Medical Fitness for Offshore Work

Guidelines

7th Edition
May 2024

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List of Abbreviations

Abbreviations	Definitions
AIDS	Acquired Immune Deficiency Syndrome
BA	Breathing Apparatus
BMI	Body Mass Index
BOSIET	Basic Offshore Safety Induction and Survival Training
BP	Blood Pressure
CAA	Civil Aviation Authority
CABG	Coronary Artery Bypass Graft
CA-EBS	Compressed Air Emergency Breathing System
COSHH	Control of Substances Hazardous to Health
CPHM	Consultant in Public Health Medicine
DVT	Deep Vein Thrombosis
ECG	Electrocardiograph
ENT	Ear, Nose and Throat
ERT	Emergency Response Team
FOET	Further Offshore Emergency Training
FPSO	Floating Production, Storage and Offloading (vessel)
HAVS	Hand / Arm Vibration Syndrome
HDL	High Density Lipoprotein
HIV	Human Immunodeficiency Virus
HSE	Health and Safety Executive
IDDM	Insulin Dependent Diabetes Mellitus
NICE	National Institute for Clinical Excellence
NIDDM	Non-insulin Dependent Diabetes Mellitus
OFAR	The Offshore Installations and Pipeline Works (First Aid) Regulations 1989
OMA	Offshore Medical Advisor
PPE	Personal Protective Equipment
RPE	Respiratory Protective Equipment
TIA	Transient Ischaemic Attack
UKCS	United Kingdom Continental Shelf

1 Introduction

These guidelines are intended for the use of examining physicians undertaking assessment of fitness for work on UK offshore energy installations.

This edition of the guidelines is the first revision since the 6th edition was published in 2008. Since the 2008 6th edition, a supplement was added in 2017 describing the assessment of fitness to undertake shallow-water familiarisation exercises with CA-EBS on BOSIET and FOET courses ('fitness to train').

Amendments were published in 2020 to enable the continuation of medical assessments in the presence of recommended restrictions on medical activity because of the SARS-COV2 pandemic, followed by other amendments specific to assessment of fitness for Emergency Response Team (ERT) duty and 'fitness to train' for the same reason. With the publication of this 7th edition the 2020 'Covid amendments' to the guidelines are withdrawn. This 7th edition guideline should now be considered as the valid and current guideline, regardless of any previous alterations to or variations from the 6th edition.

A consultation exercise on revision of the 6th edition had completed by the end of 2019, and the key elements of the 6th edition in need of clarification, updating or change were identified. The structure and layout of this 7th edition follows as far as possible that of the 6th edition, but readers will find substantial changes to the text – the guideline should be read carefully for changes to the previous edition. These guidelines will come into effect on 1st May 2024.

2 General notes on the OEUK offshore medical assessment

2.1 Definition of important terms used

Table 1: Definition of important terms used

Term	Definition
Duty Holder	The entity with legal responsibility for the installation. The duty holder has ultimate responsibility for the safety of all persons on the installation and is the final authority on who may be permitted to travel to its installation or not. For fixed installations the duty holder is the Operator, and for mobile installations (e.g. drilling rigs) it is the installation Owner For brevity and in accordance with common practice, the term 'Operator' will be used throughout this document to mean both the operator of fixed installations and the owner of mobile installations.
Operator	The company responsible for day-to-day running of the fixed installation concerned. Fixed installations may be jointly owned by several companies, in which case they will agree one among them to be the 'operator'.
Owner	The company owning the installation outright, or owning a part share of it
Vendor/Contractor	A company providing some form of service to an operator, but not actually running the installation itself.
Operator Medical Advisor (OMA)	A subset of employer medical advisors, the OMA is retained by the operator to provide it with medical advice on a range of matters affecting operations. The OMA may be directly employed by the operator or retained under a contract with an occupational health service.
Employer Medical Advisor	A doctor acting as medical advisor to an employer. Very few will be directly employed by the employer, most being retained under a contract with an occupational health service. In the oil and gas sector of the UK offshore energy industry it is unusual for a non-operator employer to retain an employer medical advisor, but some may do so.
Examining Doctor	The doctor carrying out the assessment of fitness for offshore work.
Installation Medic	A person employed on an offshore installation to provide medical care to the workers there, if necessary. The Offshore Installations and Pipeline Works (First Aid) Regulations 1989 (OFAR) are the relevant governing legislation.
Supervising Doctor	Regulation 5 (1) (c) (i) of OFAR requires the work of the installation medic to be supervised by a 'suitably qualified medical practitioner'. This may or may not be the same doctor as the OMA and may or may not be the same doctor as the 'Topside' doctor.

Term	Definition
Topside Doctor	Regulation 5 (1) (c) (ii) of OFAR requires that the advice of a suitable doctor be available to the installation medic 'when needed'. Because a medical emergency requiring advice may occur at any time, the operator will typically make an arrangement with a Topside medical service to ensure that advice is available 'round the clock'. The doctor providing it is unlikely to be either the OMA or the medic's day-to-day supervising doctor.
Examinee	The offshore worker undergoing assessment under these guidelines (whether or not actually 'examined' at any given contact).
Medevac	Removal of a worker from an installation for medical reasons. May be as 'emergency' (i.e. life or limb threatening), 'urgent' (i.e. requires hospital evaluation within 24 hours), or 'routine' (unable to remain to complete trip, but can move on scheduled flight)

2.2 Status of the OEUK medical

The OEUK offshore medical is not a statutory one. This is different from the situation for seafarers, commercial pilots, and commercial divers, for example.

The Health and Safety at Work etc. Act 1974 and The Health and Safety at Work etc. Act 1974 (Application outside Great Britain) Order 2013 place general requirements on operators of offshore installations. Therefore, operators require workers on installations to be medically assessed prior to being deployed offshore.

Operators may require workers to undergo operator-specific medical assessment, but operators in the UK sector North Sea[1] will generally accept an OEUK medical certificate as evidence of fitness to work on their installation. They may accept other certificates (e.g. Norwegian and Netherlands offshore medical) but may also decline to accept any certificate, including OEUK certificates, at their own discretion.

2.3 Applicability of the OEUK Medical

The OEUK medical is intended to confirm fitness for work on offshore energy installations in the UK Sector North Sea. It was originally intended to apply to offshore oil and gas installations. These typically have a sickbay and medic on board at all times, and helicopters are able to land on them to remove ill

[1] The term 'UK sector North Sea' is used here for simplicity and should be understood to encompass all offshore waters around the UK in which OEUK members operate – this will include areas in the Atlantic Ocean west of the Shetland Isles, the Irish Sea in the Liverpool Bay area, and others not limited to those listed.

or injured workers. The medical arrangements on board are determined by legislation[2] and guidance[3]. The OEUK medical guidelines are also applicable to offshore non-oil/gas energy installations, where those installations have equivalent working, habitation and medical response arrangements. Where non-oil/gas energy installations do not have equivalent working, habitation and medical response arrangements, they should be considered as 'normally-unmanned installations' within these guidelines.

OEUK medical assessments are known to occur around the world for purposes other than work on offshore energy installations in the UK sector North Sea. Such use of the OEUK medical is not approved, sanctioned or in any way encouraged by OEUK. However, a significant proportion of workers in the UK sector North Sea will have arrived from outside the UK to work. All OEUK examining doctors, but particularly those outside the UK, must ensure before issue of an OEUK certificate that the examinee is fit for work in the UK sector North Sea, regardless of any other purpose the assessment may be undertaken for.

2.4 Significance of the OEUK examining doctor list

There is no UK legislation governing who may issue a certificate of fitness for offshore work. While anyone could provide an opinion that a worker is fit for offshore work, installation operators are likely to accept only a statement issued by certain doctors. These are medical practitioners named on a list maintained on behalf of industry by OEUK.

The list of examining doctors is available at: http://oeuk.org.uk/doctors/.

2.5 Different circumstances of workers

Examining doctors will encounter workers with different employment status and work patterns. Workers will be in one of the following groups:

i) Operator-employed core crew
ii) Operator-employed irregular/occasional/infrequent offshore visitors
iii) Non-operator-employed core crew
iv) Non-operator-employed non-core-crew, but regularly/frequently working offshore ('ad-hoc')
v) Non-operator-employed occasional/infrequent offshore visitors
vi) Not yet employed but seeking work offshore

[2] Offshore Installations and Pipeline Works (First-Aid) Regulations 1989. Approved Code of Practice and guidance. L123, 3rd edition, 2016. Available here: https://www.hse.gov.uk/pubns/books/l123.htm

[3] OEUK. Medications and Medical Equipment for Offshore Installations Guidelines. Issue 2, 2019. Available here: https://oeuk.org.uk/product/medications-and-medical-equipment-for-offshore-installations-guidelines/

See the supplementary information[4] accompanying the guidelines for a more detailed explanation of the differences. Note that all groups may include workers who will deploy to 'normally unmanned installations' (NUIs) – see section 4.4.

2.6 Different circumstances of examining doctors

Examining doctors work in a variety of circumstances: some within occupational health/medical services providers, others as a 'sole practitioner' (e.g. in general practice), while others will have a combination of commitments in OH practice.

'Sole practitioner' examining doctors have the advantage of self-determination of their own workload and organisation, but may have limited administrative support. Examining doctors within occupational health service providers may benefit from more administrative support, but may have less self-determination of workload. It is essential that all examining doctors either arrange for or are given sufficient time and resource to adequately complete all aspects of OEUK medical assessments, including the discretion to arrange additional time and/or resource for assessment elements other than their own or their OH service's 'routine protocols'.

2.7 The offshore working environment

Since 2011, examining doctors added to the OEUK list have undertaken a one-day training course which includes information on living and working conditions on offshore installations.

The key features of the offshore working environment for examining doctors to be aware of are the limitations on medical diagnosis and treatment which can be delivered, potential logistical difficulties and time delays in transportation of patients to definitive medical care, and the operational and medevac safety-related challenges posed by conditions requiring urgent or complex intervention in an emergency, or causing sudden incapacitation, and/or disturbed behaviour.

2.8 Objective of the medical assessment

The OEUK medical is intended as a process to review established information about a worker's state of health, and to determine fitness for offshore work by interpretation of this against these guidelines. The necessary elements of fitness for offshore work are that the worker should:

- not have any medical condition liable to interfere with the ability to carry out their normal work tasks safely.
- not have any medical condition which could severely adversely affect others

[4] See Supplement to guidelines, paragraph 2.1

- have sufficient physical activity capacity to be able to a) perform normal job functions and move generally around the installation (including climbing stairs), and b) to take the actions required in response to emergency situations and in particular to successfully take part in evacuations.
- not have a liability to acute and/or severe illness requiring medical intervention which cannot be adequately managed offshore.
- not require any ongoing medical treatment which cannot be adequately managed offshore, or which has significant side effects incompatible with the other elements of fitness listed here.
- not have a condition liable to be worsened by features of or exposures in the offshore working environment
- be able to take part in offshore survival training[5].

There are UK national screening programs[6] for occult pathology in the 'clinically apparently well' general population. It is expected that workers will have established healthcare arrangements in place (i.e. being registered with a GP) to access usual clinical care, including national screening programmes. The OEUK medical is *not* intended to replace these, nor to introduce screening programs for diseases not included in the national screening program.

Occupational medicine (including the OEUK medical) differs fundamentally from diagnostic clinical practice in that the worker does not seek assessment for diagnosis or treatment of an illness, but is required to undergo assessment to secure or retain their occupational status. The possibility of inaccurate medical history exists, and examining doctors may contemplate undertaking blood, imaging and other tests normally used in clinical diagnostic practice, as a means of mitigating against the possibility of inaccurate history. Examining doctors considering doing so should note paragraph 2.9.10.

During assessment the examining doctor may incidentally identify actual or suspected clinical pathology previously unrecognised by the examinee. If so, the examining doctor should take reasonable action to ensure appropriate clinical investigation and/or treatment – the form and urgency of this will depend on the nature of the clinical pathology found or suspected, and on usual local processes. In the UK this would generally be communication with and referral to the worker's GP. While minor and/or non-urgent incidental pathology may not affect OEUK certification, it is probable that finding serious or urgent incidental pathology would result in postponement of certification until the outcome of investigation is known.

2.9 Elements of the medical assessment process

The elements of the OEUK medical are:

- Identification of the examinee
- Relevant contextual occupational history, including:
    - Date and provider of previous OEUK medical
    - Date and provider of most recent past 'fit to train' assessment
    - Date of next FOET (or BOSIET)

[5] See Supplement to guidelines, paragraph 2.2.1

[6] See Supplement to guidelines, paragraph 2.2.2

- Medical history
- Height, weight and calculated body mass index, and waist-to-height ratio
- Blood pressure
- Visual acuity
- Audiometry
- Urinalysis
- Physical Examination
- Additional examination/tests arranged by examining doctor as required (including functional assessment)

Each element is explained below

2.9.1 Identification of the examinee

The identity of the examinee should be confirmed from photographic evidence such as passport, driving licence, 'Vantage' card or similar.

2.9.2 Relevant contextual occupational history

Examining doctors should gather sufficient information to appreciate the occupational context in which OEUK certification is requested. A suggested minimum set of questions to elicit the necessary understanding are included at paragraph 2.14.1.

Unless the examinee is a 'new start' to the industry, the examinee or their employer should make known to the examining doctor a) the date and provider of the most recent previous OEUK medical, b) the date and provider of the most recent previous 'fit to train assessment', and c) the date of next FOET.

a) and b) will be obvious if a copy of the certificate is provided to the examining doctor.

2.9.3 Medical History

Sources of medical history relevant to the assessment will always include:

- Examinee-provided history

and may include:

- Information on history and findings at previous OEUK medical
- Employer-provided information on medevac/sickness absence
- Additional information from treating clinicians

2.9.3.1 Examinee-provided history

Although examining doctors could take a medical history from the examinee verbally in-person, usual practice is to use a structured questionnaire. The examinee may complete the questionnaire either in advance of the assessment, or at the time of the assessment itself. A suggested minimum scope of questions is provided at 2.14.1 – it covers relevant occupational context, past history of significant medical occurrences, current conditions (whether requiring treatment or not), medication history, information on health-related behaviours such as smoking, alcohol consumption and physical activity,

and questions on specific work activities. Examining doctors may use a questionnaire of their own devising but it should include all these elements as a minimum.

2.9.3.2 Information on history and findings at previous OEUK medical

The OEUK medical is better understood and considered as an episodic but continuous ongoing review of an examinee's fitness for offshore work, rather than a 'one-off' activity. Examinees may express surprise that examining doctors do not have available to them information provided by the examinee at previous assessments, and will generally express interest in changes or trends in test results. Where previous OEUK medicals in the same employment circumstances were undertaken by the same examining doctor or OH service, the previous records should be considered to form part of the current assessment. The previous notes should be reviewed for changes in medical history and test results.

On completion of the OEUK medical, the examinee should be offered a copy of the records from their medical, at no charge to the examinee. Examinees should be encouraged to accept the offer[7].

Where examining doctors do not have the records of previous OEUK medicals, they should ask if the examinee is willing to share the contents of copies of previous medicals in the examinee's possession. Examinees who have been offered and accepted a copy of their offshore medical record are not required to provide this to a subsequent examining doctor, but should be aware that doing so may simplify and significantly improve the quality of assessment.

If examinees do not have or are unable/unwilling to share previous records, examining doctors may obtain (with appropriate examinee consent in the usual way for medical reports), information from examining doctor(s) who undertook previous OEUK medical(s), wherever thought necessary. In order to ensure optimum quality of assessment, and as professional courtesy to examinees and colleagues, examining doctors are expected as a condition of their presence on the OEUK list to respond promptly, without undue delay and without charge or fee to either the examinee or the requesting examining doctor, to other examining doctors requesting information in this way. OH services providing administrative support are expected to ensure that examining doctors are able to respond to requests for reports in the same way.

If information from previous assessments is confidently expected to confirm an impression of fitness issue of a limited duration certificate may be possible while awaiting it, while on other occasions no certificate can be issued unless/until information is obtained or clarified.

2.9.3.3 Employer-provided history

Employers/agencies may hold information relevant to assessing fitness for offshore work. For example, they may be aware of episodes of sickness absence, medevac from offshore installations, and trips missed or delayed for medical reasons. They may have concerns about the health or work capability of a worker. If employers/agencies provide information of this nature when a worker undergoes OEUK medical assessment, it should be taken into account.

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[7] See Supplement to guidelines, paragraph 2.3.1

2.9.3.4 Additional information from treating clinicians

Where the examinee has a medical condition of any significance, information from the examinee's treating physician (whether GP/primary care physician or hospital consultant/secondary care specialist, or both, and/or others) may be required to confirm or correct details of the medical history, to provide the results of tests of relevance in deciding fitness, or in some cases to seek opinion from the treating clinician on prognosis or other aspects of the condition.

In some instances, the examinee may have been discharged from secondary care and the GP may feel professionally unable to offer comment on the specific questions posed by the examining doctor. If the answer is not evident from correspondence within the GP notes, and the secondary care clinician cannot be contacted, it may be necessary to arrange independent consultant assessment and opinion.

In all instances of communication appropriate consent should be obtained. In the UK, this means in accordance with the Access to Medical Reports Act 1988. Consent for communication with medical colleagues in other circumstances (for example referral to the examinee's GP regarding suspicion of clinical pathology requiring investigation, or discussion with other examining doctors in the case of an examinee's disagreement over certification decisions) will be obtained in line with usual local clinical practice.

In the UK, most of the population are registered with a GP/primary care physician, who will have a historical medical record for each patient. In practice, if an examinee has or has had any significant medical condition or event, information is likely to be within the GP clinical record. Routine GP corroboration of the examinee's history is ***not*** required[8] but may be appropriate where the history seems inconsistent or clinically implausible.

In some instances, issue of a limited duration certificate may be possible while awaiting reports expected to confirm information felt to known with high confidence, while on other occasions no certificate can be issued unless/until information is obtained or clarified.

2.9.4 Height, weight, calculated Body Mass Index (BMI), waist-to-height ratio

Calculation of body mass index requires measurement of the examinee's height and weight.

2.9.4.1 Measurement of height

Height may decrease during adult life, but the change is unlikely to exceed 1 cm over the course of a decade[9]. If at least two measurements of height agreeing to within 1 cm are already available from previous records or other sources, within the past decade, it is not necessary to repeat height measurement.

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[8] See Supplement to guidelines, paragraph 2.3.2

[9] Sorkin, J D et al. Longitudinal Change in Height of Men and Women: Implications for Interpretation of the Body Mass Index: The Baltimore Longitudinal Study of Aging. *American Journal of Epidemiology*, Volume 150, Issue 9, 1 November 1999, Pages 969–977, https://doi.org/10.1093/oxfordjournals.aje.a010106

2.9.4.2 Measurement of weight

Experience suggests a tendency to progressive increase in weight over time in many offshore workers. Weight should be measured at each OEUK medical, and the current weight compared to previous measurements.

2.9.4.3 Measurement of waist-to-height ratio

This is indicated for examinees of BMI less than 35 (see paragraph 3.8.1).

> Find the bottom of the ribs and the top of the hips. Measure around the waist midway between these points (just above the umbilicus); examinee should breathe out naturally before the measure is made.
>
> Measure waist circumference and height in the same units (centimetres or inches). Divide waist measurement by height measurement. Examples:
>
> 38 inches (waist) divided by 67 inches (height) = waist-to-height ratio of 0.57
>
> 96.5 cm (waist) divided by 170 cm (height) = waist-to-height ratio of 0.57.

2.9.5 Blood Pressure

Blood pressure should be measured as described at NICE guideline NG136[10] points 1.2.1 and 1.2.2. British Hypertension Society documents on correct blood pressure measurement are available here:

https://bihsoc.org/wp-content/uploads/2017/11/BP-Measurement-Poster-Manual-2017.pdf

https://bihsoc.org/wp-content/uploads/2017/11/BP-Measurement-Poster-Automated-2017.pdf

https://bihsoc.org/wp-content/uploads/2017/12/May-Measurement-Month-How-to-take-an-automated-blood-pressure-measurement-English-subtitles.mp4

Measurement should obtain a valid 'clinic blood pressure' as defined at NG136, point 1.2.2. The examining doctor should then act appropriately on this. Some practitioners may attempt to obtain lowered blood pressure readings, for example by lying the examinee supine and/or in a dimly-lit room for a time. This is not a NICE-recommended procedure and values obtained in this way should be disregarded.

Paragraph 1.2.10 of NG136 recommends measuring blood pressure in persons without a diagnosis of hypertension 'at least every 5 years, more frequently if close to 140/90 mmHg'. In the UK, usual clinical practice for persons with diagnosed hypertension is to measure blood pressure annually or six monthly.

[10] Hypertension in adults: diagnosis and management. NICE NG136, August 2019: https://www.nice.org.uk/guidance/ng136

Measurement of BP is therefore not a requirement for every examinee at every OEUK medical. The need for measurement at the OEUK medical should be determined by the guidance at section 3.1.2

Outside the UK examining doctors may measure blood pressure as recommended by local guidelines equivalent to NICE NG136. If none exist, NG136 should be used for reference.

2.9.6 Visual Acuity

Examinees without corrective lenses should have distance vision for left and right eyes and binocular vision checked by Snellen chart. Binocular near vision should be checked by reading a test type chart.

Examinees with corrective lenses for refractive errors should be following their optician's recommendation for repeat vision testing. Both uncorrected and corrected vision should be checked as above.

For vision testing requirements for crane operators, see section 4.2.

2.9.7 Audiometry

While audiometry at the medical may be used as an indication of functionally normal hearing, employers should note that audiometry at an OEUK medical does not of itself ensure compliance with health surveillance regulations regarding noise exposure, for example in regard to keeping of health records and anonymised summary of grouped results.

Relevant regulations[11] recommend a 'baseline' audiogram (ideally prior to noise exposure) followed by audiometry annually for the next two years and three-yearly thereafter, or at intervals determined by the results of the tests.

Examining doctors should follow the recommendations of L108 on frequency of audiometry; it may not be necessary for audiometry to be undertaken 'routinely' at every assessment. Where audiometry is not undertaken at OEUK medical, it may be necessary to limit the duration of certification in order to prompt attendance for audiometry at the appropriate time – if this is the sole reason for limited duration certification, on completion of the audiogram the certificate may be extended to the maximum of two years from the initial date of assessment.

Employers may wish to review with their medical advisors their existing processes for recording and acting on dates recommended for repeat audiometry, bearing in mind that the recommended interval for repeat audiometry may not coincide with the review date for next OEUK medical assessment. Employers should note that requesting audiometry at every OEUK medical does not remove the L108 recommendation for annual audiograms on commencement of noise exposure, nor the need to arrange audiograms at times other than at OEUK medicals, if recommended by the examining doctor. OEUK certification duration may be used as a prompt to facilitate correct timing of audiometry.

[11] See paragraph 262 of part 5, and paragraphs 18 and 20 of appendix 4, of L108 Controlling Noise at Work – Guidance on Regulations. Third edition. HSE, 2021: https://www.hse.gov.uk/pubns/books/l108.htm

To facilitate review of past and current audiograms when a different examining doctor undertakes the assessment on consecutive occasions, it is good practice to give the examinee a copy of their audiogram.

2.9.8 Urinalysis

Examining doctors should follow relevant national clinical guidelines in the selection of examinees for urinalysis, the procedure for urinalysis, the definition of an abnormal result, and further follow-up and assessment of abnormal results.

> Outside the UK examining doctors may follow local guidelines on urinalysis equivalent to NICE NG203, and NG12. If none exist, the relevant NICE guideline should be used for reference.

2.9.8.1 Proteinuria

Paragraph 1.1.14 of NICE NG203[12] advises which persons should have assessment for urinary proteinuria, and how this should be done.

The following are appropriate for urinalysis for proteinuria:

a) Examinees with diabetes (of any type)
b) Examinees known to have an eGFR of less than 60ml/min/1.73m2
c) Examinees where there is a strong suspicion of CKD (chronic kidney disease)[13]

Paragraph 1.1.11 of NG203 clearly states that urinalysis reagent strips should not be used for identifying proteinuria unless they are capable of expressing an albumin/creatinine ratio (ACR). At least one reagent strip capable of expressing an ACR is available in the UK[14] and may be available elsewhere in the world[15]. Therefore, in an OEUK medical, reagent strips not capable of expressing an ACR should ***not*** be used for urinalysis for proteinuria. If lacking appropriate reagent test strips, examining doctors may seek information on the presence of proteinuria and the ACR value from the treating clinicians of examinees in the groups above.

2.9.8.2 Glycosuria

The UK National Screening Committee recommends against screening for diabetes[16]. Undertaking urinalysis for glycosuria as a screening test for diabetes is inconsistent with the UK NSC recommendation.

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12 Chronic kidney disease; assessment and management. NICE NG203, August 2021: https://www.nice.org.uk/guidance/ng203/chapter/Recommendations#investigations-for-chronic-kidney-disease

13 See Supplement to guidelines, paragraph 2.4.1

14 See: https://www.siemens-healthineers.com/en-uk/urinalysis-products/urinalysis-reagents/clinitek-microalbumin9-reagent-strips NB: reference provided for example only: equivalent alternative products may be available

15 Example 'Multistix PRO': https://www.siemens-healthineers.com/urinalysis-products/urinalysis-reagents/multistix-10-sg-reagent-strips and https://www.siemens-healthineers.com/urinalysis-products/stix-family NB: reference provided for example only: equivalent alternative products may be available

16 UK National Screening Committee https://view-health-screening-recommendations.service.gov.uk/diabetes/

However, NICE PH38 recommends a process for identifying persons at high risk of diabetes[17]. PH38 does not require urinalysis for glycosuria.

Where the examining doctor suspects a diagnosis of diabetes from the clinical history, urinalysis may be performed as clinically indicated. Unless the examining doctor confidently judges that negative urinalysis has excluded diabetes, examinees suspected of having diabetes should be referred for appropriate diagnostic assessment via their GP/personal physician.

2.9.8.3 Haematuria

The Renal Association and British Association of Urological Surgeons jointly advised in 2008 that 'urine testing for haematuria should only be undertaken for identifiable clinical reasons; there is currently no evidence to support opportunistic screening of the general population'[18]. That recommendation was replaced in June 2016 by reference to NICE NG12 ('Suspected cancer: recognition and referral'), section 1.6[19], which mentions non-visible haematuria only in the case of persons aged 60 and older with either dysuria or a raised white cell count.

Paragraph 1.1.16 of NICE NG203 recommends which persons should have urinalysis for haematuria performed. At OEUK medicals, these will be:

a) Examinees with diabetes (of any type)
b) Examinees known to have an eGFR of less than 60ml/min/1.73m2
c) Examinees where there is a strong suspicion of CKD[20]

Para 1.1.16 of NG203 recommends that results of 1+ or greater should be evaluated.

An evidence-based guide to the further evaluation of haematuria in UK general practice is available here: https://www.gp-update.co.uk/SM4/Mutable/Uploads/pdf_file/Haematuria-and-urology-red-flags-GEMS_1.pdf In this, 1+ dipstick haematuria does not meet criteria for GP investigation unless present on at least two samples on separate days. Therefore, if a test is positive, examining doctors should arrange for repeat urinalysis until the threshold of two out of three samples 1+ or more positive is reached, before requesting treating clinicians to undertake further investigation[21] [22]. Examining doctors should expect examinees to be investigated in accordance with the referenced guidelines. Certification may be time-limited or postponed pending receipt of the GP report.

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17 NICE PH38 Type 2 diabetes: prevention in people at high risk https://www.nice.org.uk/Guidance/ph38

18 Joint Consensus Statement on the Initial Assessment of Haematuria. Renal Association and British Association of Urological Surgeons. July 2008. https://www.baus.org.uk/_userfiles/pages/files/News/haematuria_consensus_guidelines_July_2008.pdf

19 NICE NG12 Suspected cancer: recognition and referral. June 2015. https://www.nice.org.uk/guidance/ng12/chapter/Recommendations-organised-by-site-of-cancer#urological-cancers

20 See Supplement to guidelines, paragraph 2.4.2

21 See also BAUS summary of NG12, available from link here: https://www.baus.org.uk/professionals/baus_business/publications/17/haematuria_guidelines

22 See Supplement to guidelines, para 2.4.2

Table 2: Urinalysis

	Proteinuria	Glycosuria	Haematuria
	Follow relevant national clinical guidelines		
Indication for urinalysis at OEUK medical	Examinees with: Diabetes; eGFR <60ml/min/1.73m2; Strong suspicion of CKD (note importance of ACR)	Clinical suspicion of diabetes	Examinee aged 60 or more, with either dysuria or known raised WCC (do ***not*** check WCC count for sole purpose of deciding if urinalysis is indicated) Examinees with: Diabetes; eGFR <60ml/min/1.73m2; Strong suspicion of CKD

2.9.9 Additional examination/tests as required (including examination and functional assessment)

The guidelines indicate where specific tests (e.g. spirometry) may be required to aid the decision on fitness. Tests other than as listed at paragraph 2.9 above are not a 'routine' requirement of the OEUK medical. However, the results of tests performed as part of the clinical care of an examinee may form part of the evaluation of fitness. These results will typically be sought when obtaining information from a treating physician. However, on occasions it may be more expeditious and practical for the examining doctor to undertake the test: if so, the test may be arranged or performed by the examining doctor, with examinee and/or employer agreement after explanation of time/cost differences compared to obtaining from the treating clinician.

Although employers frequently place great value on the perceived benefit of a 'full physical examination', examining doctors will be aware of the substantial limitations of this as a means to exclude significant medical conditions. This is because medical conditions (e.g. psychiatric disorders in remission, seizure disorders) may not be apparent on even the most detailed physical examination.

The examining doctor should undertake relevant physical examination of the examinee as indicated by the clinical history. For examinees with no clinical history the minimum physical examination is described at paragraph 2.14.2.1.

2.9.9.1 Functional assessment

On occasions it will be necessary to establish the examinee's functional ability, particularly where there may be doubt about ability to participate in offshore emergency response procedures (see section 2.8, third bullet point b)). For offshore workers who are not Emergency Response Team members[23], the requirement in an emergency is to make safe their workstation and then walk briskly (not run) to their muster station.

The 6-minute walking test is a recognised functional assessment in clinical practice (see paragraph 1.1.25 of NICE NG115[24]). Normal values in healthy males and females aged 43 to 79 have been published[25].

Where it is necessary to establish an examinee's functional ability (e.g. as per paragraph 3.6.3), the examining doctor should arrange for the examinee to undergo a 6-minute walking test. The supplement to these guidelines gives additional information on the conduct of the test[26] Examining doctors without the ability, facility or equipment for testing may accept the result of a test performed by another examining doctor.

Examinees unable to complete a distance of 550 metres in six minutes, and/or those who require to stop (or slow to a pace which in the examining doctor's opinion is nearly stopped) should have certification postponed until able to do so.

If the degree of physical exertion involved in a 6-minute walk test is considered medically contraindicated for the examinee, he/she will be unfit for offshore work because the physical exertion required during platform emergency procedures would therefore also be contraindicated.

2.9.10 Other 'screening' tests

Examining doctors considering undertaking other 'screening' tests on examinees, such as X-rays, scans, blood tests or others, should ensure that national clinical guidelines on the indication for testing, choice of value for a 'positive' or 'abnormal' result, the interpretation of abnormal results, appropriate follow-up/diagnostic investigations, and who (worker, employer, other) will pay for these, are all known and understood.

The general questions to be considered prior to performing any test not specifically required in the OEUK guidelines are outlined at table 3 below. If it is not possible to clearly answer any of the questions in the table, including those related to follow-up[27], performing the test should be seriously reconsidered.

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23 Functional assessment procedures for workers who are part of ERTs are described at section 4

24 NICE NG115 Chronic obstructive pulmonary disease in over 16s: diagnosis and management. December 2018. https://www.nice.org.uk/guidance/ng115/chapter/Recommendations#diagnosing-copd

25 Enright, P et al. Reference Equations for the Six-Minute Walk in Healthy Adults. American Journal of Respiratory and Critical Care Medicine. Volume 158, No.5, 1997. https://www.atsjournals.org/doi/10.1164/ajrccm.158.5.9710086

26 See Supplement to guidelines, paragraph 2.5

27 See Supplement to guidelines, paragraph 2.6

Table 3: Test Considerations

Examinee's likely question	Question re-phrased	Technical Consideration
What is this test for?	What condition(s) is/are being tested for?	Indication for test
I feel fine – but could I have that condition?	How likely is an apparently well person to have that condition, without realising they are unwell?	Condition ***prevalence***
If I have the condition, will the test find it?	What proportion of people with the condition does the test identify?	Test ***sensitivity***
Is my test abnormal?	What is the point in the range of test result values which will be used to decide abnormality?	***Threshold*** or ***cut-off value***
If my test is positive, does that mean I have the condition?	What proportion of people with a positive test actually turn out to have the condition?	***Positive Predictive Value (PPV)*** of test
If my test is positive, what happens next?	What diagnostic test(s) will be required to confirm or exclude the condition?	Has this been considered, decided, and agreed on in advance with relevant colleagues?
Who pays for that?	Who will be paying for the diagnostic test(s)?	Has this been discussed and agreed with the bill-payer in advance?

2.10 Conduct of the medical assessment process

Commonplace practice may be that on a single occasion on the same day, the examinee attends the examining doctor facility, completes a questionnaire, undergoes measurement of weight etc. by a 'delegated assistant' and is then interviewed and examined by the assessing doctor for evaluation and decision on fitness. However, the quality of assessment will be improved by the following:

- Continuity of assessment (i.e. the examinee is seen on successive occasions by the same examining doctor, or at least one of a group of examining doctors within the same practice or service), particularly if the examinee has any 'complicated' medical condition.
- Completion and return of examinee questionnaires (perhaps 'online' over appropriate internet link) prior to attending the examining doctor. Examinees may also be invited to provide any previous OEUK medical notes in their possession at the same time.

- Examining doctor review of previous OEUK records in their possession, and/or any previous notes provided by the examinee, prior to the examinee attending for assessment. Examining doctors should consider it essential, as part of the current assessment, to review previous notes in their possession.

Height, weight, BMI, waist/height ratio, BP, visual acuity and audiometry should be undertaken at the appropriate interval at 2.9.4 to 2.9.8 above, as recommended by the examining doctor at the previous OEUK medical, and/or as judged appropriate by the examining doctor from review of submitted questionnaires and review of previous assessments.

Adequate time should be assured for the inevitable occurrence of 'complicated cases' among a planned number of assessments, and the consequent administrative requirements. Examining doctors should anticipate the need to seek additional information from treating clinicians and/or arrange additional tests as described at 2.9.9 above in a proportion of cases. It is essential that all examining doctors either arrange for or are given sufficient time and resource to adequately complete all aspects of OEUK medical assessments, including the discretion to arrange additional time and/or resource for assessment elements other than their own or their OH service's 'routine protocols'.

2.10.1 Role of nurses and installation medics

It is established practice that it is not the examining doctor who directly undertakes the measurements of weight, BP etc. involved in the OEUK medical, but the 'delegated assistant' referred to at 2.10 who does so. The delegated assistant may, at the examining doctor's discretion and subject to the assistant being suitably trained by the doctor, be further delegated to undertake the medical interview and examination which would otherwise be undertaken by the examining doctor.

Where the taking of medical history, measurement of elements such as blood pressure, etc., and physical examination is delegated to the assistant, the examining doctor's role will be to review the assessment documentation and determine whether a certificate may be issued without in-person assessment by the doctor. In some cases the examining doctor will decide that it is necessary for the examinee to be questioned, seen and/or examined personally by the doctor, in which case this should occur. Where the examining doctor elects to issue a certificate on review of the documentation only, it is essential to note that the examining doctor remains entirely responsible for ensuring that the clinical history is as accurately understood as possible, and for interpretation of all test and examination findings, including their relevance and reliability.

Where the delegated assistant is an installation medic, the operator medical advisor of the installation they work on, the medic's supervising doctor under regulation 5 (1) (c) (i) of OFAR (if different), and the examining doctor must agree on the feasibility of this. Examining doctors should ensure agreement is in place before attempting to delegate tasks to medics.

Note that individual national, operator or employer policy may mean that unless an OEUK medical has been undertaken personally by the examining doctor, it will not be accepted for mobilisation. Examining doctors should ensure that this point is understood by examinees, and/or the party booking the medical, if it is planned to conduct the medical by delegation.

2.11 Operator-specific medical assessments

It is recognised that some operators (particularly those with directly employed 'in-house' occupational health departments and OMA) may have longstanding company-specific medical assessments of fitness for work on their own installations. Their process of assessment may vary from those of these guidelines, but their objective will be equivalent in outcome.

Operators/duty holders of installations in the UK sector North Sea may issue standard OEUK certificates of fitness for offshore work (2.14.4) based on their own medical assessment process, provided:

The certificate relates to an operator/duty holder employee

The certificate is issued on operator/duty holder stationery

Alternatively, operator/duty holders may issue an operator-specific certificate valid for their own installations only, which should be recorded in Vantage under an operator-specific (not '8888') code.

2.12 Certification

2.12.1 Standard certification

For examinees found fit for offshore work, a standard certificate template is provided at paragraph 2.14.4. This should be reproduced on the examining doctor's own stationery, including the practice/clinic/OH service name, address and contact telephone number and/or email address. The certificate wording and layout should not be altered in any way, and no additions should be made to it.

The certificate now includes notification of fitness (or not) for specific tasks (e.g. 'fit to train', food handling duties). These are included for use when the examining doctor is informed by the person arranging the medical that the relevant additional assessment is required. It is ***not*** necessary that every assessment is performed on every offshore worker at every medical (e.g. offshore workers who are not crane operators will not require assessment of fitness for crane driving). Guidance on timing of assessments is included at the relevant guideline section.

The certificate now includes a space for the inclusion of 'annotations'. Only the annotations listed as 'permitted' should be entered in this space: appropriate comment on when this should be done is included at relevant guidelines sections. Examining doctors should not enter any text, comment, or 'message' other than permitted annotations in this space.

Certification should be for a maximum of two years, but may be for any duration up to this, at the examining doctor's discretion. There will be many occasions when it is appropriate to issue a certificate of less than two years: this may be for clinical reasons (e.g. to more frequently follow-up examinees with a medical conditions) or it may be for administrative reasons (e.g. if a particular item of information is required to complete the assessment), or to prompt recall for a repeat test.

Standard certificates of fitness will be recorded in Vantage under code '8888'. It is recommended that if the certificate carries any annotations, it is directly uploaded into Vantage.

2.12.2 If a standard certificate is not issued

The 6th edition (2008) of these guidelines included the concept of a 'restricted' certificate. Experience has shown increasing confusion and uncertainty over the practical application of this concept. This 7th edition of the guidelines has therefore removed the restricted certificate concept.

Where a worker has not been issued a standard certificate of fitness, the guidelines will indicate where they may apply directly to an operator for medical approval to work on that specific operator's installation(s).

If the examining doctor judges that the examinee is suitable for application for operator approval, the first part of the 'Location-Specific Certificate of Medical Fitness to Work Offshore' at paragraph 2.14.5 should be completed[28]. Note that final approval will be at the operator's sole discretion. If the guideline does not suggest clinical criteria for potential operator approval, it is very unlikely that application would be favourably considered.

Examinees who were issued with an Addendum 3 (restricted destinations) certificate under the 2008 guidelines should expect continued direct operator approval to work on the same installations, assuming no adverse change in clinical condition, or in occupational/installation circumstances.

If the operator gives approval, a fully-completed and operator-signed 'Location-Specific Certificate of Medical Fitness to Work Offshore' may be recorded in 'Vantage' as either a location-limited 8888 code, or an operator-specific medical code, at the operator's discretion.

Examinees and employers should note that the principle of paragraph 2.2 above means that the review process described at 2.13 below will not apply to operator decisions regarding direct application for approval to work on operator installations.

2.12.2.1 Contacting the operator medical advisor

Examinees not issued with a standard certificate and applying for operator approval for mobilisation should be issued with the 'Location-Specific Certificate of Medical Fitness to Work Offshore' at paragraph 2.14.5. The examining doctor should complete part 1, and give it to the examinee. The examinee will then give it (either themselves directly, or via their employer/agency) to the logistics/personnel movement department of the operator(s) whose installation(s) they wish to apply to for mobilisation approval, in the usual way.

On receipt of the certificate, the operator logistics/personnel movement department will forward it to the operator/duty holder's medical advisor. The operator medical advisor will then decide whether approval for mobilisation will be granted or not[29], and complete part 2 accordingly.

2.12.2.2 Survival training while awaiting approval

There will be some circumstances when an examinee has not been issued with a standard certificate, but wishes to undertake survival training, e.g. while examinees await operator approval. Provided the

[28] See Supplement to guidelines, paragraph 2.7

[29] See Supplement to guidelines, paragraph 2.8

examinee is considered fit for survival training and their fitness for shallow-water CA-EBS exercises has been assessed, they may be issued with the certificate at paragraph 2.14.6 to facilitate this.

The certificate should be issued with a 'short' expiry date of no more than three months from the date of assessment.

2.12.3 Certification of fitness to return to offshore work following medevac and/or sickness absence

It is expected that operators will maintain a process of delaying further mobilisation of workers medevaced from their installations until the worker is declared 'fit to return to offshore work'. It is also expected that employers will follow advice from examining doctors or other relevant advisors to avoid, for medical reasons (e.g. off work on sickness absence, or following medevac), mobilising a worker despite possession of an OEUK certificate, until the worker has been declared 'fit to return to offshore work'.

Examining doctors should expect to be asked to confirm fitness to return to offshore work, e.g. following sickness absence or medevac. Procedures will vary, but many employers will refer workers for an 'occupational health consultation' on fitness for work, expecting/requesting a report and/or certificate on conclusion of the consultation.

Examining doctors assessing fitness to return to offshore work do not need to undertake a 'full OEUK medical', but should direct their attention to the element of these guidelines relevant to the cause of absence from work. Where the employer requests a certificate confirming fitness to return offshore, a suitable template is at 2.14.7.

2.13 Review Process

It is expected that prior to the examining doctor deciding that an examinee is unfit for standard certification, sufficient background information will have been obtained to adequately understand the examinee's medical condition. The examining doctor should have explained the guidelines relevant to that condition to the examinee, in the context of the understanding of their medical condition.

It is understood that examinees who have not been issued with a certificate of fitness for offshore work will be disappointed by this, but is also anticipated that with adequate explanation of the reasons for this (most appropriately made 'in person' to them) of the reasons for this, the examinee will be able to accept that the examining doctor has made a decision in line with the guidelines.

Where an examinee considers after reasonable explanation by the examining doctor that a decision incompatible with the guidelines has been made, the examining doctor should in the first instance discuss the case with one or more colleagues (i.e. other examining doctors, either in the same OH service, or known to them), take due account of any observations made by the colleague(s), and again discuss the reason(s) for the decision with the examinee, clearly determining the examinee's reasons for why the decision is not felt to be in accordance with the guidelines, and addressing these. If 'second (or more) opinion' of this nature fails to resolve the disagreement and/or assure the examinee that a decision in

line with the guidelines has been made, the examinee may (but is not obliged to) contact the OEUK Medical Advisor for review of the decision.

On receipt of a communication regarding the outcome of an OEUK medical in such circumstances, the OEUK Medical Advisor will first contact the examining doctor and request supply of all materials (history, clinical reports, tests results etc.) relating to the assessment. Experience shows that the majority of disagreements over certification decisions can be resolved by the OEUK Medical Advisor discussing the assessment with examinee and examining doctor and suggesting a course of action to resolve any outstanding uncertainty. It should be appreciated by all concerned that the OEUK Medical Advisor's review cannot be expected to lead to a different outcome simply because the examinee (or a third party) believes that the guideline itself is 'wrong', but is intended to resolve disagreements over the process of assessment or interpretation of the relevant guideline.

In the exceptional circumstance that the OEUK Medical Advisor's review fails to resolve the situation, a 'peer review process' may be undertaken (note that the OEUK medical is not a statutory one, so no formal 'right of appeal' as such is possible). For a 'peer review process', the OEUK Medical Advisor will select up to three examining doctors from the OEUK list. These doctors will not have had prior involvement in the assessment under consideration, and will not themselves be connected in any conflicting capacity with the original examining doctor (e.g. working in the same practice, clinic or OH service as him/her). The 'peer reviewers' will be provided with the documentation relating to the assessment and asked to consider these questions:

i) Was the medical assessment conducted in accordance with the guidelines and in a professional and reasonable manner?
ii) Is it established that the examinee has a medical condition (or conditions), and what is it (or are these)?
iii) Taking account of the guideline regarding the condition(s), was a reasonable interpretation of the guideline made? If not, why not?
iv) What recommendation (if any) for further assessment does the peer reviewer have for the original examining doctor, and what recommendation does the peer reviewer have for the timing of any future reassessment of the examinee?

Once at least a majority opinion has been received by the OEUK Medical Advisor, the outcome of the peer review will be communicated appropriately to examinee and examining doctor. The original examining doctor will be expected to accord due weight to the comments and recommendations of the peer reviewers, and respond accordingly.

All parties should note that around 150,000 OEUK medicals are undertaken each year. With a 'non-certification rate' of around 1% (i.e. around 1500 per year), universal resort to request for a review of the examining doctor's decision (or inappropriate encouragement by examining doctors of requests for review) will result in an unfeasibly large number of requests to be managed. Examining doctors should make every effort to reasonably explain their decisions to examinees, and examinees should understand that requests for review will inevitably take some considerable time to complete.

2.14 Appendices for section 2

2.14.1 OEUK medical questionnaire – question set

Examining doctors should be inherently capable of taking a medical history intended to elicit understanding of the past or present presence of conditions significant to the assessment of fitness for offshore work. Of particular significance is a history suggestive of liability to sudden incapacitation, onset of an acute severe manifestation of a chronic medical condition, impairment of cognition, situational awareness and/or judgement, and/or unsafe behaviours. Examining doctors will be familiar with the concept of combining initial 'open' questions supplemented by further 'closed' questions to elicit pertinent information. The following topics should be included in a questionnaire composed and delivered to the examinee in any format of the examining doctor's choice – this may be on a paper form, .pdf format form, or online computer system form.

Identifying details – name, date of birth, address

Occupational details – occupation prior to working offshore, number of years in offshore industry, current employer name, duration in employment with current employer, current job title, duration in current job, whether 'core crew' or 'ad-hoc', whether work is in UK offshore sector only, or elsewhere in world, rota pattern (2:3, 3:3, etc.), date of next trip; whether (if not obvious from title) job involves a) food handling, b) operating a crane, c) being a member of the installation Emergency Response Team, or d) working on normally-unmanned installations (NUIs).

Certification details – date/provider of most recent previous OEUK medical, date and provider of most recent prior 'fit to train assessment', date of next FOET/BOSIET

Health habits – smoking/vaping (quantity, duration, attempts at/interest in stopping), alcohol consumption (units/week), leisure-time physical activity (what, how often, duration)

Occupational medical history – occupational illnesses (e.g. asthma, skin conditions), job loss for medical reasons, medevac/missed trip history, outcome of previous OEUK medicals (e.g. fail, restricted certificate)

Current medical history (general) – presence of any ongoing medical diagnosis or undiagnosed symptoms (whether treated or not), actual or intended periodic appointments at GP/primary care physician and/or hospital clinic for any medical condition (and whether attended as intended), current medications, medications prescribed but not taken by examinee.

Past medical history (general) – previous attendance at hospital clinics (out-patient clinics/ambulatory care) or past admissions to hospital for any operations, illnesses, investigations or tests.

Specific conditions/diagnoses (current or past history):

- hypertension, any manifestation of cardiovascular or cerebrovascular disease (including angina, MI, CVA, RIND/TIA), congenital heart disease
- seizure disorders, loss of consciousness episodes, chronic neurological disorders (e.g. multiple sclerosis, Parkinson's disease),

- anxiety/depression, psychotic illness, neurodevelopmental disorders (e.g. ADHD, autism), alcohol use disorder, substance misuse, use of 'recreational' drugs.
- asthma (including occupational asthma), COPD, pneumothorax.
- diabetes, thyroid disorder, Addison's disease
- peptic ulcer, inflammatory bowel disease, pancreatitis, liver disease
- limb amputation, arthritis, joint replacement, frequent or persisting musculoskeletal pain (including back pain) causing functional impairment
- dermatitis (including work-related), psoriasis
- kidney/renal disease, renal calculi
- bleeding disorder, thrombotic disorder, sickle cell disease
- organ transplant
- cancer
- infectious diseases – tuberculosis, HIV, hepatitis
- hearing loss, dizziness/vertigo, perforation of tympanic membrane
- visual loss or impairment, visual field loss, diplopia
- dental caries
- allergic disorders (including food allergy), anaphylaxis
- condition causing immunodeficiency, use of immunosuppressant medication.
- current pregnancy
- self-perception of disability, or classification as disabled by any insurer or benefit scheme

2.14.1.1 'Fitness to train'

For assessment of fitness to undertake in-shallow-water compressed-air emergency breathing apparatus exercises ('fit to train') the topics to be covered in the history should include:

Past or current history of spontaneous pneumothorax, traumatic pneumothorax, asthma, reactive airways disease, COPD [chronic obstructive pulmonary disease], emphysema, sarcoidosis, tuberculosis, pulmonary fibrosis, cystic fibrosis, lung bullae or cysts, thoracic or 'open-heart' surgery, lung problems related to vigorous physical activity and/or immersion in water (including but not limited to non-immersion pulmonary oedema), any other chest or lung disease.

Current or past use of inhaler for asthma, COPD or chest infections, current use of medication for a persisting ear nose or throat condition (excluding common cold or hayfever), advice to examinee to avoid swimming/immersion of ears in water, advice to examinee to avoid diving because of any problem related to ears, nose, sinuses or throat.

Change (improvement, worsening, none) in symptoms/severity of any condition mentioned at a previous 'fit to train' assessment.

Possibility of current pregnancy

Diagnosis (and time since) of Covid-19 (whether or not confirmed by testing), positive (and time since) Covid-19 PCR test (whether or not symptomatic), presence/severity of any persisting post-Covid symptoms.

2.14.1.2 Crane operators

For assessment of fitness for operating a crane the topics to be covered in the history should include:

Past or present conditions resulting in diplopia, visual field loss, or loss of depth perception. Monocular vision. Need for corrective lenses, frequency of and most recent timing of attendance at optician.

2.14.1.3 Food handlers

For assessment of fitness for foodhandling the topics to be covered in the history should include:

Current or recent (past three weeks) non-specific diarrhoeal or vomiting illness; discharge from ear(s); discharge from eye(s); fever; illness with, or contact with any third party known to have, typhoid, paratyphoid, salmonella, shigella, amoebic dysentery, cholera, E Coli, or hepatitis A.

Known carrier status for salmonella, typhoid or paratyphoid.

Recurrent infections of skin, ear or throat; bowel disorder with potential for accidental self-soiling, jaundice.

Presence of open wounds, grazes, skin lesions (e.g. psoriasis or dermatitis, boils paronychia, stye) of hands, arms or face.

2.14.2 OEUK medical assessment and record form

Examining doctors may use a record form of their own devising, but it should include the following information as a minimum:

Examinee Details:		**Date of Assessment:**
Surname	Forename(s):	Date of Birth:

	Yes	No
ERT member?		
Crane operator?		
Catering crew?		
May work on normally-unmanned-installation (NUI)?		

Have you, the examining doctor, viewed:	Yes	No
Medical history from examinee (and additional clarifications of same by delegated assistant, where relevant)		
Information from previous OEUK medical		
Corroborating information from examinee's GP		
Information from examinee's employer?		

Audiometry	Yes	No
Was an audiogram performed at this medical?		
Have you viewed the audiogram?		
Have you viewed previous audiograms?		
Examining doctor comment on audiograms:		
Have you provided a copy of all audiograms to the examinee?		
Intended date of next audiogram (insert date or review period in box)		

Vision

Distance vision			
	Left eye	Right eye	Binocular
uncorrected			
corrected			
Near vision			
uncorrected			
corrected			
Is the examinee a crane operator? Yes/ No			

Height

Is height established from previous measurements?	Yes		No	
	Date	Height	Date	Height
Height for BMI Calculation:				
Recommendation for timing of next measurement:				

Weight/BMI/Waist-to-height ratio

Date	Weight	BMI	Waist/Height Ratio (if BMI <35)
What is the trend in weight? (plot graph if necessary to clarify) Decreasing/Static/Increasing			

Anthropometric category (tick one box):

	Co-morbidity absent				Co-morbidity present	
	Waist-to-height ratio <0.5		Waist-to-height ratio 0.5 or >			
BMI <25	Low-risk normal weight		At-risk normal weight			
BMI 25-29.9	Low-risk overweight		At-risk overweight			
BMI 30-34.9	Low-risk class 1 uncomplicated obesity		At-risk class 1 uncomplicated obesity			
					Complicated class 1 obesity	
BMI 35-39.9	Uncomplicated class 2 (At-risk) obesity				Complicated class 2 obesity	
BMI 40 or >	Uncomplicated class 3 (At-risk) obesity				Complicated class 3 obesity	

Blood Pressure	Date	BP
Previous BP readings		
	Yes	No
Is BP measurement appropriate at this assessment?		
Reading:		
Is today's BP significantly clinically different from previous readings?		
Does BP meet threshold for investigation?		
Recommendation for timing of next BP check		

Is **Urinalysis** indicated?

	Yes	No	Result	Action required
Protein			ACR value:	
Glucose				
Blood				

Overall conclusion

Examining doctor's summary of history, test results, relevant clinical examination findings, conclusion on fitness (including duration) and plan for review (as necessary):		
	Yes	No
Have you personally questioned and examined this examinee?		
If 'no', have you ensured that the examinee has been offered an opportunity to speak to you, if they wish?		
Have you offered the examinee a copy of their OEUK medical record(s)?		

	Tick box
Fit for standard certificate	
Not fit for standard certificate, but appears to meet criteria to apply for operator-specific approval	
Unfit for standard certificate and ineligible for operator-specific approval	

Doctor name & signature:	OEUK PIN:	Date:
Examining doctor's follow-up notes (1):		
Doctor name & signature:	OEUK PIN:	Date:
Examining doctor's follow-up notes (2):		
Doctor name & signature:	OEUK PIN:	Date:

Fitness to undertake in-shallow-water compressed air EBS exercises ('fit to train')

Is 'fit-to-train'-specific clinical examination indicated? Yes/No							
Findings (if indicated) :							
i) Chest		Normal		Abnormal (give details):			
ii) Ears, Nose and Throat		Normal		Abnormal (give details):			
iii) Other (if relevant)		Normal		Abnormal (give details):			
Is Spirometry indicated? Yes/No							
Results (if indicated):							
FEV1 LLN	litres	Measured FEV1	litres	Predicted FEV1	litres	Measured FEV1 as % of Predicted FEV1	%
FVC LLN	litres	Measured FVC	litres	Predicted FVC	litres	Measured FVC as % of Predicted FVC	%
Circle one:							
A.	Fit for in-water PSTASS EBS training						
B.	Temporarily unfit for PSTASS EBS training						
C.	Indefinitely unfit for in-water PSTASS training						
Notes (including notes on positive answers at examinee questionnaire (if relevant): I confirm that I have discussed the hazard and risk of barotrauma in in-water EBS training exercises, the need for an accurate medical history from the trainee, and relevant risk mitigation measures, with the examinee							
Doctor name & signature:			OEUK PIN:			Date:	

2.14.2.1 Physical Examination

Few specific comments on expected minimum physical examination were received during the guideline revision process. Specific suggestions were observation of gait, range of movement of spine, and range of movement of joints and limbs (for impaired mobility and/or gross neurological dysfunction), inspection for scars suggesting thoracic or abdominal surgery, confirmation of presence of all four limbs and both eyes, auscultation of heart for murmurs, palpation of pulse for arrhythmia, auscultation of chest for abnormal breath sounds, abdominal palpation for organomegaly and palpation for inguinal/femoral hernia, and inspection of dentition for caries.

Examining doctors should undertake and formally record the above examination findings at an examinee's first OEUK medical. At subsequent medicals, observation of gait and mobility sufficient to confirm ability to don and remove survival suit and enter/exit a helicopter may be rapidly and simply

undertaken, inspection of dentition repeated, and other relevant physical examination guided by change in medical history, symptomatology, and/or examinee request.

Examination of the ears (canals and tympanic membrane) should be performed on each occasion an audiogram is undertaken.

2.14.3 Preparing for the OEUK medical – advice for examinees

Advice for examinees preparing for their OEUK medical, and for employers booking employees for medicals, is including in the Supplement to these guidelines – see paragraph 2.9 of the supplement.

2.14.4 Certificate of Medical Fitness to Work Offshore

Statement of Medical Fitness to Work Offshore

Name:	Date of Birth:
Occupation:	Employer:

The above-named has been assessed in accordance with the 'OEUK Guidelines on Medical Fitness for Offshore Work 2024', and in my opinion is **FIT** for work on offshore energy installations

At the same time, the above-named was also considered for the following:

Fitness to participate in shallow-water CA-EBS exercises	Fit/**UNFIT**/not assessed*
Fitness for food handling duties	Fit/**UNFIT**/assessment not requested*
Fitness for crane operator work	Fit/**UNFIT**/assessment not requested*
Fitness for work on normally-unmanned installations	Fit/**UNFIT**/assessment not requested*

Annotations: Employer-specific assessment required for work requiring normal colour vision	
Date of Assessment:	Date of Expiry:
For this assessment, I have directly questioned/examined the examinee in-person myself: Yes/No*	
Examining Doctor:	PIN:
Signature:	

*delete/remove those not applicable

Permitted annotations:

UNFIT **for shallow-water CA-EBS exercises**

UNFIT **for work on normally-unmanned installations without direct operator approval**

Fit for work in 'category 2' occupation of [insert job title] only

Must wear corrective glasses/lenses for crane operator work

Employer-specific assessment required for work requiring normal colour vision

Fit for **UK sector** North Sea **only** – **NOT FIT** for work in Norwegian and/or Dutch sector

2.14.5 Location-Specific Certificate of Medical Fitness to Work Offshore

PART 1 - Medical Assessment under OEUK Guidelines

Name:	Date of Birth:
Occupation:	Employer:

The above-named has been assessed in accordance with the 'OEUK Guidelines on Medical Fitness for Offshore Work 2024', and in my opinion

They appear to meet the criteria for potential operator approval for offshore mobilisation, and

I have obtained the examinee's consent to share their medical information with an operator medical advisor who requests it.

Date of Assessment:	
Examining Doctor:	PIN:
Signature:	

NOT VALID FOR OFFSHORE MOBILISATION UNLESS PART 2 BELOW IS FULLY COMPLETED BY OPERATOR/DUTY HOLDER MEDICAL ADVISOR – OPERATOR TO PASS CERTIFICATE TO MEDICAL ADVISOR

PART 2 - Operator/Duty Holder Medical Advisor Approval

The above-named has been approved for mobilisation to the [insert operator/duty holder name] installations listed below, subject to the conditions specified

Approved for mobilisation to these installations:	
Conditions:	
Date of Approval:	Date of Expiry:
Operator/Duty Holder Medical Advisor Name:	
Signature:	

2.14.6 Confirmation of fitness for survival training/fitness to train

Statement of Fitness to undertake Survival Training

Name:	Date of Birth:
Occupation:	Employer:

The above-named has been assessed in accordance with the 'OEUK Guidelines on Medical Fitness for Offshore Work 2024' for the purpose of attending a BOSIET/FOET course, and in my opinion they are **fit for survival training** in accordance with the guidelines;

for the shallow-water CA-EBS exercises element of survival training they: are Fit/are **UNFIT** *

NOTE: THIS CERTIFICATE IS NOT VALID FOR OFFSHORE MOBILISATION – IT IS ISSUED FOR THE PURPOSE OF SURVIVAL TRAINING ONLY

Date of Assessment:	Date of Expiry:
Examining Doctor:	PIN:
Signature:	

*delete/remove those not applicable

2.14.7 Certificate of fitness to return to offshore work

Statement of Fitness to Return to Work Offshore

Name:	Date of Birth:
Occupation:	Employer:

Following sickness absence/medevac the above-named has been re-assessed in accordance with the 'OEUK Guidelines on Medical Fitness for Offshore Work 2024', and in my opinion is:*

	Fit to return to offshore work
	Unfit to return to offshore work, but fit for onshore work
	Unfit for any work

*tick/indicate relevant box

Comments: (e.g. 'see accompanying report')	
Date of Assessment:	
Examining Doctor:	PIN:
Signature:	

3 Specific Medical Conditions

The general requirements for issue of a standard OEUK certificate of fitness for offshore work are at paragraph 2.8. Examinees unable to meet these criteria should not be considered fit for issue of a standard certificate of fitness. More detailed guidance for selected specific clinical conditions follows in section 3. For examinees with medical conditions not specifically mentioned, the examining doctors should apply the general principles of paragraph 2.8.

During the period of validity of a certificate a worker may become temporarily unfit due to illness or injury. Paragraph 2.12.3 outlines the process to confirm resumption of fitness.

The guidelines indicate when determining fitness for offshore work will be aided by employer risk assessment. Offshore occupations may be classified by employer risk assessment as being in one of two categories, either:

• Category 1 – occupations, job roles and/or job function in which sudden or rapid-onset incapacitation (e.g. from impairment of consciousness, motor function, or other symptom) may adversely affect the safety of, or result in serious injury to/death of, either the worker in that occupation, or other persons. Examples of such occupations are likely to include (but are not limited to) crane operators, rope access personnel, scaffolders and drill crew.

• Category 2 - all other occupations

Where there is no employer or agency to undertake the risk assessment and categorisation, the examinee should be considered to be in a category 1 occupation. Examining doctors should not undertake risk assessment and classification themselves.

For examinees not found fit for issue of a standard certificate of fitness it may be possible, on a case-by-case basis, to mitigate the risk to a level which is deemed acceptable by an installation operator for worker mobilisation offshore (see paragraph 2.12.2). Note that where occupational categorisation is relevant to application for direct operator approval for mobilisation, the operator may require the employer to provide its risk assessment of job classification, and a copy of the worker's job description.

3.1 Cardio- and cerebrovascular conditions

Actual or suspected cardiovascular disease is the commonest cause of emergency evacuation from offshore installations. Cardiac dysfunction may cause rapid-onset incapacitation, and/or result in limitation of functional ability. Cerebrovascular events may result in sudden or subacute incapacitation, or lead to residual disability on recovery. For examinees with cardio- and cerebrovascular conditions, assessment should consider:

• Risk of developing acute and/or severe clinical events, ability to treat these offshore, and the potential effect of time to reach definitive medical care

• Capacity for physical activity: a) for general mobility on the installation, ability to perform normal job functions, ability to respond to emergency situations (especially taking part in evacuations), and b) to take part in survival training (including exposure to smoke-filled environments, wearing smoke hoods and breathing apparatus), helicopter underwater escape training, and in-water training exercises.

3.1.1 Primary prevention of cardiovascular disease

Given the frequency of medevac with cardiovascular disease, consideration to primary prevention is relevant. The most significant contributors to individual worker cardiovascular disease are gender, age, and smoking habit, and the presence of hypertension, diabetes, and hyperlipidaemia.

The gender and age distribution of the workforce are not easily amenable to change[30], and although some installation operators have eliminated smoking from their installations, smoking continues to be actively facilitated on many other installations through provision of reduced-price tobacco products and facilities in which to consume them. Beneficial influence on these risk factors seems improbable.

Therefore, opportunity for primary prevention within the offshore energy industry is through attention to the medical risk factors of hypertension, diabetes, and hyperlipidaemia. Consistent with national clinical practice, the 2023 guidelines now contain more detail on assessment of hypertension, and more clearly identify those workers 'at risk' (see section 3.8).

3.1.2 Hypertension

Examining doctors will encounter examinees with:

1. Established diagnosis of hypertension
2. No known hypertension

An established diagnosis will be evident from the examinee's clinical history, documented at a previous OEUK medical, or inferred from other information (e.g. examinee on medication).

[30] See Supplement to guidelines, paragraph 2.10

3.1.2.1 Examinees with an established diagnosis of hypertension

Section 1.4 of NICE NG 136[31] ('Hypertension in Adults: diagnosis and management') provides useful information on normal UK clinical management. Examining doctors should discuss the examinee's understanding of the advice given to them by their treating clinicians on the 'lifestyle interventions' at points 1.4.2, 1.4.3, 1.4.4, 1.4.5 and 1.4.7 of NG136, and reinforce this.

NG136 point 1.4.23 indicates that examinees with hypertension would normally be reviewed annually by their treating clinician. NG136 points 1.4.20 and 1.4.22 indicate 'treatment targets' of less than 140/90 ('clinic BP') or less than 135/85 ('home monitoring').

Examining doctors should establish whether the examinee has satisfactory management of their hypertension. Well-prepared examinees will greatly assist in this by obtaining, prior to their medical, relevant information (see paragraph 2.14.3) Where the overall impression is of 'good control' of hypertension (i.e. blood pressure consistently below target and regular monitoring as recommended in guidelines), normal duration certification is appropriate.

Where the overall impression is of less satisfactory control of hypertension, reduced duration of certification and communication with the treating clinician on intended actions to improve this is appropriate.

Where the overall impression is of very poor control of hypertension, or complete lack of follow-up, it is appropriate to withhold/delay certification until this is satisfactorily re-established.

Table 4: Certification considerations – established diagnosis of hypertension

			
Established Diagnosis	Good Control	Suboptimal Control	Unsatisfactory Control (e.g. no follow-up).
	Normal duration certificate	Reduced duration certificate	No certificate until control re-established

3.1.2.2 Examinees with no known hypertension

NG 136 point 1.2.10 advises BP measurement every 5 years (or sooner at the examining doctor's discretion based on previous readings or other clinical factors). This recommendation should be followed: all examinees should have their blood pressure measured at least every 5 years.

Blood pressure should be measured as described at NG136 points 1.2.1 and 1.2.2 (see 2.9.5). The objective is to obtain a valid 'clinic blood pressure' and act appropriately on it.

[31] Hypertension in adults: diagnosis and management. NICE NG136, August 2019: https://www.nice.org.uk/guidance/ng136

Where clinic BP is less than 140/90 the examining doctor should consider overall clinical presentation (including the 'at risk' weight risk categories in section 3.8), previous measurements, and the clinic BP itself, to decide the appropriate interval for next measurement, and note this in the record. If the examining doctor judges that BP should be re-measured at a period less than 2 years, certificate duration should be limited accordingly.

If the OEUK medical clinic BP is 140/90 or greater, examining doctors should ensure appropriate clinical follow-up, to confirm or discount a diagnosis of hypertension – the clinic BP is not itself diagnosis. In the UK, follow-up will typically be by communication from examining doctor to the examinee's GP; the GP will likely arrange ambulatory blood pressure monitoring (ABPM), or clinical equivalent. Examining doctors may offer ABPM if able to do so and it is thought helpful in the overall assessment, but should ensure examinees and employers are informed of costs, and the option for usual GP care. They should inform GPs of the results.

Examinees with a clinic BP of 140/90 or greater may be issued a limited duration certificate while follow-up is undertaken, duration being extended once the outcome of investigation is known.

If the clinic BP is 180/120 or greater, with the signs/symptoms described at NG136 point 1.5.2, the examinee should be referred immediately (same day) for specialist (i.e. hospital cardiologist) assessment, and no certificate should be issued until the outcome of this is known.

If the clinic BP is 180/120 or greater with no signs or symptoms as described at NG136 point 1.5.2, the examinee should be referred promptly and as soon as possible (no later than 7 days) to their GP for follow-up as per NG136 point 1.5.1; no certificate should be issued until the outcome of this is known.

Note: at higher blood pressures in the range 140/90 to 180/120 examining doctors should exercise clinical judgement and individual discretion on certification decisions and urgency of referral for follow-up.

Table 5: Certification considerations – clinic BP

			
Clinic BP	<140/90	140/90 or >, but <180/120	180/120 or >
	Normal duration certificate*	Reduced duration certificate while diagnosis confirmed/discounted**	No certificate, same day/urgent clinical assessment

*unless repeat measurement at interval <2 years thought necessary
**unless clinical judgment suggests urgency of follow-up precludes certification

3.1.3 Ischaemic heart disease

Examinees with symptomatic IHD (i.e. angina) are not fit for standard certification of fitness. Prior to return to work offshore, examinees who have had an IHD event (including myocardial infarction, angioplasty/stent insertion and coronary artery bypass graft) will require assessment to confirm

- functional recovery with no residual impairment of exercise capacity
- risk of recurrent event is 'as low as clinically possible' by adequate implementation of clinically recognised 'secondary prevention' measures
- adequate time since event to ensure the above, with no occurrence of cardiac symptoms in that time. Adequate time should normally be not less than three months from the event*

*exceptionally, examinees in whom it is confirmed recovery is complete and secondary preventative measures satisfactorily established more rapidly than this may apply for operator-specific approval for mobilisation

3.1.3.1 First assessment on recovery from clinical event

The likelihood of further events should be established by seeking a treating clinician report to confirm diagnosis, absence of cardiac symptoms, satisfactory cardiac function with no indication of cardiac failure, patient-specific factors influencing prognosis (e.g. investigations results), risk of recurrence, and recommendations for secondary preventative lifestyle modifications and medications to reduce recurrence risk. Typical measures recommended are likely to include low-dose aspirin, an antiplatelet agent, antihypertensives*, statin medication* and recommendation to stop smoking*

*'target blood pressure' for secondary prevention is likely to be as described at section 3.1.2 above; the aim of statin therapy is likely to be a reduction of at least 40% in non-HDL cholesterol; measurement of expired carbon monoxide in breath is a recognised means of monitoring reduction in smoking[32] and may be used as evidence of non-smoking status[33].

The treating clinician should be asked to comment on whether physical activity is contraindicated for the examinee, and also whether any clinical investigation not already undertaken** would improve accuracy of prognosis for recurrence and to what degree. Where recommended, this should be undertaken, subject to examinee/employer agreement to the costs of doing so.

**for example, but not limited to, coronary angiogram, perfusion scintigraphy (thallium scan), cardiac CT, exercise ECG, or cardiac MRI scan

Functional recovery may be established from the clinical history (including exercise/activity history) but if in doubt, examining doctors may undertake the 6-minute walk test at paragraph 2.9.9, having first established that this is not medically contraindicated.

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[32] Tobacco: preventing uptake, promoting quitting and treating dependence. NICE NG209, November 2021: https://www.nice.org.uk/guidance/ng209 See points 1.14.11 and 1.17.4

[33] See Supplement to guidelines, paragraph 2.11.1

If the treating clinician report confirms initial satisfactory establishment of secondary preventative treatment goals (e.g. blood pressure, lipid values, smoking cessation) a standard certificate of maximum duration one year may be issued.

3.1.3.2 Subsequent assessments

Continued and consistent achievement of secondary preventative treatment goals should be confirmed at subsequent OEUK medicals. Information from previous OEUK medicals will be relevant in establishing this and should be sought. Certification duration will be dependent on the trend in recurrence risk factors. Examinees who require ongoing nicotine replacement therapy for nicotine dependence should check operator policy on 'vapes' if using these, as acceptability to operators may vary.

Table 6: Certification considerations – ischaemic heart disease

			
First assessment on recovery: establishment of secondary preventative measures	Established pattern of consistently good recurrence risk factor control	-	Unsatisfactory pattern of recurrence risk factor control (e.g. continued smoking)
	Standard certificate of up to 1 year duration	-	No certificate
Subsequent assessments: Trend in overall clinical progress	Well established pattern of consistently good recurrence risk factor control	Variable pattern of recurrence risk factor control (treatment targets inconsistently met)	Unsatisfactory pattern of recurrence risk factor control (e.g. continued smoking)
	Standard certificate of up to 2 years duration	Certificate duration limited at discretion of examining doctor	Suspend certification until improving pattern of recurrence risk factor control is restored

Where examinees with a history of ischaemic heart disease meet the criteria for issue of a standard certificate, the certificate should be annotated '***UNFIT*** **for work on normally-unmanned installations without direct operator approval**' (see section 4.4).

3.1.3.3 Recurrent clinical events

Persons who have suffered a second clinical event (e.g. myocardial infarction) despite apparently adequate implementation of secondary preventative measures after a first event, are not fit for standard certification.

3.1.3.4 If unfit for standard certification

A small number of operator medical advisors have indicated that they may be willing, subject to additional testing, to approve mobilisation of examinees who do not meet the criteria for issue of a standard certificate. These doctors are identified in the Supplement to these guidelines, along with advice on the test requirements they are likely to specify, and the procedure for contacting them for relevant examinees[34] .

3.1.4 Cardiac arrhythmias

If these result in functional impairment or cause temporary incapacitation examinees should be classified by occupation into either 'category 1' or 'category 2' (see section 3 introductory paragraph). Those without an employer or agency to do this should be assumed to be in a category 1 occupation. The examining doctor should clarify the nature and likely future clinical manifestations of the arrhythmia.

Examinees in a category 2 occupation and with clinical opinion for a benign prognosis will be fit for standard certification. For those in category 1 occupations, application for direct operator approval for mobilisation will be necessary.

Atrial fibrillation is likely to be the commonest arrhythmia encountered in examinees. Examining doctors should note the certification implications of anticoagulant medication (see paragraph 3.21.6).

Where examinees with a history of cardiac arrhythmia meet the criteria for issue of a standard certificate but require medication therapy, the certificate should be annotated '*UNFIT* for work on normally-unmanned installations without direct operator approval' (see section 4.4).

3.1.5 Pacemakers

Examinees with a cardiac pacemaker should be under regular secondary care follow-up. Examining doctors should establish the indication for pacemaker insertion, any expected symptoms despite the presence of a functioning pacemaker, and the expected technical probability and clinical effect(s) (e.g. limited exercise capacity, syncope or pre-syncope) of pacemaker failure.

Although pacemakers may be adversely affected by electromagnetic fields, this seems unlikely on offshore installations unless examinees will be very close (approximately 1m or less) to major electromagnetic sources (see Supplement[35]). Nevertheless, the treating clinician should be asked specifically to advise the electromagnetic field strengths above which exposure should be avoided, and prior to certification employers/agencies should be asked to risk-assess the examinee's likely exposure to such field strengths and feasibility of avoidance. Employer discussion with their operator client to

[34] See Supplement to guidelines, paragraph 2.11.12

[35] See Supplement to guidelines, paragraph 2.12

identify possible electromagnetic sources (e.g. generators, high-voltage switchboards) on the installation(s) to be worked on may be necessary.

If the treating clinician report and the employer risk assessment are favourable, a standard certificate can be issued. Certificate duration should be consistent with clinical follow-up intervals. Examinees without an employer or agency able to provide a risk assessment should not be issued with standard certification, but may apply for direct operator approval for mobilisation if the operator deems it feasible to conduct the risk assessment itself.

Where examinees with a pacemaker meet the criteria for issue of a standard certificate, the certificate should be annotated '*UNFIT* for work on normally-unmanned installations without direct operator approval' (see section 4.4).

3.1.6 Implanted cardiac defibrillator

A clinical condition requiring an implanted cardiac defibrillator (ICD) will involve potential cessation of effective cardiac activity and the possibility of unsuccessful response to device action. Examinees with an ICD will not be fit for standard certification. Prior to any application for direct operator approval for mobilisation, examinees should be classified by occupation into either 'category 1' or 'category 2' (see introductory paragraph at section 3). Those without an employer or agency to do this should be assumed to be in a category 1 occupation. Operator approval for mobilisation is likely to be considered for those in category 2 occupations only.

3.1.7 Congenital and/or valvular heart disease

If a previously-undocumented cardiac murmur is identified at the OEUK medical, referral for appropriate investigation will be required unless it can be confidently attributed clinically to an insignificant lesion. Certification should be delayed pending the outcome of investigation.

Where the examinee has a previously-known congenital or valvular heart lesion, it should have been investigated and the outcome documented at any previous OEUK medical. If not, a report from GP or treating physician, or independent cardiac assessment if insufficient information is available from these sources, will be required. Where reports indicate no haemodynamic significance or liability to syncope or pre-syncope, a standard certification can be issued, but examining doctors should note the certification implications of anticoagulant medication (see paragraph 3.21.6).

3.1.8 Deep venous thrombosis and pulmonary embolism

Where the examinee has a history of DVT or pulmonary embolism, the examining doctor should establish the clinical circumstances and whether or not there is any prior medical condition predisposing to recurrence. A history of single episode with clear non-recurring precipitant (e.g. following imposed immobility) and no need for long-term anticoagulation is compatible with standard certification of fitness, but any liability to recurrence (e.g. from clotting disorder), whether or not treated by prophylactic anticoagulation therapy, will require direct operator approval for mobilisation. Examining doctors should note the particular implications for examinees of anticoagulant medication (see paragraph 3.21.6).

3.1.9 Cerebrovascular disorders

Given the similar risk factors for occurrence, the approach to assessment will be similar for cerebrovascular disorders and ischaemic heart disease.

Prior to return to work offshore, examinees who have had a cerebrovascular disease event (e.g. stroke due to occlusive vascular disease, spontaneous intracerebral haemorrhage, Transient Ischaemic Attack (TIA)/Reversible Ischaemic Neurological Deficit (RIND) or amaurosis fugax) will require assessment to confirm

- functional recovery with no residual impairment of cognitive or motor capacity
- risk of recurrent event is 'as low as clinically possible' by adequate implementation of clinically recognised 'secondary prevention' measures
- adequate time to ensure the above, with no occurrence of symptoms in that time. Adequate time should normally be not less than three months from the event*

*exceptionally, examinees in whom it is confirmed that recovery is complete and secondary preventative measures satisfactorily established more rapidly than this may apply for operator-specific approval for mobilisation.

3.1.9.1 First assessment on recovery from clinical event

Functional recovery may take some time and in-person physical examination will be necessary. If in doubt about capacity to undertake emergency actions in event of a platform alarm, examining doctors should undertake the functional capacity assessment described at paragraph 2.9.9, having first established that this is not medically contraindicated. Risk of recurrence should be established by seeking a treating clinician report to confirm diagnosis, patient-specific factors (e.g. investigations results) influencing prognosis, and recommendations for secondary preventative lifestyle modifications and medications to reduce recurrence risk. The treating clinician may be asked to comment on whether any clinical investigation not already undertaken would improve accuracy of prognosis and to what degree, and where recommended should be undertaken, subject to examinee/employer agreement to the costs of doing so.

If the treating clinician report confirms initial satisfactory establishment of secondary preventative treatment goals (e.g. blood pressure, lipid values, smoking cessation) a standard certificate of maximum duration one year may be issued.

3.1.9.2 Subsequent assessments

Continued and consistent achievement of secondary preventative treatment goals should be confirmed at subsequent OEUK medicals. Information from previous OEUK medicals will be relevant in establishing this and should be sought. Certification duration will be dependent on the trend in recurrence risk factors. Measurement of expired carbon monoxide in breath is a recognised means of monitoring

reduction in smoking[36] and may be used as evidence of non-smoking status[37]. Those who require ongoing nicotine replacement therapy for nicotine dependence should check operator policy on 'vapes' if using these, as acceptability to operators may vary.

Where examinees with a history of cerebrovascular disease meet the criteria for issue of a standard certificate, the certificate should be annotated '***UNFIT* for work on normally-unmanned installations without direct operator approval**' (see section 4.4).

3.1.9.3 Recurrent clinical events

Persons who have suffered a second clinical event despite apparently adequate implementation of secondary preventative measures after a first event, are not fit for standard certification.

Table 7: Certification considerations – cerebrovascular disease

			
First assessment on recovery: establishment of secondary preventative measures	Established pattern of consistently good recurrence risk factor control	-	Unsatisfactory pattern of recurrence risk factor control (e.g. continued smoking)
	Standard certificate of up to 1 year duration	-	No certificate
Subsequent assessments: Trend in overall clinical progress	Well established pattern of consistently good recurrence risk factor control	Variable pattern of recurrence risk factor control (treatment targets inconsistently met)	Unsatisfactory pattern of recurrence risk factor control (e.g. continued smoking)
	Standard certificate of up to 2 years duration	Certificate duration limited at discretion of examining doctor	Suspend certification until improving trend in factor control is restored

[36] Tobacco: preventing uptake, promoting quitting and treating dependence. NICE NG209, November 2021: https://www.nice.org.uk/guidance/ng209 See points 1.14.11 and 1.17.4

[37] See Supplement to guidelines, paragraph 2.13

3.2 Diseases of the Nervous System

Nervous system conditions may lead to:

- Altered levels of consciousness
- Changes in cognitive function, particularly memory and concentration
- Loss of muscle power
- Impaired balance and/or co-ordination
- Impaired mobility
- Loss of sensation

Any of these may lead to a functional deficit affecting occupational requirements or emergency situation actions which would make an examinee unfit for standard certification. It may, in limited circumstances, be possible to mitigate the deficits sufficiently such that the examinee may be acceptable for travel to and work on specific installations with direct operator approval.

3.2.1 Epilepsy

A diagnosis of epilepsy with recurrent epileptic seizures of any type will mean that the examinee is unfit for standard certification unless the criteria below are met. The examining doctor should confirm/clarify the clinical history including circumstances of onset, seizure frequency and characteristics, response to treatment, and date of most recent seizure. For examinees in established offshore employment relevant information is very likely to be present in the records of previous OEUK medicals, and obtaining information on this from the previous examining doctor (if previous notes are not immediately available at the current assessment) may reduce the information required from treating clinicians.

The examinee's employer or agency should be asked to classify (and confirm in writing) the examinee's occupation into one of the two categories explained at the introduction to section 3.

3.2.1.1 For examinees in Category 1 occupations:

- the examinee must have been seizure-free for at least the last 10 years without taking anti-convulsant medication during that period, or have a neurologist-assessed risk of further seizures of less than 2% per annum.

- for alcohol-related seizures, examinees must have been seizure-free for a minimum period of 2 years by day and night and off all medication. Examinees must also meet the guidelines in paragraph 3.4.

- for examinees with a history of significant head injury or cranial surgery, and when there have been no epileptic seizures, the risk of post-surgical or post-injury epilepsy must be assessed by a neurologist or neurosurgeon as being low (i.e. below 2% per annum). If stopping prophylactic anticonvulsant medication is being considered, neurological opinion on prognosis for seizure risk

should be obtained in all cases – where risk will increase to 2% or greater, standard certification will be inappropriate.

Examinees with epilepsy but meeting the criteria above are nevertheless unfit for work on normally-unmanned installations (NUIs) and the certificate should be annotated '***UNFIT* for work on normally-unmanned installations without direct operator approval**' (see section 4.4).

Table 8: Certification considerations – epilepsy, category 1 occupations

			
Epilepsy	No history	Seizure-free for at least 10 years (off all medication)	Seizure within past 10 years, or risk 2% pa or >
	Standard certificate	Standard certificate	No certificate
Alcohol-related seizure	None	Seizure-free for 2 years or more	Seizure within past 2 years
	Standard certificate	Standard certificate	No certificate
Post head injury or cranial surgery	No history	Risk <2% pa	Risk 2% pa or >
	Standard certificate	Standard certificate	No certificate

3.2.1.2 For examinees in Category 2 occupations:

- the examinee must have been seizure-free for a minimum of 6 months, whether taking medication or not.
- if taking medication, the examinee should be free from significant side effects
- if taking medication, the treating clinician report should confirm no indication of poor compliance, and for medication for which therapeutic level monitoring is appropriate, confirm adequate therapeutic levels
- examinees who stop anticonvulsant medication must demonstrate a seizure-free period of 6 months before returning to offshore work

- for alcohol-related seizures, examinees must have been seizure-free for a minimum period of 2 years by day and night and off all medication. Examinees must also meet the guidelines in paragraph 3.4.

- for examinees with a history of significant head injury or cranial surgery, and when there have been no epileptic seizures, either a) the risk of post-surgical or post-injury epilepsy must be assessed by a neurologist or neurosurgeon as being low (i.e. below 2% per annum), or b) if the risk cannot be determined to be less than 2%, examinees may be considered fit after a minimum seizure-free period of 6 months. If stopping prophylactic anticonvulsant medication is being considered, neurological opinion on prognosis for seizure risk should be obtained – where risk will remain at or increase to 2% or greater, examinees must demonstrate a seizure-free period of 6 months after stopping medication for standard certification to be appropriate.

Examinees with epilepsy but meeting the criteria above are nevertheless unfit for work on normally-unmanned installations (NUIs) and the certificate should be annotated '***UNFIT* for work on normally-unmanned installations without direct operator approval**' (see section 4.4).

Table 9: Certification considerations – epilepsy, category 2 occupations

			
Epilepsy	No history	Seizure-free for at least 6 months	Seizure within past 6 months
	Standard certificate	Standard certificate	No certificate
Alcohol-related seizure	None	Seizure-free for 2 years or more	Seizure within past 2 years
	Standard certificate	Standard certificate	No certificate
Post head injury or cranial surgery	No history	Risk <2% pa, or seizure-free for 6 months	Seizure within past 6 months
	Standard certificate	Standard certificate	No certificate

3.2.2 Single Seizure

Examinees who have suffered a single seizure without a diagnosis of epilepsy being made, are fit for standard certification after a seizure-free interval depending on job category. For a category 2 role, this is six months; for a category 1 role, it is five years.

Examinees with a single seizure but meeting the criteria above are nevertheless unfit for work on normally-unmanned installations (NUIs) and the certificate should be annotated '***UNFIT* for work on normally-unmanned installations without direct operator approval**' (see section 4.4).

Table 8: Certification considerations – Single seizure, no epilepsy diagnosis

	▲
Category 1 role	Seizure-free for at least 5 years
Category 2 role	Seizure-free for at least 6 months

3.2.3 Loss of consciousness/altered level of awareness

Examinees with a history of unexplained or undiagnosed loss of or altered consciousness will require investigation by an appropriate specialist. Where a benign and non-recurrent specific cause (e.g. simple faint) is confidently diagnosed, standard certification and/or certification of fitness to return to work will be appropriate. Where a confident benign diagnosis (with no or minimal probability of recurrence) cannot be made, the examinee may be considered fit for or to return to offshore work after 6 months without recurrence.

3.2.4 Chronic neurological disorders

Examinees with conditions such as multiple sclerosis, Parkinson's disease, motor neurone disease and other disorders of muscle and movement should be assessed with regard to the factors described above. Those with mild symptoms are likely to be at minimal risk and therefore may be fit for offshore work, but the potential for relapse and/or progression will mean that more frequent review of fitness will be necessary, and duration of certification limited accordingly. A more severely affected examinee, if judged unsuitable for standard certification, may request individual operator approval for work on specific installations if their employer/agency can provide risk assessment indicating how any functional impairment can be satisfactorily mitigated.

3.2.5 Narcolepsy/sleep disorders (including obstructive sleep apnoea)

Examinees with a liability to drowsiness during periods of normal wakefulness due to narcolepsy, obstructive sleep apnoea or other sleep disorders, are unfit for standard certification for offshore work. Applications for direct operator approval for mobilisation should be accompanied by an employer/agency occupational classification (category 1 or 2 as per the introductory paragraph to section 3) and a treating clinician report explaining the response to treatment (e.g. CPAP) and how this has been assessed.

3.3 Psychiatric Disorders

Living at their place of work for days and weeks at a time makes offshore worker circumstances atypical, and some features of offshore life (the need to share accommodation with unfamiliar others, general lack of privacy, isolation from family and friends, limitations on personal preferences for off-duty recreation, dining etc.) mean that persons unable to tolerate these aspects of offshore life will be psychologically unsuited to offshore work. Medical conditions reducing psychological adaptation to offshore life, or which may be worsened or precipitated by these living and working conditions, require careful assessment. In addition, medical conditions affecting psychological health may have adverse effects on mood, memory, concentration, perception and behaviour, such that mental functioning may vary outwith the range of physiological normal.

3.3.1 Mild anxiety or depressive disorders ('common mental health problems')

While some degree of anxiety and alteration of mood in response to day-to-day psychological stressors is an expected normal physiological variation, any deviation sufficiently beyond physiological normal resulting in diagnosis of a medical condition requires careful evaluation. Presentations will vary greatly in severity, extent, duration and course, and robust objective measures are unlikely to be available. The examining doctor's clinical judgement, and the availability of additional information from treating clinicians and other sources (including the course of illness documented in previous OEUK medicals) will be important.

In general, the more clearly anxiety and/or depressive illness can be seen to be due to an individual provoking event in the examinee's course of life (e.g. marital breakup, bereavement) and the clearer the response to either active treatment or natural recovery with time, the more confidently standard certification may be decided upon. Given standard clinical practice to continue antidepressant medication for what may be months after resolution of an isolated episode of depression, examining doctors are likely to encounter examinees taking antidepressant medication for some time after recovery. This need not prevent standard certification of fitness provided no side-effects of medication are apparent. Reduced duration of certification may be appropriate to monitor clinical progress.

In situations where anxiety and/or depression is

- 'mild to moderate' (without referral to outpatient evaluation services) but
- of clinical intensity (e.g. resulting in sickness absence, and/or employer doubt about work performance or safety), yet
- has no clear precipitating cause (or appears to be precipitated by unexceptional day-to-day life occurrences),
- recurs and relapses unpredictably, and
- shows poor response to several or multiple variations of medication,

adaptation to offshore life and work is likely to be impaired to a significant extent, and examinees will be unfit for standard certification. The possibility that pervasive/persistent symptoms of ill-defined cause and/or poor response to treatment may be due to underlying alcohol or substance misuse problems should be considered, and appropriate enquiries made.

Table 10: Certification considerations – mild anxiety/depression

Anxiety	No history	Mild symptoms of specific known correctable/avoidable cause. No pharmacological treatment	Pervasive and persistent symptoms of uncertain or ill-defined cause
	Standard certificate	Standard certificate: consider reduced duration	No certificate
Depression	No history	Isolated episode of known and corrected cause	Persistent and/or recurring episodes with unclear cause, and/or poor response to treatment
	Standard certificate	Standard certificate: consider reduced duration	No certificate

3.3.2 More severe anxiety or depressive disorders

Where a diagnosis of anxiety or depression has led to referral for secondary care evaluation and/or treatment (including periods of admission to inpatient facilities), symptoms are likely to be of a more persistent or severe nature. Reports from treating clinicians will be required, including psychiatric opinion on prognosis. Where the course of illness has included actual or attempted self-harm, and/or if the examinee has current thoughts of suicide, specific psychiatric opinion should be sought on the likelihood of these being acted on. Unless reports indicate a favourable course of recovery and future prognosis from an isolated albeit more severe illness, or where clinical evaluation indicates the examinee has problems with memory, concentration, or behavioural disturbance (e.g. agitation), examinees will be unfit for standard certification of fitness.

Anxiety of phobic severity is unlikely to be compatible with standard certification of fitness unless it is confidently expected that the phobia in question will not be encountered in the course of travel and work offshore.

Table 11: Certification considerations – more severe anxiety/depression

			
Anxiety	No history	Phobic anxiety, precipitant unlikely in course of offshore activities; no pharmacological treatment	Phobic anxiety with possibility of expression in course of offshore activities, whether or not with ongoing pharmacological treatment
	Standard certificate	Standard certificate may be appropriate: consider reduced duration	No certificate
Depression	No history	More severe, but isolated episode of known and corrected cause; good psychiatric prognosis, single-agent pharmacotherapy only	Persistent and/or recurring episodes with unclear cause, and/or poor response to treatment. Multi-agent pharmacotherapy
	Standard certificate	Standard certificate may be appropriate: consider reduced duration	No certificate

3.3.3 Psychoses (including bipolar and schizophrenic disorders)

A defining feature of active psychotic intensity psychiatric illness is loss of insight: examinees frankly unwell with psychosis are unlikely to present for assessment of fitness but if they do, they will be unfit.

Examinees may be seen following a remission from psychotic illness. Treating clinician and documented course of illness/contents of prior reports at previous OEUK medicals will be essential for assessment. The examinee will be unfit for standard certification of fitness, but may apply for direct operator approval for work offshore if the examining doctor has established evidence that they:

- are in complete remission
- are continuing any recommended clinical follow-up
- are continuing any recommended medication
- have documented psychiatrist-assessed low risk of recurrence

Direct operator approval for mobilisation is unlikely unless mobilisation is expected for short and infrequent trips only, and the application for approval is accompanied by an employer risk assessment detailing what measures will be implemented to identify incipient recurrence at the earliest possible stage (e.g. examinee will be accompanied by a colleague who knows the examinee well enough to recognise early signs of incipient illness).

Table 12: Certification considerations – psychotic illness

			
Psychotic illness	No history	Any prior history of psychotic illness	Active psychotic illness
	Standard certificate	Work offshore under direct operator approval only	Requires clinical treatment: ongoing assessment inappropriate until treated and recovered

3.3.4 Personality and behavioural disorders

The nature of personality disorders is such that interactions with others may be characterised by perceptions and/or behaviours which are not consistent with offshore social and working circumstances. Examinees will be unfit for standard certification of fitness, and operator approval for location-specific mobilisation is unlikely to be issued unless the examining doctor has been supplied with evidence confirming, despite the diagnosis of personality disorder, a consistent lack of problems or impairment in an employment situation very similar to offshore life and work over a substantial period (i.e. years) of time.

3.3.5 Neurodevelopmental disorders (e.g. autism [including Asperger's syndrome] and attention deficit hyperactivity disorder [ADHD])

The nature of these conditions is such that interactions with others may be characterised by perceptions and/or behaviours which are not consistent with offshore social and working circumstances. For example, the inherent impaired understanding of 'social cues' and anticipation of third-party actions found in autism, and the inherent impaired concentration and potential for impulsivity and risk-taking of ADHD are likely to pose significant difficulties in offshore operations. In ADHD, the potential for uncertain diagnosis may lead to the paradoxical situation of a worker with symptoms actually due to a non-ADHD condition being administered stimulant medication which, were they taking it inappropriately as a 'recreational' drug, would breach employer/operator substance misuse policies.

Examinees with these conditions are unfit for standard certification of fitness, and direct operator approval is unlikely unless the examining doctor has been supplied with evidence confirming, despite the diagnosis, a consistent lack of problems or impairment in an employment situation very similar to offshore life and work over a substantial period of time. Operator approval will also depend on the practicality of implementing any adjustments required to accommodate aspects of neurodiversity. In the case of ADHD treated by stimulant medication, the operator is likely to require objective evidence (i.e. not from patient self-reporting or clinician impression from patient self-reporting) of 'before and after treatment' changes in psycho-neurological functioning.

3.3.6 Other psychological conditions

Examinees may give a history of other less common psychological conditions (e.g. eating disorders, post head injury cognitive and/or behavioural changes, functional disorders). Background information will be

necessary to understand the full nature, extent and prognosis of the condition, but standard certification is unlikely to be appropriate. Direct operator approval is unlikely unless the examining doctor has been supplied with evidence confirming, despite the diagnosis, a consistent lack of problems or impairment in an employment situation very similar to offshore life and work over a substantial period of time.

3.4 Alcohol Problems

Evaluation of examinees with alcohol problems is complicated by variation in severity (from 'excessive consumption' through 'problem drinking' to 'alcohol dependency'), imperfect performance of blood tests as a measure of the presence/severity of the problem, relapsing and remitting clinical course, variable 'cause and effect' relationship to co-morbid psychiatric problems (anxiety/depression), and prognostic uncertainty.

A tendency to concealment of alcohol problems means that little, other than the suggestion of excessive consumption from the number of alcohol units declared on the examinee questionnaire, is likely to be encountered at the OEUK medical itself. Presentation for assessment of fitness for offshore work is more likely on employer referral following a positive 'for cause' alcohol test, failure to mobilise as expected, inappropriate behaviour at work, or medevac. Such events should be considered as markers of a potentially more severe problem regardless of examinee self-stated perception, and appropriate other sources of information should be sought, although reluctance to provide information by 'third sector' therapy providers (e.g. Alcoholics Anonymous) may hamper assessment.

Employers/operators may have specific alcohol abuse policies: if not advised of the contents of these (e.g. by a referring employer) examining doctors should directly seek relevant information as this will influence certification decisions. Some policies may adopt a 'zero tolerance' approach, while others may offer one (or more) 'second chance(s)'. Employer provision of treatment will also vary, with some able to support non-NHS inpatient detoxification and rehabilitation services, while others may only be able to support attendance at NHS facilities. NHS provision of therapy for alcohol problems will vary geographically and by waiting list time.

Examining doctors will require to exercise judgement on a case-by-case basis, but in general:

- Where biological monitoring (e.g. CDT, gamma GT and/or others) is used to assist assessment, results should be normal, but normal results in themselves should not be taken as assurance of recovery
- A sufficiently long period of sobriety/abstinence to confirm that the examinee is able to cope with the day-to-day adversities of life (including the necessary absence from offshore work itself) without relapse will be required. An appropriate period is likely to be 'months' rather than 'weeks' long.
- If available, return to work in a suitable observed onshore role during the period of sobriety/abstinence will provide an indication of work performance
- If it is decided that the examinee is fit for offshore work (or to return to offshore work) he or she should be reviewed no less frequently than every three months in the first 12 months after return, and no less frequently than every six months in the second 12 months.

Individuals who have suffered an alcohol withdrawal induced seizure should also be assessed in accordance with the guidance given in paragraph 3.2.1.

3.5 Substance misuse

Examinees identified by any means as misusing drugs (illegal or medicinal), or with a past history of misuse*, are not fit for standard certification of fitness.

It is uncommon at OEUK medicals for examinees to directly provide a history of substance misuse. Examinees with substance misuse problems are more likely to be identified during medical assessment of sickness absence, concerns about behaviour, or the results of drug tests.

A common misperception is that a drugscreen test is a requirement of the OEUK medical. This is not so – any drugscreen test done in association with an OEUK medical will be undertaken at the request of a third party, most likely an employer booking the medical. Nevertheless, a positive drugscreen result will be evidence of misuse of the substance concerned. Where a 'non-negative' result from a substance misuse test performed at the same time as an OEUK medical requires laboratory clarification, OEUK certification should be deferred until a definitive result is available.

Examinees found unfit for standard certification of fitness may apply for direct operator approval for mobilisation if they can show that they meet the requirements of both their own employer's and the relevant operator's substance misuse policy criteria for return to offshore work. If the examinee can first meet the substance misuse policy criteria for return to work of their employer (if they have one), they may apply for direct operator approval if they can then meet the return-to-work criteria that would be applied to an operator employee. Note that both employer and operator policies may vary – some adopt what may be described as a 'zero tolerance' approach, while others may offer one (or more) 'second chance(s)'.

Both employer and operator policy requirements may involve combinations of drug testing, and/or background reports. Examining doctors who are not qualified Medical Review Officers for substance misuse testing are recommended to avoid undertaking drug tests on examinees, but should direct the examinee to an alternative examining doctor. Employers should supply examining doctors with the return-to-work requirements of their substance misuse policy. Examinees who meet these and wish to seek direct operator approval should obtain from the operator(s), either themselves or via their employer, details of the operator return-to work policy requirements.

*Previous drug misuse may be compatible with certification if it can confidently be ascribed to an isolated episode of immature 'experimentation', without any indication of concomitant psychiatric disorder, dependence, or psychosocial impairment, no more recently than a decade previously. Given the potential for inaccurate history, corroboration from the examinee's GP and/or other available sources will be desirable.

It is recognised that recreational use of cannabis is legal in some jurisdictions around the world. This is NOT the case in the UK. Examinees using cannabis or with a history of past use are unfit for standard certification. For examinees claiming 'medicinal' use of cannabis, see section 3.21.4

Recreational use of nicotine, including dependence, is not generally viewed as substance misuse in the UK offshore industry.

3.6 Respiratory Conditions

Asthma will likely be the commonest chronic respiratory condition encountered in examinees, but chronic obstructive pulmonary disease will also be encountered in older smokers. Acute exacerbations and progressive functional impairment will be the relevant considerations in assessment, but consideration should also be given to occupational factors such as respiratory irritants and sensitisers.

3.6.1 Asthma

A history of resolved childhood asthma can be disregarded.

The British Thoracic Society/Scottish Intercollegiate Guideline Network guidelines (BTS/SIGN 158[38]) provide detailed guidance on the management of asthma in adults, which should be used by examining doctors to assess the severity of asthma and adequacy of control (outside the UK, equivalent national guidelines may be used). Examinees will be unfit for standard certification unless they have:

- infrequent, non-disabling episodes only
- normal exercise tolerance
- absence of hospitalising episodes
- good knowledge and awareness of illness with the ability to modify their own treatment as necessary
- symptoms which do not require high dose inhaled or oral steroids

Examinees not meeting these criteria are unlikely to be considered for direct operator approval for mobilisation unless a treating clinician (expected to be a secondary care clinician) report has been obtained by the examining doctor, confirming good prognosis for lack of severe episodes despite an adverse prior clinical history.

3.6.2 Pneumothorax

A specialist report to determine the probability of recurrence (which is increased in smokers) will be required. Examinees with other than a low risk of recurrence (including smokers) are not fit for standard certification of fitness.

3.6.3 Obstructive or restrictive pulmonary disease

Conditions such as chronic bronchitis, emphysema, and any other pulmonary disease causing significant disability or recurring illness (such as bronchiectasis) should be assessed using standard spirometry measurements.

Examinees with an FEV1 at least 60% of predicted values and an FVC at least 75% of predicted values are likely to have sufficient pulmonary reserve to meet the physical capacity requirements of offshore travel and work.

[38] SIGN 158. British guideline on management of asthma. July 2019 https://www.sign.ac.uk/media/1383/qrg158.pdf

For examinees whose spirometry does not meet these values, or where physical capability is doubted regardless of spirometry, the 6-minute walking test at 2.9.9 should be performed to ensure that the examinee has the capacity to respond in a platform emergency and evacuation.

Examinees with COPD but meeting the criteria above are nevertheless unfit for work on normally-unmanned installations (NUIs) if they have had more than two exacerbations within the previous two years: if so, the certificate should be annotated '***UNFIT*** **for work on normally-unmanned installations without direct operator approval**' (see section 4.4).

Table 13: Certification considerations – obstructive or restrictive pulmonary disease

			
Obstructive or restrictive pulmonary disease	None Fit for offshore; normal duration certificate.	FEV1 60% or > of predicted and FVC 75% or > of predicted Fit for offshore; certificate duration guided by clinical assessment and trend in lung function tests over time.	FEV1 <60% of predicted or FVC <75% of predicted UNFIT for offshore unless satisfactory completion of functional assessment (6 min walk); if pass, certificate duration guided by clinical assessment and trend in lung function tests over time.

3.6.4 Respiratory conditions considerations in assessing fitness to participate in shallow-water CA-EBS training

Asthma

Approximately 8% of examinees may be expected to give a history of current asthma, and a further 3% of resolved past asthma. A history of resolved childhood asthma may be disregarded. For examinees with current asthma, any history of symptoms in circumstances similar to those of survival pool training (e.g. swimming), or during previous 'dry' EBS training should be sought.

The chest should be examined to confirm absence of wheeze where a history of good control is given. FEV1 should be measured by spirometry, and a suitable asthma control test[39] administered.

Examinees with asthma will be unfit for training if any one or more of the following are found:

a) wheeze is precipitated by exercise, cold or emotion of the nature/degree to be encountered in training, despite treatment.

[39] See Supplement to guidelines, paragraph 2.14.1

b) severe exacerbation (e.g. hospital admission) within prior three months

c) examinee is at 'specialist therapies' step of BTS/SIGN guideline 158, 2019[40] (see figure 2 on page 80)

d) asthma control test score outwith satisfactory limits[41]

e) FEV1 is below lower limit of normal (LLN)

Chronic Obstructive Pulmonary Disease (COPD)

Approximately 1% of examinees may give COPD as a known diagnosis but COPD may be more commonly suspected by examining doctors. NICE clinical guideline NG115[42] is relevant for examining doctors assessing a suspected new diagnosis. Note that diagnosis should not be made on a single diagnostic test or criteria, but on combination of history, examination and spirometry.

Examining doctors attempting to 'find undiagnosed cases' by performing 'routine' spirometry on all examinees would in effect be screening for COPD, and should ensure that they are aware of the expected prevalence of COPD in the particular population they intend to test, the sensitivity and specificity of the cut-off values of spirometry variables they choose to consider indicative of COPD, and the positive predictive value and other screening test characteristics of the screening strategy they are considering.

Examinees with an established or 'confirmed after clinical suspicion' diagnosis of COPD should be considered fit for training if their FEV1 is 60% or greater of predicted and their FVC is 75% or greater of predicted. Examinees should be considered unfit if either FEV1 is less than 60% of predicted or their FVC is below 75% of predicted.

Spontaneous pneumothorax

A history of spontaneous pneumothorax is likely in less than 1% of examinees but should be considered an **absolute contraindication** to in-water EBS training, unless treated by bilateral pleurectomy, in which case examining doctors should seek advice from the treating clinician. Bilateral pleurectomy is a significant surgical procedure and is unlikely to be justified solely as a means to achieve eligibility for in-water EBS training.

Traumatic pneumothorax (including post-thoracotomy)

Examinees should be considered fit for training unless there are indications that there were lasting complications of surgery or injury, recovery has been abnormal or incomplete, or there is residual lung function impairment.

Sarcoidosis

Sarcoidosis is likely to be uncommon (less than 1%) in examinees. Unless effects on other organ systems lead to a finding of unfitness for offshore work, most cases are likely to be coincidental findings on chest

40 SIGN 158. British guideline on management of asthma. July 2019 https://www.sign.ac.uk/media/1383/qrg158.pdf

41 See Supplement to guidelines, paragraph 2.14.1

42 NICE clinical guideline NG115. Chronic obstructive pulmonary disease in over 16s: diagnosis and management. 26th July 2019. https://www.nice.org.uk/guidance/NG115

x-rays for other purposes. Such cases should be considered fit for training if there is no requirement for clinical treatment, and their FEV1, FVC and FEV1/FVC ratio are at or above the lower limit of normal (LLN). Examinees will be unfit for training if their sarcoidosis requires treatment (most likely with steroids), or if any of FEV1, FVC and FEV1/FVC ratio are below LLN.

Cystic fibrosis

Pulmonary cystic fibrosis is likely to be encountered in approximately 0.1% of examinees or fewer and should be considered an absolute contraindication to EBS in-water training.

Pulmonary fibrosis

Pulmonary fibrosis is likely to be only rarely encountered among examinees and may well render an examinee unfit for offshore work due to effects on exercise tolerance. Those with a diagnosis of pulmonary fibrosis and sufficient exercise tolerance to be generally fit for offshore work should be considered fit for training if a specialist respiratory physician confirms no increased risk of barotrauma.

(Known) Lung bullae or cysts

Should be considered an absolute contraindication to in-water EBS training.

Pulmonary Tuberculosis

This is an unlikely diagnosis in the UK population of examinees, but those with a history of pulmonary TB will be fit for training once clinically recovered, with evidence of normal lung function and chest x-ray.

SARS-CoV-2 ('Covid-19') infection

The clinical expression of Covid-19 infection varies from asymptomatic infection through mild illness of short duration and with complete recovery, to more severe and persistent illness (with or without hospitalisation) to the most severe manifestations requiring hospitalisation and possibly respiratory support.

Examinees who have tested positive, but who had no symptoms should be regarded as unfit for in-water EBS training exercises for one week from the date of the most recent positive test.

Examinees with a history of mild to moderate Covid-19 and symptomatic resolution within one week should be considered temporarily unfit for in-water EBS until seven days after full functional recovery and return to normal activities.

Those with a history of more severe Covid-19 infection whether or not requiring hospitalisation but with subsequent complete symptomatic resolution should be considered temporarily unfit for in-water EBS until a minimum of seven days after full functional recovery and return to normal activities, including previous physical exercise activities. The possibility of residual complications, particularly in those with a history of hospital admission, should be carefully evaluated.

Examinees with a history of Covid-19 infection of any severity or duration and with persisting respiratory symptoms other than a simple cough ('long Covid') should be regarded as indefinitely unfit for in-water EBS exercises, until such time as there is sufficient understanding of the underlying pathophysiology and ability to assess significance for breathing compressed air.

Table 14: Fitness to Train Decision - respiratory conditions (note: read text above)

Fitness to Train Decisions	Fit to Train	Fit to Train (under certain circumstances)	**UNFIT** to Train
Asthma	None	Asthma, but features at text above absent. Issue 'asthma advice' as per section 5, paragraph 5.6.	a) Wheeze precipitated by exercise, cold or emotion. b) severe exacerbation within prior three months c) Examinee is at 'specialist therapies' step of BTS/SIGN guideline 158, 2019[43] (see figure 2 on page 80) d) unsatisfactory asthma control test score e) FEV1 < LLN
COPD	None	COPD, but FEV1 is 60% or > of predicted, and FVC is 75% or > of predicted Issue 'COPD advice' as per section 5, paragraph 5.6.	COPD, and FEV1 is <60% of predicted, or FVC is <75% of predicted
Spontaneous pneumothorax	None	Has had bilateral pleurectomy	No bilateral pleurectomy (absolute contraindication)
Sarcoidosis	None	No requirement for treatment AND all of FEV1, FVC and FEV1/FVC ratio are at or above LLN	Requires treatment OR if any of FEV1, FVC and FEV1/FVC ratio are below LLN
Cystic fibrosis	None	N/A	Any history (absolute contraindication)
Pulmonary fibrosis	None	No increased risk of barotrauma	increased risk of barotrauma
Lung bullae or cysts	None	N/A	Any history

[43] SIGN 158. British guideline on management of asthma. July 2019 https://www.sign.ac.uk/media/1383/qrg158.pdf

Fitness to Train Decisions	Fit to Train 	Fit to Train (under certain circumstances) 	**UNFIT** to Train 
Pulmonary TB	None	Clinically recovered, with evidence of normal lung function and chest x-ray	Incomplete recovery, or abnormal lung function, or abnormal chest x-ray
Covid-19	None	Asymptomatic positive PCR test Fit to train from 1 week after test --- --- --- mild to moderate illness, full clinical recovery within one week Fit to train from 7 days after fully recovered and returned to normal activities. --- --- --- more severe infection with or without hospitalisation Fit to train from 7 days after fully recovered and returned to normal activities, including previous physical exercise activities.	Incomplete recovery, or abnormal lung function, or abnormal chest x-ray

3.7 Endocrine disorders

Diabetes is the most likely endocrine disorder to be encountered; thyroid disease should also be expected, but other conditions (e.g. Addison's disease) are likely to be rarer among examinees. The possibility of an acute, serious medical event (ketoacidosis) clearly exists for type 1 diabetes, as does the possibility of rapid-onset incapacitation from hypoglycaemia. While acute and/or severe medical events (e.g. acute cardiac events) may be of more concern as a result of the secondary consequences of type 2 diabetes, the possibility of hypoglycaemia as a side-effect of medication in this group of examinees should not be neglected.

Hypothyroidism (once identified) should be manageable without undue consequences provided regular clinical review occurs. Hyperthyroidism in the acute stage will not be compatible with standard certification of fitness, and close review as treatment (likely either surgery or radioiodine followed by replacement thyroxine) progresses will be required to judge the point at which recovery is sufficient for return to work.

3.7.1 Insulin-treated diabetes

The 2008 guidelines required application of a 'restricted certificate' process for examinees with type 1 diabetes. That 'restricted certificate process' no longer applies. Instead, where examinees have insulin-treated diabetes (including type 1 DM and type 2 diabetes treated with insulin), examining doctors should be provided with employer classification of the examinee's occupation into either 'category 1' or 'category 2' (see introductory paragraph Section 3). Those without an employer or agency to do this should be assumed to be in a category 1 occupation.

In all cases, the examining doctor should obtain treating clinician (GP and/or hospital clinic as appropriate) information to confirm:
a) good control of diabetes as defined by the treating clinician for a minimum of the prior 6 months,
b) the examinee's ability to self-manage their insulin requirements to the treating clinician's satisfaction,
c) that the examinee retains awareness of hypoglycaemia.

Unless the examinee has only recently developed diabetes, previous OEUK medicals will contain relevant information which should also be sought to build a picture of the trend in overall control of the examinee's diabetes.

3.7.1.1 For examinees in occupational 'category 2':

Provided the treating clinician report remains satisfactory, examinees may be issued with a standard certificate of fitness for offshore work. *It is **ESSENTIAL** that in all such cases the certificate is annotated:*

Fit for **UK sector** North Sea **only** – **NOT FIT** for work in Norwegian and/or Dutch sector

UNFIT **for work on normally-unmanned installations without direct operator approval**

Fit for work in 'category 2' occupation of [insert job title] only

Certification must be restricted to a maximum of 1 year, and examinees reviewed at least annually to ensure control remains acceptable and that occupational category has not changed. Development of clinical complications (e.g. diabetic retinopathy, neuropathy, or renal impairment) may indicate an increased probability of macrovascular complications (e.g. acute cardiac event): treating clinician opinion on prognosis should be sought, but the presence of clinical complications will mean that examinees are unfit for standard certification. Application for direct operator approval for mobilisation may be made if examinees meet criteria a) to c) above.

Note that this provision of these guidelines assumes that all installations are following the recommendation of the OEUK publication 'Medications and Medical Equipment for Offshore Installations Guidelines. Issue 2, 2019[44]' to have a supply of glucagon, 40% glucose gel, and 10% intravenous glucose solution on board the installation, that the installation medic has received appropriate instruction in the management of diabetic emergencies from their operator medical advisor or OFAR regulation 5 (1) (c) (i) supervising doctor, as appropriate, and that operators in the UK sector have satisfied themselves that their 'Topside' medical advice service provider is aware of the potential presence of workers with type 1 diabetes aboard their installations.

3.7.1.2 For examinees in occupational 'category 1':

Examinees with insulin-treated diabetes and who are in a category 1 job are not fit for standard certification. However, they may apply for direct operator approval to work offshore if they meet the criteria at a) to c) above.

Examinees who were previously issued with 'Addendum 3' (restricted) certificates under the 2008 guidelines may expect approval to continue working on the same installations, assuming no untoward change in clinical condition or in occupational/installation circumstances. Examining doctors should anticipate operator request to confirm the clinical features described above, and should obtain information from treating physicians accordingly. For examinees meeting criteria a) to c) above but not previously issued with 2008 Addendum 3 certificates, some operators may also require an employer/agency risk assessment to clarify the measures expected to be implemented to mitigate any diabetes-related impairment of consciousness. It is unlikely that operators will approve mobilisation to normally-unmanned installations for examinees with insulin-treated diabetes, and examinees should be advised accordingly.

3.7.2 Insulin pumps

Developments in therapeutic monitoring and insulin delivery have occurred over the past decade: it is not unusual to encounter patients with diabetes who use cutaneous continuous glucose monitoring devices (often combined with a smartphone 'app') to enable better glucose control, and some patients

[44] OEUK. Medications and Medical Equipment for Offshore Installations Guidelines. Issue 2, 2019 https://oeuk.org.uk/product/medications-and-medical-equipment-for-offshore-installations-guidelines/

are now using continuous subcutaneous insulin delivery systems ('insulin pumps', potentially linked to the results of the cutaneous monitor), instead of intermittent bolus doses. While technological improvements to aid diabetic control and reduce long-term complications are welcomed, use of insulin pumps is restricted by the need for powered devices used outside the accommodation to be confirmed as 'intrinsically safe'.

Examinees will not be able to use insulin pumps offshore unless they are confirmed to be intrinsically safe. Changing between continuous delivery and intermittent bolus dosing of insulin may be therapeutically undesirable. Any examinee with diabetes proposing to do so should discuss this carefully with their treating clinician, and the examining doctor should confirm their approval, if given.

Cutaneous monitoring devices are sealed self-contained units and are thus acceptable for offshore use, but examinees proposing to use offshore an insulin pump (where known to be intrinsically safe) should be advised to contact the operator before mobilisation to ensure its intrinsic safety status is agreed.

Table 15: Certification considerations – insulin-treated diabetes

			
Examinee in category 2 occupation	n/a	Satisfactory treating clinician report and overall trend from previous OEUK assessments	Does not meet criteria outlined in text, and/or adverse trend in control
	n/a	Standard certification (maximum 1 year), **with annotations**	Unfit for standard certification.
Examinee in category 1 occupation, with previous 'addendum 3' certificate	n/a	Satisfactory treating clinician report and overall trend from previous OEUK assessments	Does not meet criteria outlined in text, and/or adverse trend in control
	n/a	Direct operator approval likely	Direct operator approval unlikely
Examinee in category 1 occupation, without previous 'addendum 3' certificate	n/a	Satisfactory treating clinician report and overall trend from previous OEUK assessments	Does not meet criteria outlined in text, and/or adverse trend in control
	n/a	Operator may require employer risk assessment before approval	Direct operator approval unlikely

3.7.3 Type 2 diabetes/non-insulin treated diabetes

Some offshore workers may consider that type 2 diabetes is 'mild diabetes' and/or of less clinical significance. However, it is a significant contributor to cardiovascular risk, and regular review of affected examinees will be necessary to encourage continued optimum lifestyle and clinical management to reduce this risk.

Examinees with type 2 diabetes will frequently also be overweight or obese, and if so, should be considered to have 'complicated' obesity (see paragraph 3.8.1).

The examining doctor should establish what treatment 'goals' have been set for the examinee, in regard to blood glucose control (typically judged by HbA1c), blood pressure, weight, and blood lipids. While treating clinicians may vary in their acceptance of variation from these goals, examining doctors should assess the data from treating clinicians and from previous OEUK medicals to establish the general trend in control, whether 'static and satisfactory', 'improving', or 'worsening'.

In general, standard certification will be appropriate for examinees with either static or improving diabetic control, showing monitoring parameters within established treatment goals. Duration of certification will be guided by the class of complicated obesity (paragraph 3.8).

Where the trend in diabetic control shows a deterioration, certification will be guided by the class of complicated obesity (paragraph 3.8). If certification is withdrawn or suspended, it may be restored once monitoring shows a return to improving trend. If treating clinician review is expected to be delayed, examining doctors may repeat HbA1c levels, and/or measure weight and/or BP etc. themselves (provided examinee/employers have accepted the cost).

3.7.4 Hypoglycaemia in type 2 diabetes

Hypoglycaemia is not limited to diabetic patients treated with insulin – it may also occur in patients with type 2 diabetes as a side-effect of medication. Medications most likely to cause hypoglycaemia in type 2 diabetes are sulphonylureas (e.g. gliclazide), repaglinide), and 'gliflozin' (SGLT-2 inhibitor) class agents (when used in combination with a sulphonylurea). The 'gliflozin' agents are also associated with a risk of severe ketoacidosis at moderate blood glucose levels.

Examinees on any of the above drugs should be classified by occupation into either 'category 1' or 'category 2' (see introductory paragraph at section 3); those without an employer or agency able to do so should be assumed to be in a category 1 occupation.

For those on the above medications and in a category 2 occupation, standard certification may proceed as otherwise clinically appropriate as per paragraph 3.7.3. Those in category 1 occupations are not fit for standard certification: application for direct operator approval for mobilisation will be necessary.

Note that for patients unable to achieve treatment targets on a combination of weight reduction and up to three oral medications, treating clinicians will seriously consider managing type 2 diabetes with insulin. For examinees with type 2 diabetes treated by insulin, the guidance at paragraph 3.7.1 applies.

Table 16: Certification considerations – type 2 diabetes

			
Trend in overall clinical progress	Well established pattern of consistently good diabetes control	Variable pattern of diabetic control (treatment targets inconsistently met)	i) worsening pattern of diabetic control OR ii) on medication with potential for hypoglycaemia
	Standard certificate of up to 2 years duration	Certificate duration limited at discretion of examining doctor	i) Minimal certificate duration until return to improving trend ii) Certification dependent on occupational classification

3.7.5 Non-diabetic hyperglycaemia

In UK clinical practice, examinees who are identified as having 'non-diabetic hyperglycaemia' should be reviewed annually by their GP, for repeat BMI measurement and annual offer of HbA1c/fasting blood glucose. Examinees with 'non-diabetic hyperglycaemia' should have certification limited to one year, and at each review the examining doctor should establish the outcome of GP/treating clinician review. Examinees developing diabetes at any point should be assessed as paragraph 3.7.1 or 3.7.3.

3.8 Obesity

Examining doctors will frequently encounter examinees who are overweight or obese: the majority of adults in England are overweight or obese and offshore workers more likely to be so. Weight gain is common between successive OEUK medicals. Although 5% weight loss has clinical benefits, achieving this is difficult. The prognosis for sustained weight loss is very poor. See Supplementary information for detailed figures and references[45].

The relevance of overweight and obesity for offshore work is that it is a risk factor for the development of medical conditions which increase the probability of medevac, an adverse clinical factor in those examinees who already have these conditions, and may result in functional impairment (particularly for required actions in alarm situations).

3.8.1 Identifying and classifying overweight and obesity

NICE CG189 (Obesity: identification, assessment and management) [46], points 1.2.5, 1.2.7, and 1.2.11 are relevant to identification and classification of overweight and obesity.

All examinees should have their BMI calculated from a weight measured at the medical and their height, as previously known or as measured at the medical. In addition, all examinees with BMI less than 35 should have their waist-to-height ratio (WHR) measured (see paragraph 2.9.4).

In the absence of hypertension, diabetes and cardiovascular disease (or, at the examining doctor's discretion, other significantly problematic medical conditions likely to have been contributed to by obesity), from the combination of BMI and WHR, examinees may be classified into the following groups:

- Low-risk normal weight
- At-risk normal weight
- Low-risk overweight
- At-risk overweight
- Low-risk uncomplicated class 1 obesity
- At-risk uncomplicated class 1 obesity

[45] See Supplement to guidelines, paragraph 2.15

[46] Obesity: identification, assessment and management. NICE CG189. November 2014. https://www.nice.org.uk/guidance/cg189

Table 17: BMI and WHR classification

	Waist-to-height ratio <0.5	Waist-to-height ratio 0.5 or >
BMI <25	Low-risk normal weight	At-risk normal weight
BMI 25-29.9	Low-risk overweight	At-risk overweight
BMI 30-34.9	Low-risk class 1 uncomplicated obesity	At-risk class 1 uncomplicated obesity

Based on the presence or absence of medical conditions likely to have been contributed to by obesity, and their BMI, examinees may be classified into the following groups:

- Complicated class 1 obesity
- Uncomplicated class 2 obesity
- Complicated class 2 obesity
- Uncomplicated class 3 (formerly 'morbid') obesity
- Complicated class 3 (formerly 'morbid') obesity

Table 18: BMI and co-morbidity classification

	Co-morbidity absent	Co-morbidity present
BMI 30-34.9	(Low-risk or At-risk uncomplicated class 1 obesity as above)	Complicated class 1 obesity
BMI 35-39.9	Uncomplicated class 2 obesity	Complicated class 2 obesity
BMI 40-44.9	Uncomplicated class 3 obesity	Complicated class 3 obesity

Note that WHR is not considered in obesity at BMI of 35 and above because BMI of 35 and above is sufficient to confer 'at risk' status.

3.8.2 Low-risk normal weight

Examinees in this group will have a BMI of less than 25, and a WHR of less than 0.5. This is the expected physiological normal for the population, and otherwise well examinees in this group are fit for standard certification for 2 years.

3.8.3 At-risk normal weight

Examinees in this group will have a BMI of less than 25, but a WHR of 0.5 or more. Although of normal weight, they have an increased risk of developing medical conditions such as hypertension, obesity, and cardiovascular disease, increasing further if WHR increases to 0.6 or more.

Examinees in this group are fit for standard certification, but more frequent review for identification of the possible onset of hypertension/diabetes etc. may be appropriate. The duration of certification should be based on the direction, degree and rate of change in the trend in the examinee's weight, BMI and WHR.

3.8.4 Low-risk overweight

Examinees in this group will have a BMI of 25 or more, but less than 30, and a WHR of less than 0.5. Although overweight, they are not appreciably at increased risk of developing overweight-related medical conditions. If otherwise well, examinees in this group are fit for standard certification for 2 years.

3.8.5 At-risk overweight

Examinees in this group will have a BMI of 25 or more, but less than 30, and a WHR of 0.5 or more. They have an increased risk of developing overweight-related medical conditions, increasing further if WHR increases to 0.6 or more.

Examinees in this group are fit for standard certification, but more frequent review for identification of the possible onset of hypertension/diabetes etc. may be appropriate. The duration of certification should be based on the direction, degree and rate of change in the trend in the examinee's weight, BMI and WHR.

3.8.6 Potential significance of weight loss in overweight examinees

Assuming an average adult height of 1.75m for males and 1.61m for females[47] and 5% weight loss as the practical maximum achievable, an average height male examinee will likely encounter difficulty in returning to a 'normal' BMI (less than 25) once their weight has exceeded 80kg (BMI 26.1). An average height female examinee will likely encounter difficulty in returning to a 'normal' BMI (less than 25) once their weight has exceeded 68kg (BMI 26.2). Obese average-height examinees will likely experience difficulty in returning to a BMI in the non-obese BMI range (<30) once their weight exceeds 96kg, a BMI of 31.3 (males), or 81kg/BMI 31.2 (females).

These figures may surprise and disappoint many examinees, but also illustrate the potential value of examining doctors actively encouraging weight loss in examinees at relatively low BMI values. Losing weight or avoiding further weight gain when at relatively low BMI in the overweight range will prevent examinees developing a degree of obesity at which they have little prospect of returning to non-obese weight even with practical maximally-achievable weight loss. Examining doctors should discuss weight

[47] Wikipedia. Average human height by country (last accessed 17 December 2022). https://en.wikipedia.org/wiki/Average_human_height_by_country

and BMI diplomatically with overweight examinees, as they may misinterpret the discussion as inappropriate given their awareness of other offshore workers with significantly greater degrees of excess weight.

3.8.7 Low-risk uncomplicated class 1 obesity

Examinees in this group will have a BMI of 30 or more, but less than 35, and a WHR of less than 0.5. Although obese, they are not appreciably at increased risk of developing weight-related medical conditions. If otherwise well, examinees in this group are fit for standard certification for 2 years

3.8.8 At-risk uncomplicated class 1 obesity

Examinees in this group will have a BMI of 30 or more, but less than 35, and a WHR of 0.5 or more.

Examinees in this group are fit for standard certification, but more frequent review for identification of the possible onset of hypertension/diabetes etc. may be appropriate. The duration of certification should be based on the direction, degree and rate of change in the trend in the examinee's weight, BMI and WHR. For example, although a 2 year certificate may be appropriate if there is a clear and consistent static trend, a 1 year certificate may be appropriate if the trend is increasing.

3.8.9 Complicated class 1 obesity

Examinees in this group will have a BMI of 30 or more, but less than 35. They will also have one or more of hypertension, diabetes, cardiovascular disease or another obesity-related medical condition.

Examinees in this group are fit for standard certification if the condition-specific guidelines allow, but more frequent review of the clinical indices of their medical condition (e.g. BP/HbA1c) will be appropriate. The duration of certification should be based on the trend in the clinical indices of their medical condition and on the direction, degree and rate of change in the trend in the examinee's weight/BMI. For example, although a 2 year certificate may be appropriate if there is a clear and consistent static trend, a 1 year certificate would be appropriate if the trend is worsening.

3.8.10 Uncomplicated class 2 obesity

Examinees in this group will have a BMI of 35 or more, but less than 40. They will not have hypertension, diabetes or other obesity-related condition, but they are increased risk of developing these.

Examinees in this group are fit for standard certification, but more frequent review for identification of the possible onset of hypertension/diabetes etc. is appropriate. The duration of certification should be based on the direction, degree and rate of change in the trend in the examinee's weight/BMI. For example, although a 2 year certificate may be appropriate if there is a clear and consistent static trend, a 1 year certificate may be appropriate if the trend is increasing.

3.8.11 Complicated class 2 obesity

Examinees in this group will have a BMI of 35 or more, but less than 40. They will also have one or more of hypertension, diabetes, cardiovascular disease or another obesity-related medical condition.

Examinees in this group are fit for standard certification if the condition-specific guidelines allow, but more frequent review of the clinical indices of their medical condition (e.g. BP/HbA1c) will be appropriate. The duration of certification should be based on the trend in the clinical indices of their medical condition and on the direction, degree and rate of change in the trend in the examinee's weight/BMI. For example, although a 1 year certificate may be appropriate if there is a clear and consistent static (or improving) trend, suspension of certification pending clinical improvement may be appropriate if the trend is worsening.

3.8.12 Functional tests in Class 3 obesity

Examining doctors will be familiar with the 'helicopter tests' required for examinees with BMI above 40 in the previous edition of the guidelines. The need to demonstrate ability to pass through a standard-size escape hatch was replaced in April 2015 by a process of 'shoulder measurement', and no longer applies. However, for examines with class 3 obesity (BMI 40 or more) examining doctors should be provided with written confirmation from the examinee's employer/agency (or from other appropriate source) that the examinee can:

a) don and fasten standard Civil Aviation Authority (CAA) approved and marine issue lifejackets over a survival suit, and
b) sit in a standard helicopter seat and fasten a three-point harness

No certificate should be issued until the examining doctor has received the necessary confirmation. Survival training centres (which possess lifejackets and helicopter seats for training purposes) may be willing to undertake a practical test for this purpose.

To minimise potential core crew inconvenience, some operators may provide a statement to the effect that they consider they have sufficient evidence of ability to fit lifejackets and helicopter seats. If the examining doctor is presented with such an operator statement practical testing is not required.

Examining doctors may generally assume that examinees have sufficient mobility for normal job functions despite obesity unless a third party (e.g. employer or operator) has communicated concern about this. However, in order to confirm that examinees with obesity retain sufficient capacity to respond to emergency situations (in particular to take the actions necessary in alert/evacuation situations), the 6-minute walking test described at paragraph 2.9.9 should be carried out for examinees with BMI 40 or more.

Examining doctors may also undertake the functional capacity test for examinees outwith these criteria if in doubt as to the examinee's capacity for general mobility around the installation.

3.8.13 Uncomplicated Class 3 obesity

Examinees in this group will have a BMI of 40 or more. They will not have hypertension, diabetes or other obesity-related condition, but they are increased risk of developing these.

Examinees in this group are fit for standard certification if they have passed the 'fit in helicopter seat and lifejacket' tests, AND they have passed the 6-min walk test. Examinees able to meet these requirements should be issued with a standard certificate of maximum duration six months, although duration of certification should be based on the direction, degree and rate of change in the trend in the examinee's weight/BMI. At each review the possible onset of hypertension/diabetes etc. should be assessed. At each review the 'fit in helicopter seat and lifejacket' and 6-min walk test should be repeated if the trend in weight/BMI is increasing, but they may be omitted if the trend is static or decreasing.

3.8.14 Complicated Class 3 obesity

Examinees in this group will have a BMI of 40 or more, and they will also have one or more of hypertension, diabetes, cardiovascular disease or another obesity-related medical condition.

Examinees in this group are unfit for standard certification unless the trend in their weight/BMI is either static or decreasing, AND the trend in the clinical indices of their medical condition (e.g. BP/HbA1c) is static or improving, AND they have passed the 'fit in helicopter seat and lifejacket' tests, AND they have passed the 6-min walk test. Examinees able to meet these requirements should be issued with a standard certificate of maximum duration three months. Any subsequent increase in weight/BMI OR adverse change in the clinical indices of their medical condition (e.g. BP/HbA1c) should result in suspension of certification until the previous acceptable values have been reached again.

Table 19: Certification considerations – BMI and co-morbidity

			
Low-risk normal weight	Standard certificate, 2 years	-	-
At-risk normal weight		Standard certificate, consider reduced duration	
Low-risk overweight	Standard certificate, 2 years	-	-
At-risk overweight		Standard certificate, consider reduced duration	
Low-risk uncomplicated class 1 obesity	Standard certificate, 2 years	-	-

			
At-risk uncomplicated class 1 obesity	Trend in weight/BMI/WHR static or decreasing Standard certificate, 2 year	Trend in weight/BMI/WHR increasing Standard certificate, 1 year	-
Complicated class 1 obesity	-	As for specific condition(s) Trend in weight/BMI increasing Standard certificate, 1 year	-
Uncomplicated class 2 obesity	Trend in weight/BMI static or decreasing Standard certificate, 2 years	Trend in weight/BMI increasing Standard certificate, 1 year	-
Complicated class 2 obesity	-	As for specific condition(s) Trend in weight/BMI static or decreasing Standard certificate, 1 year maximum	As for specific condition(s) Trend in weight/BMI increasing Consider suspending certificate
Uncomplicated class 3 obesity	-	Pass 'helicopter seat and lifejackets' tests AND Pass 6-min walk test Standard certificate 6/12	Fail 'fit in helicopter seat and lifejacket' tests OR Fail 6-min walk test Unfit for standard certificate
Complicated class 3 obesity	-	Trend in weight/BMI static or decreasing AND Trend in BP/HbA1c static or improving AND Pass 'fit in helicopter seat and lifejacket' tests AND	Trend in weight/BMI increasing OR Trend in BP/HbA1c increasing OR Fail 'fit in helicopter seat and lifejacket' tests OR

			
		Pass 6-min walk test Standard certificate 3/12	Fail 6-min walk test Unfit for standard certificate
BMI 45 or >	-	-	Unfit for standard certificate

3.8.15 Maximum BMI compatible with certification

There is insufficient data to enable use of bideltoid measurement to predict the ability of workers with BMI 45 or more to pass through helicopter escape windows. Therefore, examinees of BMI 45 or more are not fit for standard certification.

3.8.16 Maximum weight compatible with certification

At the time of writing there is no consensus on an appropriate maximum worker weight compatible with certification of fitness. This is under consideration by an OEUK Operator Health and Safety Technical Group. Their recommendation will be incorporated into this guideline once made.

3.9 Diseases of the Gastrointestinal System

Acute abdominal conditions remain a significant cause of medevac from installations in the UK sector. Assessment of gastrointestinal disease should carefully establish the probability of acute deterioration/exacerbation of the condition.

3.9.1 Upper GI conditions (peptic ulceration, GORD)

Peptic ulceration is less commonly encountered in examinees since the widespread adoption of H Pylori eradication therapy in dyspeptic patients. Nevertheless, examinees with active peptic ulcer disease are unfit for standard certification of fitness for offshore work. A past history of ulceration is compatible with standard certification if the examinee has remained asymptomatic since appropriate treatment and successful helicobacter eradication therapy.

Uncomplicated oesophagitis, gastritis and simple dyspepsia arising from 'GORD' and/or diaphragmatic hernia are compatible with standard certification. Where the examining doctor suspects more serious pathology from the clinical history, appropriate clinical information should be obtained.

3.9.2 Inflammatory bowel disease

Examinees experiencing acute exacerbations of inflammatory bowel disease will clearly be unfit for offshore work. Following recovery and treatment, the examining doctor should establish the past pattern of illness episodes (including speed of onset and severity), response to treatment in each, and prognosis for severe or rapid-onset relapse. If satisfactory, standard certification, but with reduced duration to enable monitoring of clinical progress, is appropriate.

3.9.3 Liver disease

For examinees with chronic liver disease, examining doctors should establish the cause, prognosis for progression, and presence of or likelihood of developing complications such as oesophageal varices. Examinees with minimal disease severity and good prognosis will be fit for standard certification, but all others will not.

3.9.4 Gallstones

Gallstone disease is likely to present initially with an episode of biliary colic. Medevac is likely if this occurs offshore, and sickness absence if it occurs during field break. Approach to treatment may vary from immediate surgery to delayed surgery, to non-surgical treatment. When considering fitness to return to work after known gallstone disease, examining doctors should establish the risk of recurrent biliary colic. Where this is assessed to be low, examinees will be fit for standard certification.

Examinees with untreated gallstones but meeting the criteria above are nevertheless unfit for work on normally-unmanned installations (NUIs), and the certificate should be annotated '*UNFIT* for work on normally-unmanned installations without direct operator approval' (see section 4.4).

3.9.5 Pancreatitis

For examinees with a history of single episode of pancreatitis, the cause and prognosis for recurrence should be established. Where recovery is complete and recurrence risk is reported to be low, standard certification may continue. For examinees with chronic or recurring pancreatitis the cause and prognosis for treatment to prevent further recurrence should be established. Unless further recurrence is reported to be unlikely, examinees will be unfit for standard certification of fitness.

3.9.6 Hernia

Hernia should be assessed with regard to the risk of strangulation and its effects on the examinee's ability to carry out their normal work tasks. Examinees with a hernia considered to be of high risk of strangulation should have certification of fitness postponed until surgically repaired. Examinees with a hernia of low strangulation risk may be issued a reduced-duration standard certificate while awaiting surgical assessment and repair.

3.9.7 Stoma

Uncomplicated stoma is compatible with standard certification but the examining physician should be satisfied that the underlying cause is compatible with offshore work and that the personal management of the condition will be possible offshore.

3.10 Musculoskeletal Conditions

Musculoskeletal disorders may arise from varying pathology, but in all instances

- locomotor function
- balance and co-ordination
- stability of joints and possibility of subluxation or dislocation
- ability to don and wear a survival suit

should be assessed for potential to impair ability to move around the installation during normal work or to take emergency actions offshore, and

- side effects of medication

should also be considered (see 3.21).

3.10.1 Joint replacement

Joint replacements should not affect standard certification provided the examinee can meet the mobility requirements and there is low probability of dislocation.

3.10.2 Limb prostheses

Limb prostheses may not affect standard certification provided the examinee can meet the mobility requirements of offshore life and survival training. A lower limb prosthesis is less likely to impair overall function than an upper limb prosthesis, especially of the dominant arm (although with sufficient time significant functional adaptation to single-upper-limb may occur). Arrangements for fitting the prosthesis in an emergency must be considered: examinees may be asked to demonstrate speed and ease of putting on their prosthesis, including in simulated 'low light' conditions.

3.11 Dermatological Conditions

Unless sufficiently severe to precipitate sickness absence or medevac, dermatological conditions are unlikely to cause unfitness for standard certification. The possibility of occupational exposure to substances acting as allergens or irritants should be understood and taken into account when making the assessment.

3.11.1 Psoriasis

Psoriasis which is well-controlled by topical medication should be compatible with standard certification. Assessment of more serious disease requiring inpatient treatment and chemotherapy should include the compatibility of offshore rotational duties with treatment regimes. Psoriatic arthropathy should be assessed according to its effect on musculoskeletal function.

Examining doctors should note the certification implication of immunosuppressant medication (see 3.21.7)

Extensive psoriasis affecting the scalp or hands may not be compatible with food handling work in caterers (see paragraph 4.3).

3.11.2 Dermatitis

Accurate diagnosis of potential occupational dermatitis may require specialist referral and patch testing, the results of which should be taken into account in certification decisions. Offshore working will generally be possible with appropriate use of Personal Protective Equipment (PPE), unless specialist advice is that this is contraindicated in the specific clinical circumstances.

3.12 Conditions of the Genitourinary System

A history of a short-term illness (e.g. simple urinary tract infection) will usually present no difficulties for offshore work but chronic or frequently recurrent disease should be carefully considered regarding:

- risk of disabling or life-threatening complications
- side effects of medication
- chronic or secondary effects of the disease (e.g. anaemia, lethargy, osteoporosis)

3.12.1 Renal calculi

Following an episode of renal colic, assessment of risk of recurrence is required. A specialist report should be obtained where appropriate. Low risk of recurrence is compatible with standard certification, but where risk of recurrence is high, examinees are unfit for standard certification.

3.12.2 Chronic renal disease

In addition to considering the chronic effects of the disease on the examinee's functional ability to work, the examining doctor should also determine the risk of developing acute renal failure.

3.13 Haematological Conditions

Haematological disease is complex, so examining doctors will generally require (in all but the simplest clinical situations) specialist opinion to assist certification decisions. Unless specialist opinion indicates a predictable and unchanging future clinical course, limited duration certification and more frequent review will be appropriate, where standard certification is possible.

3.13.1 Haemophilia and other bleeding disorders

Because of the obvious risk of bleeding examinees are unfit for standard certification. Application for direct operator approval for mobilisation will therefore be necessary.

3.13.2 Polycythaemia

Primary polycythaemia (polycythaemia rubra vera) is normally asymptomatic and, provided the examinee is undergoing regular venesection as clinically indicated, is unlikely to pose significant risk so standard certification will be possible. In secondary polycythaemia the causative condition is likely to be the more relevant consideration for offshore fitness assessment.

3.13.3 Thalassaemia and sickle cell disease/trait

Thalassaemia minor and sickle cell trait are unlikely to pose significant risk for offshore work and are therefore consistent with standard certification. However, the clinical features of Thalassaemia Major and Sickle Cell Disease mean examinees are unfit for standard certification – direct operator approval would be required for mobilisation.

3.14 Organ Transplant

Organ transplant in itself will not prevent offshore work provided the organ is functioning adequately, but continuing immunosuppressive medication will require assessment as per paragraph 3.21.

3.15 Neoplastic Conditions

Assessment of examinees with malignancy should consider both the clinical effect of the neoplasm and the effect of any treatment. In all cases, the following should be considered:

- nature and location of the neoplasm and any disability caused
- likelihood of lesion or treatment-related acute complications
- compatibility of treatment programmes with offshore rotation patterns
- side effects and other complications of treatment
- psychological impact of the illness and availability of appropriate support

Where the lesion and treatment are thought compatible with continued work offshore limited duration certification will be appropriate to ensure ongoing review of fitness. Examinees in remission should be issued with certificates based on the length of remission and requirements for clinical follow-up.

3.16 Infectious Diseases

Examinees with minor infectious disease should not be declined a certificate of fitness, but should be advised of likely employer and operator policies to avoid mobilisation if unwell (to reduce significant risk of spread within the offshore community) – they should seek the advice of their employer personnel mobilisation department or their operator contact. Catering staff require special consideration to exclude the risk of food-borne spread of disease (see 4.3).

Individuals suffering from chronic communicable disease should be assessed to determine:

- risk of transmission to other individuals
- effects of the condition which may adversely affect the individual's ability to perform their duties or effectively participate in emergency evacuation
- requirements for long-term therapy and side effects of such therapy

3.16.1 Pulmonary TB

The risk posed to others by individuals with active pulmonary tuberculosis is not compatible with offshore work, so examinees will be unfit for standard certification. Once treatment is underway, examining doctors must obtain a specialist report to confirm the examinee is no longer infectious and that they are not suffering from significant treatment side effects.

3.16.2 HIV/AIDS

A diagnosis of HIV positivity need not debar from employment. Examinees with AIDS-related illness should be assessed with regard to the specific functional effects and the risks associated with illness and its treatment.

3.17 Ears, Nose and Throat (ENT)

Hearing problems are the conditions most likely to be encountered, and may impact safety offshore through impairment of communication, particularly in (although not limited to) alarm/alert/emergency situations.

3.17.1 Audiometry (see also 2.9.7)

Adequate functional hearing for work offshore may be judged apparent from clinical observation of conversational understanding during the examining doctor's assessment, and audiometry at the medical can give further indication of this. See paragraph 2.9.7 for comment on audiometry in regard to regulation on noise at work.

3.17.2 Hearing aids

Examinees with a hearing aid are likely to have a mild to moderate hearing loss. The aid should improve hearing, reducing the effort required for communication, and examinees are unlikely to be dependent on their aid(s) for communication. This can be established by asking examines to remove their hearing aid(s), and assessing conversational understanding. In cases of doubt, or for examinees with a more severe hearing loss, a more objective practical test may be conducted by placing the examinee in a different room, and holding a telephone conversation with him/her: the examinee should be asked to repeat sections of text read to him/her by the examining doctor. Examinees able to correctly do so without wearing their aid(s) may be assumed to have adequate functional hearing to hear safety announcements in flight or on board a platform without a hearing aid, and thus be fit for work offshore. Examinees shown to be dependent on their hearing aid(s) for conversational understanding should not be issued with a standard certificate, but application for direct operator approval for mobilisation may be accepted if the examinee and/or their employer can demonstrate that arrangements are in place to mitigate difficulty in responding to emergency alerts.

The previous edition of this guideline advised that hearing aids should be certified as intrinsically safe. Manufacturer declarations from Oticon and Bernafon dated January and November 2007 and shared with examining doctors at their 2014 conference[48] confirmed 'insufficient energy to cause fire or explosions' in hearing aids. Hearing aids may therefore be regarded as suitable for use on offshore installations without further enquiry by the examining doctor.

3.17.3 Cochlear implants

Examinees with a cochlear implant will have very severe or profound hearing loss, to the extent that without a functioning receiver in place, they will have extremely limited understanding of audio communications. Examinees with a cochlear implant will not be fit for standard certification, but application for direct operator approval for mobilisation may be made if the examinee and/or their employer can demonstrate that a) the examinee has sufficient implant-aided hearing for satisfactory

[48] Oil & Gas UK examining Doctor Conference 29 May 2014: Dr G Furnace presentation

communication at work, and b) that arrangements are in place to mitigate difficulty in responding to emergency alerts (e.g. in the event that the implant receiver is removed or non-functional).

3.17.4 Other ENT disorders

Acute disequilibrium may occur with conditions such as viral labyrinthitis, and can be expected to result in temporary sickness absence, but should resolve and not affect standard certification. Examinees with frequently recurring or persistent disorders of balance are unlikely to be encountered, but where they are, will be unfit for standard certification if the condition is likely to affect normal movement around the platform or impair ability to take part in emergency evacuation procedures.

3.17.5 ENT conditions considerations in assessing fitness to participate in in-water CA-EBS training

The pressure changes at the depths of in-water EBS training are unlikely to cause any major clinical ENT effects. Trainees encountering difficulty in clearing their ears at the shallowest depth exercises should be identified before proceeding to 'deeper' exercises, and those with acute upper respiratory infections/conditions should be identified by training centre enquiries 'on the day'.

Persons with a tracheostomy or incompetent larynx will be unable to participate in survival training pool exercises generally and should not be encountered in EBS training.

Persons with an acute perforated tympanic membrane will be unfit to train until it has healed/resolved. Those with a chronic perforated tympanic membrane will be unfit to train if they have been advised by their treating clinician to avoid water immersion and/or diving.

Those with a history of nasal obstruction, mastoid surgery, chronic ear disease, or chronic nasal/sinus conditions, Meniere's disease or other vertiginous condition, should be considered unfit to train if they have been advised by their treating clinician to avoid water immersion and/or diving.

Table 20: Fitness to Train Decision - ENT conditions

Fitness to Train Decisions	Fit to Train	Fit to Train (under certain circumstances)	Unfit to Train
Tracheostomy or incompetent larynx	None	N/A	**UNFIT** to train (unfit for survival pool exercises).

Fitness to Train Decisions	Fit to Train 	Fit to Train (under certain circumstances) 	Unfit to Train 
Perforated tympanic membrane	None	Acute Fit to train once healed	Chronic UNFIT to train if advised to avoid water immersion or diving by treating clinician
Nasal obstruction, mastoid surgery, chronic ear disease, or chronic nasal/sinus conditions, Meniere's disease or other vertiginous condition	None	N/A	UNFIT to train if advised to avoid water immersion or diving by treating clinician

3.18 Ophthalmological Conditions

3.18.1 Visual acuity

Examinees without corrective lenses should have distance vision for left and right eyes and binocular vision checked by Snellen chart.

Examinees with corrective lenses for refractive errors should be following their optician's recommendation for repeat vision testing. Both uncorrected and corrected vision should be checked as above.

To enable safe movement around a location in an emergency, for standard certification examinees should have a minimum uncorrected binocular visual acuity of 6/60 or better. Examinees with poorer visual acuity may apply for direct operator approval for mobilisation but the operator is likely to require that the examining doctor has undertaken and can report the outcome of a practical test of the examinee's ability to navigate corridors, stairways and doors (e.g. within the examining doctor's facility).

Binocular near vision should be checked by reading a test type chart. Print size in written materials is commonly 10 to 12 pt (this guideline text is 11pt), the equivalent of N10 or N12 on a reading test type chart. Examinees unable to read N10 or larger at 40cm should be advised to see an optician for assessment of need for reading glasses, as they may have difficulty in focusing on written material. However, standard certification may be issued.

For vision testing requirements for crane operators, see section 4.2.

3.18.2 Monocular vision

Monocular vision is acceptable provided the minimum standard of acuity is met and the examinee shows appropriate adaptation to the loss of binocular vision.

3.18.3 Diplopia

Diplopia is not compatible with standard certification of fitness. Application for direct operator approval for mobilisation will only be appropriate if it is supported by a favourable employer risk assessment.

3.18.4 Visual fields

Where an examinee has a visual field deficit, clinical information should be obtained to understand the extent, cause, prognosis (i.e. liability to extend) and duration of, and the examinee's adaptation to, this. If the deficit is other than clinically insignificant, standard certification of fitness will be inappropriate. Operator approval for mobilisation may be applied for if an employer/agency practical test confirms adequate ability to carry out normal job functions and participate in installation emergency actions.

3.18.5 Colour vision

The OEUK medical is not intended as a definitive statement of fitness for work involving colour discrimination. Where this is a critical job requirement, it is expected that employers will arrange for

specific ‘trade testing’ of colour vision. As a reminder of this, all OEUK medical certificates should be annotated ‘Employer-specific assessment required for work requiring normal colour vision’.

If a colour vision deficit is identified at the OEUK medical, the examining doctor should specifically ensure that the annotation ‘Employer-specific assessment required for work requiring normal colour vision’ is not omitted.

3.19 Dental Health

Dental problems are a frequent cause of medevac from offshore. Although examining doctors are not dentists, inspection of the oral cavity and dentition should be performed to establish that the examinee is free of gross dental pathology. Bleeding gums or periodontal disease, broken teeth, and large missing fillings should be obvious to non-dentists.

If the examining doctor thinks that there is sufficient dental pathology to present a risk of acute dental pain requiring emergency treatment, then certification of fitness should be withheld pending a dental opinion and treatment if necessary.

Individuals medevaced for dental reasons must provide a statement from a dentist confirming resolution of the dental pathology before they may be considered fit to return offshore.

3.20 Allergies and Anaphylaxis

Examinees with a diagnosed allergy will have a range of response severity to allergens. Where not documented at a previous OEUK medical, examining doctors should clarify, if necessary by treating physician report:

- The nature of the allergen(s)
- The nature (including, specifically, whether anaphylactic) and severity of the reaction
- The frequency of episodes and time since last episode
- The medication required

Certification decisions will be influenced by these factors and the likelihood of exposure offshore and potential for preventing exposure.

Examinees with a diagnosis of anaphylaxis are unfit for standard certification. Prescription of an Epipen or clinical advice to carry one, whether followed or not, should be interpreted as diagnosis of anaphylaxis. Application for direct operator approval for mobilisation will be required. Operator approval is likely for those in whom only a single allergen causes anaphylaxis – approval is unlikely for those with multiple allergens known or likely to cause anaphylaxis.

Examinees advised to carry an 'EpiPen' and previously issued with an 'addendum 3' certificate under the 6th edition (2008) guidelines may expect direct operator approval to work on the same installations, assuming no untoward change in clinical condition or in occupational/installation circumstances.

Examinees with allergy requiring carriage of an 'EpiPen' should expect to be found unfit for work on normally-unmanned installations (NUIs) and to have an operator-approved certificate annotated 'unfit for work on NUI'.

3.20.1 Food (e.g. nut) allergy

There is variation in the confidence in diagnosis and threshold for precautionary treatment in patients. In some cases, diagnosis may be made on the basis of a single episode of unclear symptomatology, and 'EpiPen' medication may be prescribed 'from an abundance of clinical caution'. Given the importance of a clear diagnosis for offshore certification, it may be appropriate to encourage full clinical investigation, including referral to a specialist in immunology (or locally available equivalent); unfortunately, local NHS arrangements for this may be limited.

The combination of co-existent food allergy and asthma carries a worse prognosis for outcome of anaphylaxis than solely food allergen-induced anaphylaxis. Operators are unlikely to approve mobilisation of examinees with concomitant food allergy and asthma for anything other than very infrequent and brief mobilisations.

3.21 Medications

The OEUK Occupational Health and Hygiene Technical Group (OHHTG) has considered issues arising from use of prescription and non-prescription medications several times. The concerns raised are a) safety risks from medication intended action (e.g. sedation) or side-effects, and b) potential for unexpected effects from non-pharmaceutical agents of uncertain content or provenance.

In the UK sector, workers intending to carry medication offshore must declare it at heliport check-in. On arrival offshore, their medication will be reviewed by the installation medic. Unidentifiable substances (e.g. loose tablets or medications in unsealed containers) are not permitted offshore.

Examining doctors should remind workers taking prescribed medications offshore to carry a sufficient supply for the intended duration of their trip, and an adequate additional quantity (e.g. two weeks) in case their trip is unexpectedly extended.

3.21.1 'Over the counter*' medications

Examinees should not require to take 'over the counter*' medications offshore with them – installation sickbays should be adequately stocked with simple analgesics, 'cold cures', etc., although not necessarily of the examinee's preferred brand. Examinees taking 'over the counter*' medication offshore should ensure it is in original sealed packaging, so that it is clearly identifiable and not tampered with.

*this means UK 'General Sales List' (GSL) or 'Pharmacy' (P) non-prescription medicines[49]

3.21.2 'Health-related substances and supplements'

Various non-prescription, non-pharmacy 'over the counter' preparations are often taken offshore by workers for perceived health reasons (see supplement). Because manufacturing of these non-pharmaceutical grade substances is not standardised, contents may vary significantly from those stated. They may be purchased on the internet, and/or from suppliers in countries outwith the UK, where laws regarding constituents may be significantly different. It is also possible that the supplier's description of the contents is misleading.

Because of these issues, examinees should be advised that installation operators may allow 'health-related substances and supplements' to be taken offshore only with prior approval. Examinees should check with the operator of the installation they intend to work on what is permitted or not.

3.21.3 CBD

Some countries have legalised supply and use of cannabis for recreational purposes, so it is possible that CBD products may contain levels of cannabis constituents which are illegal in the UK. Given variation and uncertainty in product provenance and contents, and confusion over substance misuse test results,

[49] For further explanation, see: https://www.gov.uk/guidance/medicines-reclassify-your-product

it is likely that operators will not permit CBD products on their offshore installations. Examinees should check directly with the relevant operator whether it is permitted or not.

3.21.4 'Medical Cannabis'

A good brief guide to 'medical cannabis' can be found on the NHS website here: https://www.nhs.uk/conditions/medical-cannabis/ 'Medical cannabis' refers to the prescription of licensed medical products containing cannabis extracts. The only indications for prescription in the UK are some forms of intractable epilepsy, spasticity in multiple sclerosis, and as an antiemetic in cancer chemotherapy. Examinees prescribed cannabis for a recognised clinical indication will not be fit for standard certification, because of the indication for prescription, and because the preparation will have a caution label or skilled task warning (see 3.21.8).

Workers may be given 'off label' prescriptions for medical cannabis, or supplies of unlicensed preparations, for medical conditions which are not recognised indications. Examinees taking either unlicensed 'medical cannabis' preparations, or licenced cannabis preparations for 'off-label' indications will not be fit for standard certification because the preparation will have (or if unlicensed, would be expected to have) a caution label or skilled task warning (see 3.21.8).

3.21.5 Tranquilisers, hypnotics, sedatives

The intended effect of these medications will result in impaired consciousness, and potentially consequential drowsiness, impaired alertness, impaired dexterity and/or confusion. Hypnotics have 'hangover' effects where adverse effects of the drug are still present for some time after the therapeutic effect has worn off. Examinees requiring these classes of medication should not be considered fit for standard certification of fitness.

Where a worker has been accepted for offshore mobilisation despite use of such medication, or where a hypnotic is supplied by a medic offshore (for example to treat persistent insomnia):

- the medication should be taken under the direct supervision of the Medic
- the examinee should be stood down from any emergency role on the installation while on the medication
- the OIM must be advised that one of the crew has been administered medication which may affect his/her ability to respond during a platform emergency
- a colleague should be tasked with assisting the crew member taking the medication to correctly follow muster procedures in a platform emergency

3.21.6 Anticoagulants

Anticoagulants (now usually the 'DOAC' medications, e.g. rivaroxaban; examinees taking warfarin are now seen less frequently) impair the normal haemostatic response to tissue injury, and therefore have the hazard of spontaneous haemorrhage (e.g. intracerebral, gastric) or excessive bleeding in response to otherwise 'trivial' injury. The commonest reason for examinees to require long-term anticoagulant therapy in the UK offshore sector is now likely to be atrial fibrillation, rather than valvular heart disease.

3.21.6.1 DOACs (directly-acting oral anticoagulants)

Examinees requiring DOAC anticoagulant medication should not be considered fit for standard certification of fitness. They may apply for operator approval for mobilisation if their ORBIT score is 3 or less[50] [51]. Note that some operators may only accept workers with an ORBIT score of 2 or less, and/or may also require an employer or agency risk assessment confirming the examinee is in an occupational group whose rate of injury in the course of their work offshore in within the lower range of injury frequency.

Examinees should be advised that if accepted by an operator for mobilisation to its installations, they are likely to be considered unfit for work on normally-unmanned installations (NUIs).

3.21.6.2 Warfarin

The warfarin 'antidote' vitamin K is now a discretionary item in the OEUK publication 'Medications and Medical Equipment for Offshore Installations Guidelines. Issue 2, 2019'. It cannot be assumed to be present on all offshore installations, so application for direct operator approval for mobilisation will be required for examinees on warfarin. Applications are unlikely to be considered unless a treating clinician report confirms the 'time in therapeutic range' to be at least 65% for the previous six months.

3.21.6.3 Exceptions

The following medications are excepted from the 'anticoagulants' guidance above:

- Low-dose aspirin for the secondary prevention of cardiovascular disease
- Antiplatelet agents (e.g. clopidogrel) for prevention of stent thrombosis in examinees with a history of angioplasty/stent insertion.

3.21.7 Immunosuppressants

By definition, immunosuppressant medications reduce natural resistance to infection. Examinees may be prescribed these for clinical indications including organ transplant, autoimmune diseases (e.g. rheumatoid arthritis, inflammatory bowel disease) and some non-autoimmune diseases (e.g. asthma).

Examinees requiring immunosuppressant medication are not fit for standard certification of fitness. They may apply for operator approval for mobilisation provided the examining doctor considers the condition requiring immunosuppressant medication to be compatible with work offshore, and the examinee has been taking the medication for a minimum of three months without problem.

Examinees should be advised that if accepted by an operator for mobilisation to its installations, they are likely to be considered unfit for work on normally-unmanned installations (NUIs).

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[50] Footnote: NICE recommends the use of ORBIT rather than HAS-BLED in atrial fibrillation. See: NICE. Clinical Knowledge Summary 'Scenario – Management of AF'. August 2022. https://cks.nice.org.uk/topics/atrial-fibrillation/management/management-of-af/#the-orbit-bleeding-risk-tool

[51] ORBIT calculator at 'MD Calc' (linked to by NICE) https://www.mdcalc.com/calc/10227/orbit-bleeding-risk-score-atrial-fibrillation

3.21.8 Prescription medications – side-effects

The OEUK OHHTG identified a number of medication side-effects as being of concern but in practice, relevant medications can be recognised from the 'cautionary labelling' scheme explained at appendix 3 of the British National Formulary (BNF), and from 'skilled task warnings' stated within the BNF.

Applicable cautionary labels are:

2 'This medicine may make you sleepy; if this happens, do not drive or use tools or machines. Do not drink alcohol.'

3 'This medicine may make you sleepy; if this happens, do not drive or use tools or machines'. (for MAOIs, which have specific alcohol warning in Patient Information Leaflet, or where alcohol is not an issue).

19 'This medicine makes you sleepy. If you still feel sleepy the next day, do not drive or use tools or machines. Do not drink alcohol'. (for hypnotics/sedatives taken at night)

Examinees are not fit for standard certification of fitness if they are taking any medication with any of the cautionary labels listed above, or with a 'skilled task warning'[52], with the following exceptions:

- Medications for the treatment of diabetes where the examinee meets the guidelines at paragraph 3.7
- Varenicline for smoking cessation (Cochrane reviews in 2013[53] and 2016[54] established that neuropsychiatric side-effects were no commoner than with placebo, resolving previous concerns).
- SSRI class antidepressant medications, where the examinee has been taking them for not less than 4 weeks and reports no side-effects.

3.21.9 Prescription medications – relevance in incident investigation

It is known that psychotropic drugs increase the risk of workplace accidents[55]. There are no known studies from the UK offshore energy industry. It is therefore recommended that operators include in incident investigations assessment of the possibility that medication and/or a health condition has contributed to a workplace accident or near-miss. Due to the medical confidentiality issues involved, the involvement of the company medical advisor will be required.

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[52] See Supplement to guidelines, paragraph 2.16

[53] Cahill, K et al. Pharmacological interventions for smoking cessation: an overview and network meta-analysis. Cochrane Database of Systematic Reviews 2013, Issue 5. Art. No.: CD009329. DOI: https://doi.org/10.1002/14651858.CD009329.pub2.

[54] Cahill, K et al. Nicotine receptor partial agonists for smoking cessation. Cochrane Database of Systematic Reviews 2016, Issue 5. Art. No.: CD006103. DOI: https://doi.org/10.1002/14651858.CD006103.pub7.

[55] Palmer, K T et al. The role of mental health problems and common psychotropic drug treatments in accidental injury at work: a case-control study. Occup Environ Med 2014;71:308–312. DOI: https://doi.org/10.1136/oemed-2013-101948 .

3.21.10 Medication Letter

In the event that an operator medical advisor requests that an examinee is provided with a 'medication letter', the following template text may be used:

[insert date]

To installation medic, operator medical advisor, medic supervising doctor and Topside doctor,

Re: [insert identifying details of examinee – name, date of birth, occupation and employer]

I am writing to advise that the above-named is taking the following medication

[insert name and dose of medication(s)]

Installation medic – please be aware that [insert examinee name] is taking this medication in the event of any consultation with you. Follow any relevant advice/instructions in your standing orders, or from your operator medical advisor/supervising doctor. Notify any Topside doctor you discuss this patient with that he/she is taking this medication.

Topside doctor – please be aware that [insert examinee name] is taking this medication, should you be asked for advice.

Operator medical advisor/Medic supervising doctor – please provide relevant advice/instruction to medic and/or others as relevant, according to your company policy and/or practice.

In the event of clinical questions regarding the examinee's medical history, please contact me on [insert or state examining doctor contact details]

Yours Sincerely

[insert signature and name of examining doctor]

3.22 Pregnancy

One purpose of the OEUK medical guidelines is to protect workers from predictable medical emergencies which may arise in an isolated location. It is clear that pregnancy is not a 'medical condition' but a normal physiological state. It is, however, appropriate to consider any additional medical risks faced by the pregnant worker in an offshore location.

The employer of a worker who wishes to work offshore whilst pregnant should conduct a risk assessment[56] (which will require clinical advice from the employer's medical advisor) and discuss the findings with the employee. Factors to be considered during this risk assessment include:

- Previous obstetric history, particularly any risk factors or history of ectopic pregnancy, hyperemesis, pre-eclampsia, premature labour or pregnancy induced diabetes.
- Any complication of the current pregnancy, e.g. threatened miscarriage, hyperemesis.
- Any relevant medical conditions which may complicate the course or outcome of the pregnancy, including endocrine disease, cardiovascular disease, diabetes or epilepsy.
- Proposed location and means of medevac should this be necessary.
- The nature of the work and potential for exposure to physical, biological or chemical agents which could be harmful to the foetus.
- The need for regular clinical review of the employee and any additional logistical requirements this imposes.

If risk assessment is satisfactory application for direct operator approval for mobilisation may be made in the usual way (see paragraph 2.12.2), accompanied by the employer risk assessment, but it should be anticipated that operators may require that:

- The pregnancy has been assessed by a physician as low risk and confirmed at ultrasound as intrauterine.
- The employee understands and accepts any additional risks entailed in working offshore whilst pregnant.
- Any complication of pregnancy or concomitant medical condition is regarded as a contraindication to working offshore

Note that a pregnant worker undertaking a survival training course should be considered *unfit to train* with compressed air EBS.

[56] A legal requirement under Regulation 16 of the Management of Health and Safety at Work Regulations 1999 (see: https://www.hse.gov.uk/mothers/employer/workplace-safety-law.htm)

4 Specific employment groups

4.1 Emergency Response Team

4.1.1 Introduction

Duty holders make arrangements to provide for effective response to an offshore emergency. One element of this is a trained Emergency Response Team (ERT). While some ERT members have sedentary functions such as Radio Operator and Control Room Operator, the duties of others will include firefighting, assisting with a controlled platform evacuation, and casualty search and rescue. This may involve extended periods of wearing protective clothing/breathing apparatus and engaging in physical activity recognised to be of 'vigorous' intensity[57].

Because these duties and activities are likely to put additional physiological demands on the worker, it is appropriate to establish the physical capacity of team members for them, and to risk-assess their participation. This can be achieved by ERT members with physically strenuous duties undergoing regular:

- Medical Assessment
- Fitness Grading

4.1.2 Medical Assessment

ERT members should have met the conditions for issue of a standard medical certificate. Where workers are offshore on operator-specific approval, the operator will have decided the scope of their duties as part of that approval. The additional medical guidelines for ERT members are as follows:

4.1.2.1 Respiratory system

ERT members wearing breathing apparatus as part of their role should not have any respiratory condition limiting exercise tolerance or likely to interfere with wearing of BA. Exercise- or cold-air-induced asthma should result in a finding of unfitness for ERT duty; any other form of asthma should be cautiously evaluated bearing in mind that an acute asthma episode will render the ERT member incapable of assisting others, and also result in them becoming an additional casualty for the reduced team to deal with.

Other chronic respiratory disease potentially limiting exercise capacity (e.g. COPD) should be assessed by spirometry – measured FEV1 and FVC should be greater than 80% of predicted values, and measured FEV1/FVC ratio should be at least 70% (note that these values are greater than those at paragraph 3.6.3).

Workers insisting they are fit for ERT duty despite spirometry values below those specified above (or in any case of doubt despite apparently satisfactory spirometry) may be found fit if they can provide

[57] Bugajska, J et al. Cardiovascular Stress, Energy Expenditure and Subjective Perceived Ratings of Fire Fighters During Typical Fire Suppression and Rescue Tasks. International Journal of Occupational Safety and Ergonomics, 13:3, 323-331. DOI: https://doi.org/10.1080/10803548.2007.11076730

evidence of ability to run at a *minimum* pace of 4 mph (6.4 km/h) continuously for 30 minutes (i.e. covering a *minimum* distance of 2 miles (3.2 km) in 30 minutes).

4.1.2.2 Cardiovascular system

Any form of cardiac pathology including dysfunction or myocardial insufficiency will normally render an individual unacceptable for ERT duty. Adequately treated hypertension is acceptable providing the medication does not limit exercise tolerance, but note that the presence of treated hypertension will contribute to the worker's 'safety rating'.

4.1.2.3 Nervous system

A history of epilepsy, recurrent impaired consciousness, vertigo or impaired co-ordination is unacceptable for ERT members.

4.1.2.4 Psychological disorders

ERT members should be psychologically suited to the task. Anxiety about wearing full-face breathing apparatus, confined spaces or heights will render the worker unfit. A history of significant/recurrent general anxiety and/or depressive illness will require careful evaluation but will normally disqualify. Any indication of current alcohol and or substance abuse is unacceptable.

4.1.2.5 Vision

A minimum standard of 6/6 binocular vision is required, if necessary, using appropriate corrective lenses compatible with BA use. If visual correction is required, an uncorrected binocular visual acuity of 6/60 is appropriate to allow the safe escape of the individual following an event. There should be no visual field deficit.

4.1.2.6 Hearing

Examinees should be able to hear conversational speech without difficulty or use of an aid to hearing. A hearing impairment in excess of 35dB in the better ear (averaged over 0.5, 1, 2kHz) may raise doubts about ability to hear in a hazardous environment. Such cases should be individually assessed by the examining physician but are normally unlikely to be fit for ERT membership.

4.1.2.7 Endocrine disease

Insulin-treated diabetes will render the examinee unfit to participate in ERT duties. Non-insulin treated diabetes is acceptable provided the worker meets their clinical 'treatment target' but note that it will contribute to the worker's 'safety rating'. Other forms of significant endocrine disease (e.g. hyperthyroidism, Addison's disease) will render the examinee unfit to participate in ERT duties.

4.1.2.8 Medications

Workers requiring medication to treat an identified medical condition that would deteriorate significantly should a dose be missed will normally be unfit for ERT membership, as will those taking medication that causes side-effects that would interfere with any of the ERT functions (see section 3.21).

4.1.2.9 Musculoskeletal system

The examining physician should assess the musculoskeletal system to exclude any impairment of function that would interfere with the execution of the individual's essential job tasks in the ERT. Particular attention should be paid to any history of back disorders, especially (but not limited to) in those in the role of stretcher-bearer.

4.1.3 Use of VO2 max testing

Previous editions of these guidelines used VO2max measurement as an indicator of fitness for ERT duty. Lack of evidence on a VO2max value clearly differentiating those capable of a given activity from those incapable, and the correlation between VO2max value and liability to collapse or similar safety-related untoward events during vigorous physical activity in the non-athletic normal working-age population led to uncertainty and disagreement over an appropriate 'acceptable value'.

Operators/employers wishing to retain assessment of fitness for ERT duty by VO2max may do so. They should specify whether a direct measurement (by maximal exercise test) or estimated range (from non-maximal test) is required and should define their own fit/unfit criteria and/or acceptable minimum. Examining doctors should report the results of VO2max testing (whether fit/unfit or a numerical value/estimated range) in the format requested by operators, and where uncertainty exists over any aspect of the testing or reporting process should seek advice directly from the relevant operator[58] .

4.1.4 Fitness grading

Comments from industry representatives have consistently identified two themes of concern regarding ERT members as being:

- 'They're not up to it' (i.e. concern about the worker's capability to undertake ERT duties), and
- 'They're going to collapse' (i.e. concern about the worker's safety in undertaking ERT duties).

These two aspects of ERT readiness can be assessed as follows:

[58] An operator's required method of VO2max measurement, fit/unfit criteria, and preferred format for reporting results may be relayed via a contractor employer. Similarly, examining doctors may seek operator clarification via the employer requesting ERT assessment.

4.1.4.1 A) Capability Assessment

There is general agreement that ERT activities (predominantly search and rescue) are 'vigorous intensity activity'.

The examining doctor should ask the question 'Can the worker provide evidence of ability to undertake sustained vigorous activity?' and rate the examinee accordingly:

Evidence provided = Capability Rating Green

Evidence not provided = Capability Rating Amber

The examining doctor may use the 'Compendium of Physical Activities[59] as a guide to the examinee's physical capability. As a simple guide, those examinees able to provide evidence of completion of a 'fun run' of 5k or more at a suitable pace may be judged to have provided sufficient evidence; evidence of membership of and regular training at a running club, cycling club, football team or similar activity are also likely to be sufficient.

Those unable to provide evidence of capability should be provided with information on the 'Couch to 5k' training programme[60] and encouraged to train until able to run at a *minimum* pace of 4 mph (6.4 km/h) continuously for 30 minutes[61]: this means covering a *minimum* distance of 2 miles (3.2 km) in 30 minutes.

Note that it is not necessary for the examinee to undertake an exercise test for the purposes of the ERT assessment; the capability element of the assessment is not a pass/fail one but is intended to grade ERT members on assessed capability and risk; decisions on deployment will follow accordingly (see below).

However, once an examinee reports themselves (after self-directed training) capable of running for a minimum of 30 minutes at a pace equal to or greater than 4 mph (6.4 kph), in order to be 'upgraded' from Amber to Green they may voluntarily demonstrate their ability to do so, for example to an installation medic by suitable timed run in the installation gym. Alternatively, examinees may undertake an on-installation practical demonstration of ability to undertake relevant ERT tasks while wearing the usual ERT-specific clothing and equipment for that task, sufficient capacity being judged by the ERT leader, OIM, installation medic or similarly suitable person.

Safe Vigorous Activity

The most obvious risk of vigorous physical activity is collapse (typically cardiovascular) during or immediately afterwards. Publicly available accounts of collapse and fatality during activities such as

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59 https://sites.google.com/site/compendiumofphysicalactivities/

60 NHS. Couch to 5k: https://www.nhs.uk/live-well/exercise/get-running-with-couch-to-5k/

61 Technical note: the Compendium of Physical Activities (https://sites.google.com/site/compendiumofphysicalactivities) indicates that the intensity of running at 4 mph/6.4 kph is 6.0 METs, equivalent to 'vigorous' intensity exercise (the 2008 Physical Activity Guidelines for Americans defines physical activity intensities as: light <3.0 METs, moderate 3.0-5.9 METs, and vigorous ≥6.0 METs). A person running a minimum distance of 2 miles/3.2 km in 30 minutes is therefore undertaking vigorous intensity exercise for that duration.

running[62] or novel party dancing are typically about middle-aged men (often obese, if pictured), around the average age of offshore workers.

The overall risk of fatal collapse during activity is low - 1 death per million exercise hours in middle-aged men[63 64]. It is twice as likely in those with 'low habitual activity' than in the habitually active[65]. Habitual activity pattern is the strongest predictor of death during vigorous exercise, death being 56 times more likely during vigorous exercise than at rest in the habitually inactive, compared to 5 times more likely during vigorous exercise in the habitually active[66].

4.1.4.2 B) Safety Risk Assessment

Risk of collapse and/or more severe related events during ERT duty may be assessed by considering the examinee's habitual physical activity habits, and refined empirically by the consideration of smoking habit and known clinical markers of cardiovascular risk.

The amount of physical exercise typically undertaken weekly by the examinee should be assessed, along with their use of nicotine products, and the presence or absence of hypertension, diabetes, indicators of hyperlipidaemia (e.g. prescription of statin medication) and obesity (BMI 30 or >). These factors can be scored and summed to produce a safety rating:

Table 21: Safety risk assessment rating

Risk factor		Score		
Amount of leisure time physical activity	Less than 150 minutes per week	1	0	150 minutes per week or more
Smoker*	Yes	1	0	No
Any one or more of**: hypertension, diabetes, high cholesterol, obesity	Yes	1	0	No
	Total score	(insert score here)		Safety Rating:0 = Green 1 = Amber 2 = Red 3 = Black

62 https://metro.co.uk/2017/03/20/man-collapsed-and-died-during-5k-park-run-6520857/amp/

63 Albert et al. Triggering of Sudden Death from Cardiac Causes by Vigorous Exertion. NEJM 2000; 343 (19): 1355-61 https://www.nejm.org/doi/full/10.1056/NEJM200011093431902

64 Vuori, I. Reducing the Number of Sudden Deaths in Exercise. Scand J Med Sci Sports 1995; 5: 267-8

65 Lemaitre et al. Leisure-time Physical Activity and the Risk of Primary Cardiac Arrest. Arch Intern Med 1999: 159: 686-90 https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/484990

66 Siscovik et al. Incidence of Primary Cardiac Arrest during Vigorous Exercise. NEJM 1984; 311(14): 874-7 https://www.nejm.org/doi/full/10.1056/NEJM198410043111402

Explanatory notes: Minimum requirement for physical activity per week is 150 minutes (in at least 10 minute periods) per week of moderate intensity (3.0 to 5.9 METs) exercise. Use the Compendium of Physical Activities (https://sites.google.com/site/compendiumofphysicalactivities/) to take an exercise history, and assess the MET value of leisure-time exercise, or exercise specifically for the purpose of keeping fit, reported by the examinee.

*Smoking: means smoking tobacco in any form or use of nicotine vaping in any form, in the past year - 90% of e-cigarette users also continue to use combustible tobacco products[67].

**Hypertension = medical diagnosis and/or on treatment; high cholesterol = clinically established from known blood test results, or inferred from medication history; obesity = BMI 30 or >.

4.1.4.3 C) Final Assessment of fitness grading

The examinee's capability and safety ratings are combined to give an overall fitness grading, as follows:

Table 22: Final assessment of fitness grading

Capability Rating	Safety Rating	Grading Category
Green	Green	A1
Amber	Green	B
Green	Amber	B
Amber	Amber	C
Amber/Green	Red	D
Amber/Green	Black	E

4.1.5 Frequency of Assessment

Medical assessments should follow the normal OEUK medical periodicity, whilst fitness grading should be undertaken at least annually.

4.1.6 Roles and Responsibilities

Medical assessment should be undertaken by an OEUK examining doctor. The fitness grading may be carried out by an OEUK examining doctor (or a suitably trained person working under the supervision of the examining doctor) but is more likely to be conveniently carried out on the installation by the offshore Medic, under the supervision of their OMA or medic supervising doctor.

[67] Wise, J. E-cigarettes are independent risk factor for respiratory disease, study finds. BMJ 2019;367:l7019. doi: https://doi.org/10.1136/bmj.l7019

4.1.7 Certification of Fitness for ERT Duties

Following successful completion of the medical assessment the examining physician should complete Part 1 of the Certificate of Fitness to Participate in ERT Duties (section 4.1.9).

Following fitness grading, the responsible person should complete Part 2 of the Certificate of Fitness to Participate in ERT Duties.

Subsequent fitness grading assessments between periodic medical assessments should be entered in the remaining sections of Part 2 of the certificate.

In addition to confirming fitness to participate in ERT duties, employers/operators may wish to use this certificate as confirmation of fitness for firefighting training. In such circumstances, the employer/operator should ensure the acceptability of the certificate to the relevant training facility.

4.1.8 Application of Assessment System

The fitness grading element of the assessment is not intended to be a pass/fail one, but to produce a grading of practical use to operators, employers, and ERT leaders and teams alike. The fitness grading can readily be understood as reflecting a worker's physical capability and their liability to adverse medical events during ERT activities.

Operators and employers (if different) should agree policy on selection for and deployment of workers in ERTs on the basis of fitness grading – it would be logical to select only workers of A1 grade into ERTs where possible, but if limited numbers of such workers are available, B graded workers would be preferred next, and C workers as a third preference. It is likely that operators would wish to avoid selecting D and E graded workers for ERT duty unless no other alternative higher-graded worker was available.

Similarly, deployment decisions on installations can be simply and readily informed by fitness grading: it would be logical to deploy only A1 graded team members to the most physically demanding activities (such as search and rescue in breathing apparatus), and lower-graded personnel to the least demanding activities. If lack of A1 graded personnel obliges the deployment of B or C graded persons into physically demanding activities, team leaders could take account of this by briefing the team to work at a slower pace (for example, at one judged appropriate for the lowest-graded team member).

Operators and/or employers may at their discretion set policies such as selection and deployment only of workers at or above a certain fitness grade: the extent to which this is feasible will depend on the overall pattern of fitness grading in the offshore workforce: while this is yet to be established, it is likely that only a minority of workers will be of A1 grade, with many at C grade, and a not insignificant minority at D or E grade.

4.1.9 Certificate template

Statement of Fitness to Participate in ERT Duties

Name:	Date of Birth:
Occupation:	Employer:

Part 1 – Medical Fitness for ERT Duties

The above-named has been assessed in accordance with section 4.1 of the OEUK Guidelines on Medical Fitness for Offshore Work 2024 and in my opinion is both generally fit for work offshore, and medically fit to undertake ERT duties.

Date of Assessment:	Date of Expiry:
Examining Doctor:	PIN:
Signature:	

Part 2 – Fitness Grading

The above-named has been undergone fitness grading in accordance with section 4.1 of the OEUK Guidelines on Medical Fitness for Offshore Work 2024, and is assessed as ERT Fitness Grading:

Date of grading			
Grading (circle one)	A1	A1	A1
	B	B	B
	C	C	C
	D	D	D
	E	E	E
Name of person assessing grading			
Date of expiry			
Signed			

4.2 Crane Operators

In addition to the standard OEUK requirements, visual function should be carefully assessed in crane operators. They should be asked to provide an optician's report of eyesight testing (suitable text to include in the request is suggested below), and the following requirements met:

- minimum visual acuity of 6/6 binocularly, with correction if required.
- the examinee has binocular vision (i.e. monocular vision is unacceptable because of the impact on field of vision)
- the examinee has no visual field defect
- the examinee does not have diplopia.

The extent to which depth perception affects safe crane operations is uncertain. Depth perception functions only at ranges much closer than those typical of crane operations. In most cases adequate physiological judgement of distance will be effectively established by demonstration of competence during onshore training. Consequently, medical examination to establish stereoscopic depth perception will not normally be necessary.

Fitness for crane operator duties (if requested) should be confirmed at the indicator included on the OEUK medical certificate (see 2.14.4)

Where corrective glasses/lenses are required to meet the visual acuity standard, the offshore medical certificate should be annotated 'Must wear corrective glasses/lenses for crane operator work' in the space provided for approved annotations.

Where the crane operator is found to have a colour vision deficit, the examining doctor should specifically ensure that the annotation 'Employer-specific assessment required for work requiring normal colour vision' is included in the space provided for approved certificate annotations.

Where assessment of fitness for crane operating duties as part of the OEUK medical was not requested, the 'fitness for crane operating work' indicator on the OEUK medical certificate should be completed as 'assessment not requested'.

Suggested text for inclusion in request to optician:

To Optician:

[include examinee's identifying details]

The above-named works as a crane operator on offshore installations in the energy industry. Please record his/her distance visual acuity as 'Snellen equivalent' in the table below, following the example provided

Example:

Visual Acuity			
	Left Eye	Right Eye	Binocular
Uncorrected	*6/12*	*6/18*	*6/12*
Corrected (if applicable)	*6/6*	*6/6*	*6/6*

Examinee

Visual Acuity on [insert date……]			
	Left Eye	Right Eye	Binocular
Uncorrected			
Corrected (if applicable)			

Does the examinee have any indication of diplopia, visual field defect, or problem with depth perception? Yes / No (if 'yes', please give brief further details below)

Details:

Date of report:
Completed by (optician):
Signature/Stamp:

[include here relevant text regarding consent for report, expected means of transmission to examining doctor, and responsibility for payment]

4.3 Catering Crews/'food handlers'

Catering crews on offshore installations will generally be employed by a company specialising in this work. Catering crews include chefs and bakers (who will clearly spend significant time in the galley directly involved in food preparation), but also stewards who will be responsible for general cleaning of cabins and accommodation, operation of the installation laundry, and some functions within food preparation areas such as cleaning/maintenance of utensils and equipment and receiving and storage of foodstuff supplies.

All catering crew workers can be expected to have undergone appropriate food hygiene training. Medical assessment at the OEUK medical every two years is clearly no substitute for the daily application of the principles of good food hygiene practice by the worker, but appropriate questions on clinical history and symptoms, and the presence of potentially infectious lesions provides an opportunity for a reminder of the clinical importance of this.

- Catering crew should be asked the specific questions (on symptoms of enteric illness and communicable disease) at the 'Food Handlers' section of the suggested question set (see paragraph 2.14.1.3).
- They should also be asked about the presence of potentially sources of infection (e.g. discharging ears, skin lesions such as extensive psoriasis affecting the scalp or hands).
- General observation should indicate standards of personal hygiene

Note that 'routine' examination of stool samples in asymptomatic food handlers is not typical of UK occupational medicine practice. Laboratory examination of stool specimens should only be undertaken where this is considered clinically appropriate.

Fitness for food handling duties (if requested) should be confirmed at the indicator included on the OEUK medical certificate (see 2.14.4)

Where assessment of fitness for food handling duties as part of the OEUK medical was not requested, the 'fitness for food handling duties' indicator on the OEUK medical certificate should be completed as 'assessment not requested'.

Between offshore medicals, assessment of individual catering workers will be required under the following circumstances:

- Frank or suspected infectious gastrointestinal disease.
- Close contact with an individual known to be suffering from gastroenteritis.
- Upon return from a visit to an area with a known high endemic incidence of infectious gastrointestinal disease.

Where necessary, guidance may be sought from a Consultant in Public Health Medicine (CPHM) at one of the UK public health bodies (or equivalent in other countries). Assessments in the circumstances described will effectively be assessments of 'fitness to return to work', and communication on the outcome of assessment should be made to employers in the usual way.

4.4 Work on normally-unmanned installations (NUIs)

Some offshore workers may work on 'normally unmanned' (NUI), 'not permanently attended' (NPAI) or 'minimally manned' (MMI) installations. These are usually 'satellites' of production platforms[68], without a medic/sickbay, galley or cabins, but with simple food preparation and rest areas. At the start of their shift, a small number of workers will be helicoptered from the 'parent' installation to the 'satellite' to carry out maintenance and repair tasks. At the end of the working day they will be flown back to the parent installation. In the event of bad weather, it may not be possible to return as planned, and in the event of accident or illness, a medic will not be present to assist.

Operators with NUI/NPAI/MMI ('NUI') assets have processes to select workers suitable for deployment to these installations. They will be aided in this by appropriate identification at the OEUK medical.

Where examining doctors are specifically requested to assess fitness for work on NUI, they should follow the guidance below and complete the indicator on the certificate as 'fit' or 'unfit' as appropriate. If assessment of fitness for work on NUI was not requested, the indicator on the certificate should be completed as 'assessment not requested'.

Examinees with the following medical conditions are UNFIT for work on NUI:

- Any history of anaphylaxis (whether or not prescribed, issued with or carrying an Epipen)*.
- Insulin-treated diabetes of any type (type 1, type 2 or other)**.
- Any history of epilepsy or seizure (regardless of job classification).
- Any history of unexplained loss of consciousness
- Anyone taking or prescribed any of the following medications:
    - any medication that may cause drowsiness or impaired alertness*
    - oral steroids, immunosuppressants, monoclonal antibodies or disease modifying anti-rheumatic drugs (DMARDs)*
    - major tranquilizer or hypnotic*
    - anticoagulant medication of any type, including warfarin*, DOAC*, or anti-platelet agent (e.g. clopidogrel)***
- Conditions requiring immunosuppression treatment*
- Any history of stroke, or transient ischaemic attack (TIA).
- Any history of ischaemic heart disease (including myocardial infarction, angina, cardiac failure, cardiac arrest, implanted cardiac device).
- Arrhythmias requiring medication.
- Asthma, if hospital admission in the previous two years*.
- COPD, if more than two infective episodes/exacerbations in the previous two years.
- Untreated renal colic*.
- Untreated hepatobiliary disease (e.g. gallstones).
- Any history of psychotic mental illness*.
- Any mental health conditions, unless symptoms have completely resolved for a minimum of three months. If on treatment, the examinee should not be experiencing any side-effects.

[68] See Supplement to guidelines paragraph 2.17

- Any history of blood disorder other than mild anaemia on suitable treatment, or bleeding tendency*.

*examinee unfit for standard certification
**examinee with insulin-treated diabetes unfit for standard certification in category 1 job
***the indication for anti-platelet agents is typically cardiovascular disease. Anti-platelet agents are not considered anticoagulants under paragraph 3.21.6, but examinees taking them will be unfit for work on NUIs because of the presence of a history of cardiovascular disease.

Even if examining doctors are not specifically requested to assess fitness for work on NUI, the guidelines for each of these situations indicate where the certificate should be annotated 'unfit for work on NUI without direct operator approval'. However, the location, transport arrangements, facilities and deployed personnel for normally unmanned installations vary, and operator medical advisors may permit mobilisation on a case-by-case basis at their discretion.

4.5 Aircrew and Commercial Divers

Helicopter pilots and other aircrew will regularly disembark the aircraft to use facilities on offshore installations. Their aviation medical certificate should be accepted as fitness to do. Similarly, commercial divers may on occasion need to board offshore installations (as opposed to dive vessels). Their HSE certificate of fitness to dive should be accepted as fitness to do. It should not normally be necessary to issue any other form of fitness for work offshore, but where (exceptionally) this is required by the operator, an examining doctor may issue an OEUK medical certificate for an appropriate duration (to match the statutory medical expiry) on inspection of the relevant aviation or dive medical certificate.

5 ‘Fitness to Train’

5.1 Introduction

In-water training exercises (in shallow water at the pool edge; the CA-EBS is *not* used in HUET exercises) with compressed-air emergency breathing apparatus (EBS) for survival course trainees were introduced to training courses in March 2018. Since then, a large proportion (between 25,000 and 40,000 workers yearly) of the UK offshore workforce has undergone initial assessment for what has become popularly known as the ‘fit to train’ assessment, with around 1% being found unfit. With survival courses taking place every 4 years, the earliest cohort of trainees have been repeating this from March 2022 onwards.

Breathing compressed air underwater involves the hazard of barotrauma, but for healthy survival course trainees the risk of this occurring in the circumstances of training is assessed to be very low. A description of the nature of the training exercises and the physics of gas expansion at the shallow depths involved in the training is in the supplement to these guidelines[69].

5.2 Objective of assessment

The objective of the fitness for in-water EBS training is to:

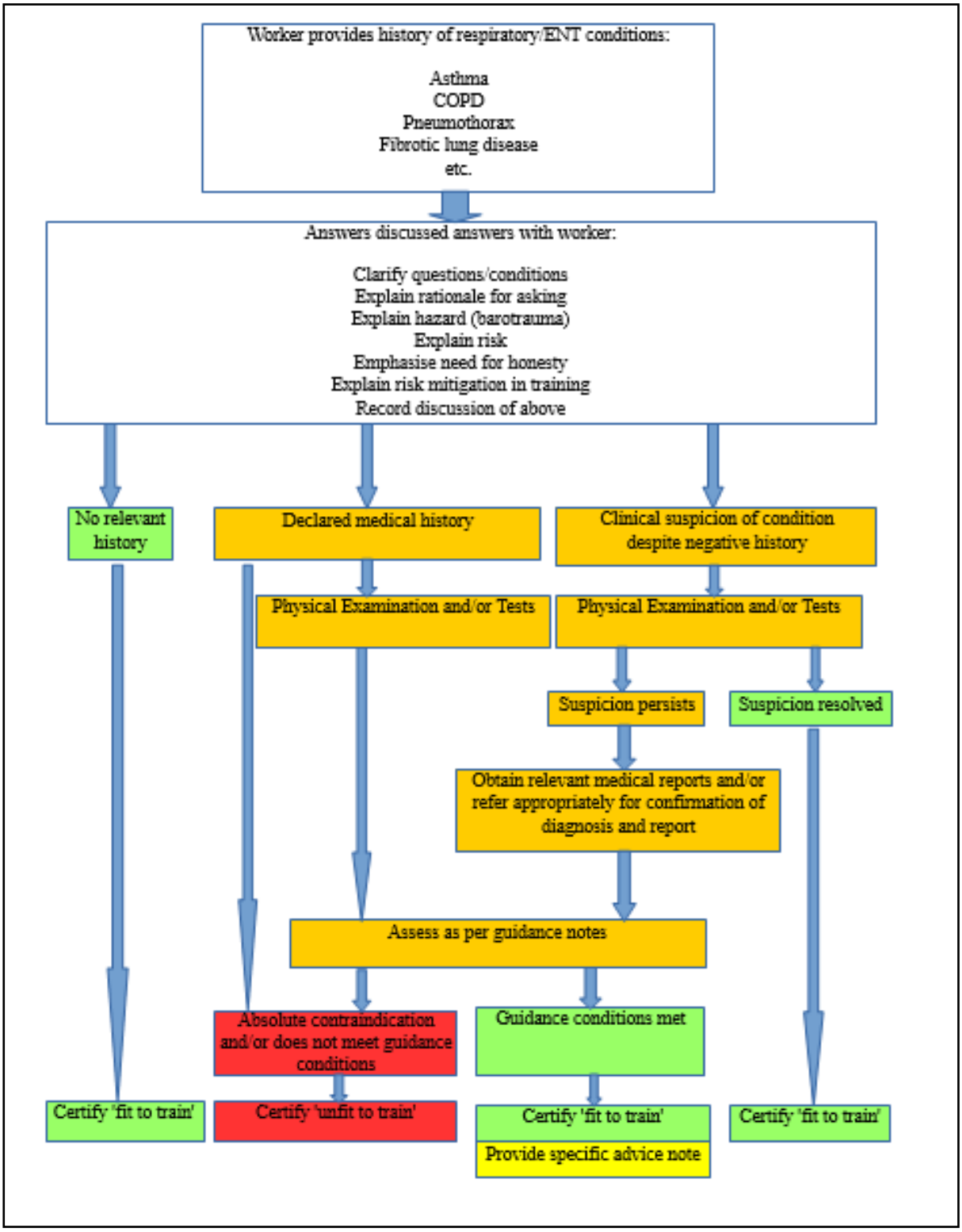
a) ensure trainees have **understood the nature of the hazard of barotrauma**, **that some medical conditions may increase the risk, and the importance of providing an accurate medical history** in order to individually assess risk (**bearing in mind that ‘unfit to train’ does *not* mean ‘no survival certificate’**)
b) classify trainees as either 'fit' or 'unfit' for in-water EBS training as simply as possible
c) ensure all trainees have received explanation of risk mitigation measures in general, and that trainees with medical conditions have received personalised risk mitigation advice relevant to their condition.
d) provide documentary confirmation of fitness status, for employers and training providers

5.3 Method of assessment

The assessment process is summarised in the flowchart below:

[69] See Supplement to guidelines, paragraph 2.18

Figure 1: Flowchart of assessment process



5.3.1 Initial assessment of fitness to train

The initial assessment of 'fitness to train' may conveniently be undertaken at the same time as an OEUK medical. Questions on relevant medical history are included in the suggested OEUK medical questionnaire (see paragraph 2.14.1.1).

The examining doctor should explain the hazard and risk of barotrauma, clarify any positive questionnaire answers, and ensure the examinee has had sufficient opportunity to provide an accurate medical history. The examining doctor should emphasise that being unfit to train will not mean failure to gain a survival certificate. For examinees without any relevant medical history, the examining doctor should explain the risk mitigation measures inherent in the training itself, and then certify fitness to participate in training without need of further tests or physical examination.

If examinees give a clear history of absolute contraindication to training the examining doctor should directly certify unfitness for training. For examinees with a history of other relevant medical condition(s), physical examination of the respiratory and/or ENT systems, and/or lung function tests should be performed as stated in the guidance on specific conditions in sections 3.6.4 and 3.17.5 of these guidelines. The outcome of assessment will follow from the results.

5.3.2 Other miscellaneous conditions affecting 'fitness to train'

This guidance cannot cover every possible medical circumstance that examining doctors may encounter. Rare, 'small print' conditions (such as non-immersion pulmonary oedema, related to vigorous physical activity, or some immersion-related disturbed physiological states) may exceptionally be encountered by examining doctors. Such cases will generally have been given advice to avoid diving, swimming, and/or immersion in water, and this advice would rule out participation in in-water EBS training. Similarly, some examinees may have no clinical contraindication to in-water training but may find the very low risk of barotrauma psychologically intolerable – in such cases they should be certified unfit to train (on the basis of being 'psychologically unsuited').

5.3.3 Suspected incidental or new clinical diagnosis of previously unknown disease

Where examining doctors suspect a clinical diagnosis relevant to EBS in-water training despite lack of history, they should undertake clinical examination and/or lung function testing and/or other relevant tests as considered appropriate. In some cases the results will sufficiently exclude or confirm the presence of the suspected diagnosis that the examining doctor will certify accordingly; in others, the suspicion of a new clinical diagnosis will not be confidently excluded or confirmed. In these circumstances the examining doctor will wish to refer appropriately (according to local arrangements, insurance status of examinee etc.) to either confirm or clarify diagnosis, and to seek clinical information to enable them to subsequently conclude the assessment. Examinees may be issued confirmation of 'temporarily unfit – pending reports' status, in the form of a letter to their employer, if necessary while this takes place.

5.3.4 Periodic review assessment of fitness to train.

At each offshore medical subsequent to the initial assessment of fitness to train, the date of the examinee's next FOET (survival course refresher) should be clarified. Where this is within two years (or the expected duration of the OEUK medical certificate, whichever is shorter) the examinee should complete the appropriate questionnaire section, and the examining doctor should review the answers, and remind the examinee of the hazard and risk of barotrauma, that being unfit to train does not mean failure to gain a survival certificate, and of the need for accurate history, as for an initial assessment.

At review assessment it is of obvious importance to explore any change (particularly any worsening) in medical history where a condition has previously been recorded, and the new onset of a relevant condition in examinees previously without this. Clinical assessment in response to medical history, and certification of fitness status should follow as for the initial assessment.

It is ***not*** necessary to review 'fit-to-train' status at every OEUK offshore medical: FOET courses are repeated every 4 years, while the maximum duration of an OEUK certificate is 2 years. 'Routine' repetition of fitness to train assessment at every 2-yearly offshore medical would result in offshore workers undergoing review when no FOET is to take place before the next OEUK medical – this is wasteful of time and effort for all concerned. However, where the company or individual booking the OEUK medical cannot indicate the date of next FOET, it may be necessary to undertake a 'fitness to train' review to avoid the need for an urgent unscheduled assessment later on (because it had been overlooked at the time of the OEUK medical).

5.4 Certification

The examinee's status in respect of fitness to undertake in-water EBS training exercises should be confirmed at the indicator included on the OEUK medical certificate (see 2.14.4). Where examinees are found unfit to train, the offshore medical certificate should also be annotated '***UNFIT*** for shallow-water CA-EBS exercises' in the space provided for approved annotations.

Where fitness to train was not assessed at the OEUK medical (see timing considerations at 5.3 above), the 'Fitness to participate in in-water CA-EBS exercises' indicator on the OEUK medical certificate should be completed as 'not assessed'.

5.5 Procedure for those found 'unfit to train'

Examinees found unfit for in-water EBS training are permitted to complete survival training by 'dry' EBS training exercises only. The occupational consequences of being found unfit to train should not be severe. It is not therefore thought necessary to establish an 'appeal' procedure for those unfit to train. However, examinees who contend unacceptably severe occupational consequences of being found unfit to train may contact OEUK to request an 'exceptional circumstances' review of their case: this would involve seeking the opinion of a doctor specifically experienced in diving medicine (of which there are few in UK practice) and should not be expected to result in a change of fitness certification where a diagnosis and assessment findings in accordance with this guidance has been established. It is only likely to be relevant to unusual or 'small print' clinical presentations and examining doctors should not in any circumstances routinely advise examinees found unfit to train to 'appeal' to OEUK.

5.6 Post-assessment advice for examinees/trainees

General advice for all examinees/trainees (may be given verbally by examining doctors):

You are presently fit for in-water EBS training. However, if your medical condition changes between now and the training, you should advise the training centre. You will be asked about this at the training centre on the day of training itself. If you have a temporary medical condition (for example, a 'cold', flu, chest infection or 'ear trouble') on the day of training, you should tell the training provider about it.

The training exercises gradually increase in depth (although all depths are shallow) and complexity (although all are in fact straightforward) – if you develop any problems (such as breathing difficulty, ear pain, or anything else) at any stage in the exercises, you should advise the training staff immediately.

Asthma – to be issued to trainees with asthma but nevertheless found fit to train:

You are presently fit for in-water EBS training. However, if your asthma worsens between now and the training, you should advise the training centre.

You should check your PEFR (peak expiratory flow rate) on the day of training. This should be 80% or more of your normal reading. If not, you should tell the training centre staff. You should already have a peak flow meter and know your normal peak flow reading, as part of your asthma treatment plan – if not, ask your GP, asthma nurse or asthma clinic about this now.

If your chest is tight or wheezy for any reason on the day of training, you should tell the training centre staff, and you should not undertake the in-water CA-EBS exercises.

You should take your asthma medication as usual on the days before, during and after training. In addition, you should take a usual dose of your 'reliever' inhaler as shortly as practical before commencing the pool exercises.

If you develop any asthma symptoms at any stage of the pool exercises, you should tell the training staff immediately.

COPD– to be issued to trainees with COPD but nevertheless found fit to train:

You are presently fit for in-water EBS training. However, if your COPD worsens between now and the training, you should advise the training centre. If your COPD symptoms are worse than usual on the day of your training, you should not undertake the in-water CA-EBS exercises.

You should take any COPD medication you have been prescribed as usual on the days before, during and after training. In addition, you should take a usual dose of any 'reliever' inhaler you have been given as shortly as practical before commencing the pool exercises.

If you develop any chest symptoms at any stage of the pool exercises, you should tell the training staff immediately.

OEUK.org.uk/guidelines

Offshore Energies UK Guidelines
Member companies dedicate specialist resources and technical expertise in developing these guidelines with OEUK with a commitment to work together, continually reviewing and improving the performance of all offshore operations.

Guidelines are free for our members and can be purchased by non-members.

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