



Merchant Shipping and Fishing Vessels (Health and Safety at Work)(Employment of young persons) Regulations 1998: Implementation of EC Directive 94/33/EC

Notice to all skippers and crew on fishing vessels, and all masters and crew on merchant vessels which are not regulated under the Maritime Labour Convention

This notice should be read with the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Employment of Young Persons) Regulations 1998 and with MGN 20(M+F). This replaces MGN 88 (M+F)

Summary:

- The purpose of this Marine Guidance Note is to give information about the minimum age for working on board UK fishing vessels and other vessels that are not regulated under the Maritime Labour Convention and protection for those under the age of 18 who work on board fishing vessels
- Those under the age of 18 years must not be assigned work which is likely to jeopardise their health and safety, unless they are fully qualified in the relevant skills or are working under supervision
- Contains guidance on specific risks to young persons which may arise from their work on board fishing vessels
- The employer must carry out a risk assessment with regard to the particular risks to young persons
- The employer must provide health surveillance of workers.

1. Introduction

1.1 The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Employment of Young Persons) Regulations 1998 (SI 1998/2411) came into force on 30 October 1998. The Regulations implement for the maritime sector Council Directive 94/33/EC on the protection of young people at work (the “Young Persons Directive”). The Regulations apply to United Kingdom ships and to other ships when they are in United Kingdom waters. Copies of the regulations are available from www.legislation.gov.uk



1.2 This MGN is based on guidance issued by the Health and Safety Executive, entitled "Young Persons at work: A Guide for Employers." HSE has also updated the guidance: Young people and work experience which is available to download from the HSE website: www.hse.gov.uk/pubns/indg364.pdf

1.3 The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997¹ (the "General Duties" regulations) require employers to assess the risks to their workers arising from their work, and to do what is reasonably practicable to control those risks.

1.4 Young workers (those under 18 years of age) are seen as being particularly at risk because of their possible lack of awareness of risks, their immaturity and inexperience. This Guidance Note provides advice on employers' responsibilities in relation to those workers, and how to comply with the regulations.

Minimum Age

1.5 The age limit for working on fishing vessels and on ships which do not go to sea is governed by section 55 of the Merchant Shipping Act 1995. No-one may work on such vessels when under school leaving age.

1.6 Children (i.e. those under school leaving age) who work ashore but part of whose duties may require them to spend some time on board vessels (e.g. in a catering company, servicing vessels in a boatyard) may work in any inland waters (Category A to D) where permitted by local authority by-laws and within the constraints of the booklet "Guidance on the Employment of Children" published by the Department for Children, Schools and families:

www.education.gov.uk/publications/standard/publicationDetail/Page1/DCSF-00827-2009.

2. Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Employment of Young Persons) Regulations 1998 (S.I. 1998/2411)

2.1 These Regulations implement for the maritime sector an EC directive, and mirror land based legislation made by the Health and Safety Executive and the Department of Trade and Industry. They revoke and replace the Merchant Shipping (Employment of Young Persons) Regulations 1995², which set out the conditions under which young persons may be employed on UK Fishing Vessels.

2.2 The regulations supplement and expand on the general duties contained in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997, in relation to the particular risks to young persons at work.

2.3 Young persons are those over minimum school leaving age but under 18 years of age. Children (i.e. those under school leaving age) may not be employed on ships (Merchant Shipping Act 1995; Section 55).

3. Persons on whom duties are imposed and additional general duties

3.1 As with the General Duties regulations, these regulations place duties on the employers, or if the employer is not "in control of the matter", extend the duty to any person who is in control of the matter.

¹ SI 1997/2962

² 1995/972



3.2 The employer is required to take particular account in carrying out his risk assessment under the General Duties regulations of the risks which might arise to young persons as a result of their inexperience, lack of awareness of risks and immaturity (regulation 5). The regulations specify the following areas for attention:

- the fitting out and layout of work areas;
- the nature, degree and duration of exposure to physical, biological and chemical agents;
- the form, range and use of work equipment and the way in which it is handled;
- the organisation of processes and activities;
- the extent of health and safety training provided or to be provided to the young persons concerned; and
- the risks from agents, processes and work listed in the schedule to the regulations.

Annex 1 to this Notice provides some advice on the risks covered by the schedule and ways of avoiding or reducing them.

Employers are also required to inform young persons of any risks to their health and safety identified in these areas. This is in addition to any information supplied under the General Duties regulations with regard to the general risk assessment for all workers.

It is for individual employers to decide whether the assessment of risks to young persons under these regulations is carried out as an integral part of the assessment process required by the General Duties regulations, or as a separate exercise. It might be helpful to consider developing generic risk assessments for the employment of young people. These will be pertinent where young people typically undertake a series of tasks or duties. A generic risk assessment would need to be revised to address additional work not covered by the original assessment or if an individual young person might face greater risks e.g. as a result of a medical condition.

In the light of their assessment(s), and of the hazards to young persons identified in the schedule to the regulations (see Annex 1) employers are required to ensure that young persons are **not** engaged in:

- work which is objectively beyond their physical or psychological capacity;
- work involving harmful exposure to agents which are toxic, carcinogenic, cause heritable genetic damage or harm to the unborn child, or which in any other way chronically affect human health;
- work involving harmful exposure to radiation;
- work involving the risk of accidents which it may be assumed cannot be recognised or avoided by young persons owing to their insufficient attention to safety or lack of experience or training; or
- work in which there is a risk to health from –
 - (i) extreme cold or heat; or
 - (ii) noise; or
 - (iii) vibration.

The guidance in Annex 1 may be helpful in considering these facts.

Exceptions are allowed to the above criteria where the activity in question is **indispensable for vocational training** and is performed **under the supervision of a competent person**. This means, for example, that a cadet or trainee who is following a structured training programme and is working alongside an experienced person or under direct supervision, may, as part of that training, carry out activities which fall within the



criteria listed. This in no way detracts from the principle that the employer has a duty to ensure the health and safety of the young person at work at all times. Appropriate controls must be in place which reduces any risk to the minimum that is reasonably practicable.

The competent person appointed to assist the employer with health and safety under the General Duties regulations must, under those regulations, be provided with any information relevant to that role. This should include being notified of any young persons employed in the ship, and of any risks identified specifically in relation to them under regulation 5.

4. Rest periods for young persons

4.1 Regulation 6 stipulates **minimum** daily and week rest periods and rest breaks for young persons. **This regulation does not apply to young persons on fishing vessels**, since fishing patterns followed by most fishing vessels do not allow for pre-set working hours for crew. The employer of young persons on a fishing vessel is nevertheless required to ensure that, where the provisions are not complied with, any young person concerned is provided with compensatory rest periods which are equivalent to those required by the provisions of Regulation 6.

4.2 It is recognised however that, if applied rigidly, such requirements would undermine the employment of young persons on board fishing vessels, since they cannot be fitted into the operating schedules of many fishing vessels.

4.3 There is therefore provision for the daily and weekly rest periods to be interrupted where periods of work are split up over the day or of short duration; and for the weekly rest period to be reduced to no less than 36 hours where this is justified by technical or organisational reasons.

4.4 In addition, derogations are built into the regulations where the young person concerned is working to a properly agreed schedule of duties. This may either be a schedule complying with the merchant shipping rules on hours of work³, or another “relevant agreement”. Annex 2 gives guidance on “relevant agreements”. In either case, where such a schedule or other relevant agreement is in place, the rest periods above do not apply provided that schedule or agreement provides for compensatory rest time and that the employer ensures that the hours worked do not put at risk the health and safety of the young person.

4.5 Time spent on training constitutes working time. This includes time spent undergoing formal instruction at college or on training courses away from the fishing vessel, as well as training received on board. It does not include private study time either on board or ashore.

5. Health Assessment

5.1 Under the General Duties regulations the employer is required to provide for health surveillance of workers where appropriate. Annex 2 to MGN20 (M+F) provides guidance on when surveillance is appropriate.

5.2 Under these regulations, where the risk assessment carried out under regulation 5(2) identifies a risk to the health and safety of young people, or where any young person is required to work at night (other than in exceptional circumstances), the young workers concerned are entitled to free assessment of their health and capacities before starting work and regular monitoring thereafter. This monitoring is required only so long as the

³ 1997/1320 Regulation 9



night work continues, unless there are other factors arising from the work which may have long-term consequences to health.

6. Young persons' Medical Certificates

6.1 Any young person employed on a UK ship must be in possession of a current medical fitness certificate. Such medical certificates are valid for 1 year.

7. Record of Young Persons

7.1 This provision is carried forward from the Employment of Young Persons Regulations 1995. The master is required to hold a record, as part of the crew agreement if one exists, of any young persons engaged as workers on the fishing vessel together with their dates of birth and date of engagement on the fishing vessel. A summary of the provisions of the Merchant Shipping and Fishing Vessels (Employment of Young Persons) Regulations 1998 must be included in the fishing vessel crew agreement.

7.2 Form ALC (FSG) 1 has been revised to reflect the new regulations. However, where this is not in use, a copy of this MGN, kept with the crew agreement, will be considered to be adequate to fulfil this requirement.

7.3 Guidance for young people and their employers is available on the HSE website; <http://www.hse.gov.uk/youngpeople/index.htm>

More Information

Seafarer Safety and Health Branch
Maritime and Coastguard Agency
Bay 1/29
Spring Place
105 Commercial Road
Southampton
SO15 1EG

Tel : +44 (0) 23 8032 9328
Fax : +44 (0) 23 8032 9251
e-mail: seafarer.s&h@mcga.gov.uk

General Inquiries: infoline@mcga.gov.uk

MCA Website Address: www.gov.uk/government/organisations/maritime-and-coastguard-agency

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Safer Lives, Safer Ships, Cleaner Seas



HAZARDS, RISKS AND WAYS OF AVOIDING THEM

- The table lists the agents, processes and work taken from the annex to the European directive on the protection of young people at work Directive (94/33/EC) which the European Union considers are likely to give rise to dangers to young people (**see paragraph 3.6 of this Note**).
- Where these are considered likely to apply to young workers on ships, advice is given on what risks may arise, and how they should be avoided.
- The advice is generally based on the HSE publication *Young People at Work – A Guide for Employers* but with the addition of some ship specific provisions.

Lists of agents, processes and work	Risk	How to avoid risk
WORK OBJECTIVELY BEYOND PHYSICAL OR PSYCHOLOGICAL CAPACITY		
Physical capacity: <i>e.g. the lifting, moving or carrying of heavy loads or objects or similar work which is beyond their physical capacity</i>	Accidents, injuries and or musculoskeletal disorders which can occur in jobs that require repetitive or forceful movements, particularly in association with awkward posture or insufficient recovery time.	The risk assessment should take account of the physique and general health, age and experience. Training and appropriate supervision should be provided.
Work the pace of which is determined by machinery and which involves payment by results	Young people may be more at risk as their muscle stretch may not be fully developed, and they may be less skilled in handling techniques or in pacing the work according to capacity. They may also be more subject to peer pressure to take on tasks that are too much for them or to work more quickly.	The risk assessments should take account of age and experience. Training and appropriate supervision should be provided.
Psychological capacity	Although there will large individual differences in the psychological capacity of young people based on differences in training, experience, skills, personality and attitudes in the vast majority of jobs there is no difference in the kind of mental and social skills used by young people and adults.	The risk assessment should focus on critical tasks which rely on skill, experience and an understanding of the task requirements. Training and effective supervision should be provided, particularly where the young person might be using machinery with exposed dangerous parts.
WORK INVOLVING HARMFUL EXPOSURE TO AGENTS WHICH ARE TOXIC, CARCINOGENIC, CAUSE HERITABLE GENETIC DAMAGE, OR HARM TO THE UNBORN CHILD, OR WHICH IN ANY OTHER WAY CHRONICALLY AFFECT HUMAN HEALTH		
Physical agents: <i>Work in high pressure atmospheres</i>	There are three types of health problem which can be caused by working in compressed air:	On the United Kingdom Continental Shelf (UKCS), divers must have an HSE certificate of



	<p>Barotrauma: where a change in surrounding pressure causes direct damage to those air-containing cavities in the body which are directly connected with the surrounding atmosphere, principally the ears, sinuses and lungs.</p> <p>Decompression illness: which mostly occurs as a condition involving pains around the joints, or, more rarely, as a serious, potentially life-threatening condition which may affect the central nervous system, the heart or the lungs.</p> <p>Dysbaric osteonecrosis: which is a long-term condition damaging the long bones, hip or shoulder joints.</p> <p>Young people's bones are not fully developed and may be at greater risk of long-term harm.</p>	<p>competence or equivalent, be fit and must have a valid certificate of medical fitness to dive. There is no minimum age limit for divers. However, it is unusual for anyone below school leaving age to undergo diver training and no one under 18 is accepted for work by employers offshore.</p>
<p>Noise</p>	<p>There is no evidence that young people face greater risk of damaged hearing from exposure to noise than other workers.</p>	<p>Reference documents: Merchant Shipping and Fishing Vessels (Control of Noise at Work) Regulations 2007 and MGN 352 (M+F).</p> <p>Compliance with the regulations will protect the hearing of most young people. Ensure that a competent person supervises the wearing of ear protection to ensure it is worn properly, during exposure to loud noise.</p>
<p>Hand-arm vibration</p>	<p>There is no evidence that young people face greater risk of developing hand-arm vibration syndrome (vibration white finger) following exposure to hand-arm vibration than other workers. However there is an increased risk in the onset of non-occupational Raynaud's disease during adolescence which can give similar symptoms to vibration white-finger. Young persons with non-occupational Raynaud's disease should not be exposed to hand-arm vibration.</p>	<p>Reference documents: the Merchant Shipping and Fishing Vessels (Control of Vibration at Work) Regulations 2007 and MGN 353 (M+F).</p> <p>Action should be taken to protect young persons where exposure exceeds an acceleration of 2.5 m/s². Employers will need to consider a programme to control the significant risks identified in the risk assessment including identification of hazardous equipment/tasks; limiting exposure to 1 m/s² normalised over 8 hours (A(8)), by reducing either time of</p>



		exposure and/or vibration level; providing competent supervision; and health surveillance.
<i>Whole body vibration</i>	Regular exposure to low frequency vibration, or to shocks, for example working in fast rescue craft, may be associated with back pain and other spinal disorders. Younger workers may be at increased risk of damage to the spine as the strength of the muscles is still developing and the bones do not fully mature until around the age of 25.	Reference documents: Merchant Shipping and Fishing Vessels (Control of Vibration at Work) Regulations 2007; MGN 353 (M+F) and MGN 436 (M+F). Action should be taken to protect young persons when exposure exceeds an acceleration of 0.5 m/s ² . Employers will need to consider a programme to control the significant risks identified in the risk assessment including: identification of hazardous equipment/tasks; limiting exposure by reducing the time and/or level; producing information and training on how to minimise the risk; and health monitoring.
Biological agents (micro-organisms)	Despite physical and psychological immaturity, young persons are no more likely to contract infections from biological agents than adults. Like any other workers they may be at greater risk if they suffer from any other disease, are taking medication or are pregnant.	Reference documents: the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 and MGN 408 (M+F). Precautions should be taken to protect all workers against risk of infection at work and of acquiring an allergy to certain microbes, regardless of their age or state of health. Following a risk assessment approach, control measures can be as simple as maintaining high standards of hygiene i.e. hand washing or use of gloves. Where available, vaccination should be offered as a supplement to procedural or physical controls.
Chemical agents: <i>Very toxic, toxic, harmful, corrosive and irritant substances</i>	Young people are not physiologically at any greater risk from exposure to such substances than anyone else. However, young people may lack awareness of hazards and risks to their health.	Reference documents: Merchant Shipping and Fishing Vessels (Health and Safety at Work)(Chemical Agents) Regulations 2010 as amended and MGN 409(M+F) and MGN 454(M+F). Chapter 27 of the Code of Safe Working Practices for Merchant Seamen. Employers should assess the



		<p>health risks to young people, arising from work with such substances, and where appropriate use a safer substance or change the process to avoid its use.</p> <p>Where information is supplied with the substance, for example under CHIP or COSHH regulations, particular attention should be paid to such information.</p> <p>Workers should be given any relevant information affecting their health and safety, instruction and training in the safe handling and use of the substance, and be provided with adequate supervision within a safe system of work.</p>
Carcinogenic substances	Some substances (<i>carcinogens</i>) may cause cancer. They need special consideration because of that property – they have no special effect on young people.	<p>Reference documents: Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Carcinogens and Mutagens) Regulations 2007 and MGN 356 (M+F).</p> <p>Many of these substances can be identified from the label or safety data sheet (where supplied) for the substance, which will say “May cause cancer”.</p> <p>Exposure is to be reduced to as low a level as reasonably practicable.</p>
Mutagens	Some substances may impair people’s ability to have children or may damage the unborn child.	<p>Reference document: MGN 522 (M+F) New and Expectant Mothers.</p> <p>Exposure is to be reduced to as low a level as reasonably practicable.</p>
Substances causing allergic reactions	<p>Some substances can cause allergic reactions in people. This may give them dermatitis or asthma.</p> <p>These substances do not affect young people any differently from adults.</p>	<p>HSE guidance on preventing asthma at work and dermatitis, gives practical advice on preventing risk to all workers.</p> <p>General guidance on hazardous substances is contained in Chapter 27 of the Code of Safe Working Practices for Merchant Seamen.</p>
Lead and lead compounds	Young people are not physiologically at any greater risk from exposure to lead and its compounds than anyone	<p>See above on chemical agents.</p> <p>Lead may be found in some paints. Guidance on precautions to be</p>



	<p>else.</p> <p>Lead and its inorganic compounds are known to produce diverse biological effects in humans depending on the exposure level. These range from minor biochemical changes in the blood, to severe irreversible or life threatening disruption of body processes, in particular the nervous system and the kidneys. There are also concerns about the effects of lead on the quality of semen and on the unborn child.</p> <p>The toxic effects of lead alkyls are primarily neurological or psychiatric. Symptoms include agitation, insomnia, dizziness, tremors and delirium, which can progress to mania, coma and death. These symptoms are accompanied by nausea, vomiting and abdominal pain. The actual risk can only be determined following a risk assessment of the particular circumstances under which there is exposure at the place of work. However, young people may not appreciate the dangers to their health or they may not understand or follow instructions properly because of their immaturity.</p>	<p>taken while painting or cleaning or rubbing down painted surfaces, are contained in Chapter 24 of the Code of Safe Working Practices for Merchant Seamen.</p> <p>Employers should ensure that they adequately control the exposure of young people to lead and its compounds. Special attention should be paid to the provision of information, instruction and training, and to the provision of adequate supervision within a safe system of work.</p>
Asbestos	<p>Young people are not physiologically at any greater risk from exposure to asbestos than anyone else. However, young people may not be aware of the hazards and risk to their health, or follow instructions properly because of their immaturity.</p> <p>Exposure to asbestos fibres causes three serious diseases;</p> <ul style="list-style-type: none"> • Mesothelioma (a cancer of the lung lining) • Lung cancer (indistinguishable from cancers caused by other agents) 	<p>Reference documents: Merchant Shipping and Fishing Vessels (Health and Safety at Work)(Asbestos) Regulations 2010 as amended and MGN 429(M+F) and Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Asbestos) (Amendment) Regulations 2013 and MGN 493 (M+F).</p> <p>Exposure to asbestos should be avoided wherever possible, and where it cannot be avoided precautions should be taken to reduce it to as low a level as possible. Advice is contained in MGN 429 (M+F) and in Chapter 27 of the Code of Safe Working</p>



	<ul style="list-style-type: none"> Asbestosis (scarring of the lung tissue) <p>There are no cures for asbestos related diseases. These diseases can take many years to appear after the period of exposure (<i>long latency</i>). This latency effect means that an exposure occurring at a young age may be a higher risk than the same exposure later in life, simply because a young person is more likely to survive until the time when the disease is most likely to emerge.</p>	<p>Practices for Merchant Seamen.</p> <p>Workers should be given any relevant information affecting their health and safety, instruction and training in the safe handling and use of the substance, and be provided with adequate supervision within a safe system of work.</p>
WORK INVOLVING HARMFUL EXPOSURE TO RADIATION		
<p>Ionising radiation</p>	<p>The risk of developing cancer and hereditary defects from exposure to ionising radiation, which increases slightly for young people, is controlled by setting statutory annual dose limits. According to the HSE website, the main dose limits which relate to the whole body dose are the most important elements in relation to cancer risk. The limits for young people per calendar year are:</p> <ul style="list-style-type: none"> 6 millisieverts (mSv) for trainees under 18 years (30% of the adult limit). <i>Trainees (including students) are defined as being aged 16 years or above receiving instruction or training involving work with ionising radiation.</i> 1 mSv for employees below 18 years who are not trainees (the same limit as for the general public). 	<p>Regard should be had to the provisions of MGN 197 and MGN 452(M+F).</p> <p>In general seafarers may not be exposed to ionising radiation at sea although it is possible that such exposure might occur when X-ray equipment is being used.</p>
<p>Non-ionising radiation, electromagnetic radiation</p>	<p>Optical radiation: There is no evidence that young people face greater risk of skin and eye damage than other workers.</p>	<p>Reference documents: Merchant Shipping and Fishing Vessels (Health and Safety at Work)(Artificial Optical Radiation) Regulations 2010 and MGN 428(M+F).</p>



	<p>Electromagnetic fields and waves: Exposure within current recommendations is not known to cause ill health to workers of any age. Extreme overexposure to radio-frequency radiation could cause harm by raising body temperature.</p>	<p>Non-binding EU guidance on artificial optical radiation at work.</p> <p>Seafarers working in hot climates are advised to reduce their exposure to the sun, following advice in Chapter 12.3 of the Code of Safe Working Practices for Merchant Seamen. If it is necessary to work in direct sunlight, appropriate clothing should be worn to protect both head and body.</p> <p>Reference document: EC Directive 2004/40/EC on the protection of workers from the risks related to exposure to electromagnetic fields at work. <i>[under review]</i></p> <p>Exposure to electric and magnetic fields should not exceed the restrictions on human exposure published by the Radiation Protection Division of the Health Protection Agency.</p>
<p>WORK INVOLVING THE RISK OF ACCIDENTS WHICH IT MAY BE ASSUMED CANNOT BE RECOGNISED OR AVOIDED BY YOUNG WORKERS OWING TO THEIR INSUFFICIENT ATTENTION TO SAFETY OR LACK OF EXPERIENCE OR TRAINING</p>		
Manufacture and handling of devices, fireworks or other objects containing explosives		It may be necessary to explain the safe handling of pyrotechnics such as distress flares, rockets, line throwing devices, floating smokes, life raft signals and man overboard markers.
Work with fierce or poisonous animals	Unlikely to be relevant to work on ships.	
Animal slaughtering on an industrial scale	Unlikely to be relevant to work on ships.	
Work involving the handling of equipment for the production, storage or application of compressed, liquefied or dissolved gases		
Work involving the operation of high risk lifting equipment or acting as signallers to operators of such equipment	<p>ILO Convention 152 Article 38</p> <p>There may be substantial risks associated with the use of lifting accessories, for example during 'slinging' and employers need to assess whether such work is appropriate for young people.</p>	Reference documents: Merchant Shipping and Fishing Vessels (Provision and Use of Work Equipment) Regulations 2006; Merchant Shipping and Fishing Vessels (Lifting Operations and Lifting Equipment) Regulations 2006 and the respective MGN 331 (M+F) and MGN 332 (M+F); Code



		<p>of Safe Working Practices for Merchant Seamen Chapter 21.</p> <p>Young people may use high-risk lifting machinery under training as long as they are adequately supervised. They should also be supervised after training if considered not sufficiently mature.</p>
Working involving the operation of power machinery or tools	Young people (under 18 years) should not be allowed to use power machinery or tools unless they have the necessary maturity and competence which includes having completed appropriate training.	<p>Reference documents: Code of Safe Working Practices for Merchant Seamen, Chapter 20 sections 20.4 to 20.8.</p> <p>Young people may operate power equipment and tools during training providing they are sufficiently mature and are adequately supervised. They should also be properly supervised after training until they reach the appropriate level of competence and can work safely unsupervised.</p>
Entry into boilers, tanks and cofferdams	Risk from depleted oxygen levels, toxic gases, risk of explosion.	<p>Reference documents: Merchant Shipping (Entry into Dangerous Spaces) Regulations 1988; Chapter 17 of the Code of Safe Working Practices for Merchant Seamen; MGN 423(M+F);</p> <p>Young persons may do this work under training and with adequate supervision.</p>
Handling mooring or tow lines or anchoring equipment	Risk being struck by or striking another person when lines are thrown; risk from parting of ropes and cables under tension.	<p>Reference documents: Code of Safe Working Practices for Merchant Seamen Chapter 25</p> <p>MGN 308 (M+F) which deals with Mooring, Towing or Hauling Equipment On All Vessels – Safe Installation and Safe Operation.</p>
Flammable liquids	<p>Accidental spills can cause fires or explosions.</p> <p>Flammable liquids should be used only for their intended purposes: using them for other purposes may lead to fires or explosions.</p>	It may be necessary to explain the basics of flammability and what to do if liquid is spilt. It may also be necessary to point out the dangers of using liquids, such as petrol for cleaning machinery.
Flammable gases	Leaking gas from pipes, appliances or cylinders can cause fires or explosions.	It may be necessary to explain basics of flammability; people need to know how to detect leaking gas and what to do in the event of a gas leak.



		MGN 310 (F) FV Risk of Fire and Explosion from Gas Welding and Burning.
Gas cylinders	<p>There is no evidence that young people face greater physical risks from a release of stored energy than other workers. Leaking gas from cylinders may cause fires or explosions.</p> <p>Physical damage to cylinders may cause leaks. Heavy cylinders may cause physical injury if not properly handled.</p> <p>Application of heat to gas cylinders may cause them to burst possibly resulting in “shrapnel” type explosion. Alternatively the contents may be vented through a pressure release valve resulting in fire or explosion.</p>	<p>It may be necessary to explain the basics of flammability; people need to know how to detect leaking gas and what to do in the event of a gas leak.</p> <p>Gas cylinders need to be properly handled, both to avoid the danger of fire or explosion, and the risk of physical injury to the worker, e.g. crushed toes.</p> <p>Gas cylinders need to be safely and used away from direct sources of heat. Guidance is contained in Chapter 23, Section 8 of the Code of Safe Working Practices for Merchant Seamen and MGN 310 (F) FV Risk of Fire and Explosion from Gas Welding and Burning.</p>
Work with tanks etc containing chemical agents	<p>This applies particularly to work on chemical tankers or any work involving handling or working near to substantial quantities of substances hazardous to health. There is a risk of fire or explosion where there is an explosive atmosphere or where spills or leaks of flammable substances are readily foreseeable. There is also a risk of ignition of a flammable liquid which has splashed or soaked into clothing.</p>	<p>The risk assessment should consider issues such as:</p> <ul style="list-style-type: none"> • how to ensure that young people will follow emergency procedures properly if containment is lost; and • how to ensure that young people behave responsibly when working near quantities of chemicals that have the potential to cause serious harm: e.g. making young workers aware of the dangers of introducing ignition sources in these situations.
Handling or taking charge of ship's boats		
WORKING IN EXPOSED POSITIONS		
Working at height, rigging	<p>Risk of falling or dropping items on workers below through lack of concentration or lack of experience.</p>	<p>Only to work under supervision. Chapter 15 of the Code of Safe Working Practices for Merchant Seamen. MGN 410 (M+F) gives general guidance on working at height.</p>
Working at height or over the side	<p>Risk from falling from aloft or over the ship's side or into the</p>	<p>Only to work under supervision. Chapter 15 of the Code of Safe</p>



	water.	Working Practices for Merchant Seamen. MGN 410 (M+F) gives general guidance on working at height.
Working on deck in heavy weather	Risk of injury or of getting washed over the ship's side.	Reference documents: Code of Safe Working Practices for Merchant Seamen, section 13.9.
Work involving risk of structural collapse	May be relevant for cargo stacking and movement of ships' stores.	Cargo should be stowed and secured in accordance with the Cargo Securing Manual and where work is to be carried out near a tall stack of cargo or stores, the stack should be secured to prevent it falling. Young workers should only do such work if properly trained or if they are under supervision of a trained person.
OPERATING HAZARDOUS EQUIPMENT		
Servicing of electrical equipment	Risk of electric shock or other injury if equipment not properly isolated from a power source.	Regard should be had to the provisions of the Merchant Shipping and Fishing Vessels (Provision and Use of Equipment) Regulations 2006 and MGN 331(M+F).
Work involving high-voltage electrical hazards	The risk is one of electric shock, burns or electrocution. There is no evidence that young people face greater physical risk from electricity than other workers.	Reference documents: MGN 452(M). As with adults, young people should not undertake work involving electricity unless they have the necessary knowledge and/or experience to prevent danger or injury; or are under an appropriate level of supervision having regard to the nature of the work.
Cleaning of catering machinery	Risk of injury from moving or sharp parts.	Regard should be had to the provisions of the Merchant Shipping and Fishing Vessels (Provision and Use of Equipment) Regulations 2006 and MGN 331 (M+F). (See the Code of Safe Working Practices for Merchant Seamen (CSWP) section 14.7.6: unless properly supervised young persons must not clean a machine with dangerous parts).
Use of ship's laundry equipment		Young persons must be fully trained and if appropriate closely supervised by a competent person (see Code of Safe Working Practices for Merchant Seamen section 20.12.1).



WORK IN WHICH THERE IS A RISK TO HEALTH FROM EXTREME COLD OR HEAT

<p>Extremes of cold or heat</p>	<p>Exposure to extreme cold carries risks to workers of all ages. These are principally hypothermia and local cold injury (frostnip/frostbite). People of all ages vary in their ability to tolerate cold conditions.</p> <p>Exposure to extreme heat carries risks for workers of all ages. These include collapse due to heat exhaustion or potentially fatal heat stroke. Protective clothing may exacerbate the problem by preventing the body from losing heat normally. There are no special considerations for young people – their response to work in hot conditions will depend on physical fitness, physique and past experience of hot conditions, which will be variable.</p>	<p>Depending on the findings of the risk assessment, the provision of appropriate protective clothing and control of periods of exposure will help to minimise the risk.</p> <p>Any intended exposure to heat must be carefully assessed and the risks can be minimised by measures such as introducing suitable work patterns, prior medical assessment of workers and proper supervision of the work.</p> <p>Guidance on the precautions for work in hot climates is given in Section 12.3 of the Code of Safe Working Practices for Merchant Seamen.</p>
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RELEVANT AGREEMENTS

A relevant agreement is defined in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations as follows:-

- “*relevant agreement*” in relation to a worker means a workforce agreement which applies to him, any provision of a collective agreement which forms part of a contract between him and his employer, or any other agreement in writing which is legally enforceable as between the worker and his employer.
- “workforce agreement” means an agreement between an employer and workers employed by him or their representatives in respect of which the conditions set out in the Schedule to the Working Time Regulations 1998 are satisfied.

The following guidance, reproduced from “*A Guide to Working Time Regulations*”, published by the Department of Trade and Industry in September 1998⁴ describes workforce agreements as defined in the Schedule.

WORKFORCE AGREEMENTS

The Regulations provide a mechanism for employers to agree working time arrangements with workers’ representatives, who do not have any terms or conditions set by collective agreement, and whether or not a schedule of hours of work is required under the Merchant Shipping (Safe Manning, Hours of Work and Watchkeeping) Regulations 1997 (Regulation 9). In the Regulations, this is called a workforce agreement. This allows employers to agree on how to use the flexibility provided by the Regulations and clarify other matters. A workforce agreement may apply to the whole of the workforce or a group of workers within it. Where it is to apply to a group of workers, the group must share a workplace, function or organisational unit within a business.

As a first step, employers should determine at what level they wish to make an agreement and then take steps to provide for representatives of the workers to be elected to negotiate it. To arrange the election of workforce representatives, the employer should:

- (a) decide on the number of representatives – this will depend on the size of the workforce or the group to be represented; it is suggested that the number be sufficiently large to be representative of the workers concerned, though not so large as to make negotiations unwieldy;
- (b) ensure so far as is reasonably practicable that the elections must be conducted by secret ballot; in practice it would be rare for this not to be possible;
- (c) ensure that the votes are counted fairly and accurately, the employer may wish to consider enlisting an independent body to verify this;
- (d) allow each worker a vote for each representative to be elected to represent them; and
- (e) ensure that candidates are members of the workforce on the date of the election, or in the case of a group, a member of the group to whom the agreement is to apply.

No member of the workforce should unreasonably be excluded from standing as a candidate.

⁴ A Guide to Working Time Regulations, Department for Trade and Industry, 1998



To be valid, a workforce agreement must:-

- (a) be in writing;
- (b) be circulated in draft to all workers to whom it applies together with guidance to assist their understanding of it;
- (c) be signed, before it comes into effect either:
 - (i) by all the representatives of the members of the workforce or group of workers; or
 - (ii) if there are 20 workers or fewer employed by the company, either by all the representatives of the workforce or by the majority of the workforce.
- (d) have effect for no more than five years.

It will be possible for an elected representative to be elected for other purposes, for example as a safety representative under the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997. However it would have to be made clear to those voting that the representatives were being elected for both purposes.

