



# MSN 1890 (M+F) Amendment 1

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## The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 and the Merchant Shipping (Maritime Labour Convention) (Medical Certification) Regulations 2010: New and Expectant Mothers

Notice to all ship, shipowners, employers and seafarers on merchant ships and fishing vessels

*This notice should be read with the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997, as amended, and replaces MGN 522.*

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### Summary

This Merchant Shipping Notice gives detailed information required to comply with the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 as they relate to new or expectant mothers. They also provide guidance on this subject. Many women continue to work while they are pregnant and return to work while breastfeeding.

- Shipowners and employers are required to take into account the safety and health of new or expectant workers when carrying out a risk assessment, in particular if the woman is required to do night work (guidance is in paragraph 6 and Annex 1);
- Subject to the findings of the risk assessment, and medical advice, a woman may continue to work at sea during pregnancy.
- The procedure to be followed is set out.
- This notice comes into force on “IP completion day”.
- IP completion day is 31 December 2020.
- After 31 January 2020 there will be a transition period until the end of 2020, while the UK and EU negotiate additional arrangements.
- The current rules on trade, travel, and business for the UK and EU will continue to apply during the transition period.

### 1. Introduction

1.1 The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (S.I. 1997/2962) came into force on 31 March 1998. Regulations 8, 9 and 10 make provision for the safety and health at work of pregnant workers, those who have recently given birth



or are breastfeeding. The Regulations apply to United Kingdom ships and to other ships when they are in United Kingdom waters.

- 1.2 The medical fitness standards for those working at sea are published in MSN 1886 (M+F). They have statutory force under the Merchant Shipping (Maritime Labour Convention) (Medical Certification) Regulations 2010 (S.I. 2010/737) and the Merchant Shipping (Work in Fishing Convention) (Medical Certification) Regulations 2018.
- 1.3 Copies of the regulations are available on the website: [www.legislation.gov.uk](http://www.legislation.gov.uk)
- 1.4 Merchant Shipping Notices, Marine Guidance Notes and Marine Information Notes are available to download from the GOV.UK website [www.gov.uk](http://www.gov.uk)
- 1.5 Paragraphs 2 to 5 of this Merchant Shipping Notice are based on the guidance issued by the Health Safety Executive. Further information is available from the HSE website: [www.hse.gov.uk/mothers/index.htm](http://www.hse.gov.uk/mothers/index.htm)

## **2. New and Expectant Mothers: Health and Safety**

### **Introduction**

- 2.1 Pregnancy should not be equated to ill health. It should be regarded as part of everyday life and its health and safety implications can be adequately addressed by normal health and safety management procedures. Many women work while they are pregnant, and many return to work while they are still breastfeeding.
- 2.2 However, the particular demands of working on board ship can place pregnant workers at risk. Very few ships carry doctors, and in the event of problems developing during pregnancy, an equivalent level of care to that available to an expectant mother working ashore is unlikely. For example, sophisticated investigations for the slightest abnormality in a previously normal pregnancy, which may be needed fairly urgently, could not be duplicated even on a ship with medical facilities. In addition, ship turnaround in ports is often very rapid allowing no time for routine ante-natal care.
- 2.3 Account must also be taken of the fact that, should labour begin prematurely, access to medical facilities for the mother and new-born child in the event of premature birth might be delayed at least until the ship reaches port.
- 2.4 The guidance and medical standards used to assess the fitness of seafarers are given in Merchant Shipping Notice MSN 1886 (M+F).

## **3. Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (S.I. 1997/2962)**

- 3.1 These Regulations require the employer to assess risks to all workers and to do all that is reasonably practicable to control those risks.
- 3.2 Regulations 8, 9 and 10 specifically require that the employer takes particular account of risks to expectant and new mothers in that risk assessment.
- 3.3 Compliance with specific regulations (e.g. for the storage and handling of dangerous goods) will normally be enough to reduce the risk, but consideration should always be given to removing the hazard or completely preventing exposure to the risk. Where this is not feasible, the risk should be controlled.



#### **4. Risks from living and working conditions subject to risk assessment in respect of new or expectant mothers (Reg 8 (1))**

4.1 Employers must assess the nature, degree and duration of exposure of new and expectant mothers and any risks to their health and safety in respect of the activities listed in Annexes A and B. The risk assessment carried out under Regulation 7(1) (see paragraph 3.2) must include these risks. The list is not exhaustive.

4.2 The table in Annex C gives guidance on avoiding or mitigating the risks from such activities.

#### **5. Action to be taken**

5.1 Action in relation to an individual worker is required when the employer has been told in writing that a worker is pregnant, a certificate from a registered practitioner or registered midwife may be requested to confirm the pregnancy.

5.2 If there is a significant risk at work to the safety and health of a new or expectant mother, which goes beyond the level of risk to be expected outside the workplace, then the following actions must be taken to remove her from the risk:-

**ACTION 1:** Temporary adjustment of working conditions and hours of work; if this is not reasonable, or would not avoid the risk -

**ACTION 2:** Provision of suitable alternative work, if any available, at the same rate of pay; or if that is not feasible -

**ACTION 3:** Suspension from work on paid leave for as long as necessary to protect her safety or health or that of her child.

- During the period of suspension, the worker must be paid (as required by the Employment Rights Act 1996 Sections 66 and 68) Further information is contained in the Department of Work and Pensions publication: Maternity Benefits: Detailed Guide (March 2015)

[www.gov.uk/government/publications/maternity-benefits-technical-guidance/maternity-benefits-technical-guidance](http://www.gov.uk/government/publications/maternity-benefits-technical-guidance/maternity-benefits-technical-guidance)

5.3 These actions are only necessary where there is genuine concern as the result of a risk assessment; if there is any doubt, the employer may want to seek professional advice on what the risks are and whether they arise from being carried out before offering alternative employment or paid leave.

#### **6. Night work**

6.1 Special consideration must be given to a new or expectant mother who works at night, and obtains a medical certificate stating that night work could affect her health and safety.

6.2 The following steps should be followed.

**STEP 1:** If an employee who has notified the employer in writing that they are pregnant has a medical certificate stating that night work could affect her health or safety, she has a right under the Employment Rights Act 1996, Sections 66 and 67, to be offered suitable alternative work on terms and conditions no less favourable than her normal terms and conditions.



**STEP 2:** If it is not possible to offer the employee suitable alternative work then she must be suspended from work under Regulations 8-10 of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997. As mentioned in paragraph 5.2, the worker must be paid during the period of suspension (as required by the Employment Rights Act 1996 Sections 66 and 68).

## 7. Medical Standards relating to pregnancy

- 7.1 Paragraphs 7.2-7.9 apply only to those required to hold an ENG 1 Medical Fitness Certificate under the Merchant Shipping (Maritime Labour Convention) (Medical Certification) Regulations 2010 and the Merchant Shipping (Work in Fishing Convention) (Medical Certification) Regulations 2018.
- 7.2 Nothing in the following paragraphs affects the rights of a worker to Maternity Leave in Sections 71-80 of the Employment Rights Act 1996.
- 7.3 The ILO/IMO Guidelines on the Medical Examinations of Seafarers advise that the normal date for the cessation of work for expectant mothers employed at sea is 24 weeks. This is because the survival of a premature infant born at 24 to 28 weeks is now common with good onshore neonatal intensive care.

[www.ilo.org/sector/Resources/codes-of-practice-and-guidelines/WCMS\\_174794/lang-en/index.htm](http://www.ilo.org/sector/Resources/codes-of-practice-and-guidelines/WCMS_174794/lang-en/index.htm)

### Procedure

7.4 Where the worker wishes to delay the start of her maternity leave after the 24<sup>th</sup> week, the worker should agree with the employer any necessary changes to her duties and her hours of work so that the following criteria are met:

The seafarer-

- is employed only on trips of not more than two hours duration;
- is able to attend the appropriate ante-natal checks within working time where necessary;
- has no emergency duties.

7.5 The employer must undertake a risk assessment under Regulations 8(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997. This must take account of the medical advice from the seafarer's Doctor or obstetrician, as appropriate. The findings of the risk assessment must show no significant risks to the worker or her unborn child.

7.6 The employer should then make arrangements for the worker to see an Approved Doctor who will assess the position in the light of the medical evidence, the above criteria and the guidance in this Merchant Shipping Notice.

7.7 If the Approved Doctor is satisfied that the seafarer is fit to continue working at sea, within the limits set out above, a new ENG 1 Medical Fitness Certificate may be issued with the following restrictions:

- restricted to trips of not more than 2 hours;
- not fit for emergency or muster duties.

7.8 If there is any doubt about the seafarer's fitness to continue to work, an ENG 3 will be issued. The seafarer may then appeal to a medical referee in the normal way.



7.9 While she continues at sea, the seafarer must continue to undergo her ante-natal checks in order that her condition can be monitored. If there is any significant change in her condition, affecting her fitness to work her employer must be notified and she should return to the Approved Doctor for a reappraisal.

### **More Information**

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telephone numbers are correct at time of publishing

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***Safer Lives, Safer Ships, Cleaner Seas***



## NON-EXHAUSTIVE LIST OF AGENTS, PROCESSES AND WORKING CONDITIONS (Regulation 8(1))

### A. Agents

1. Physical agents where these are regarded as agents causing foetal lesions and/or likely to disrupt placental attachment, and in particular:

- (a) shocks, vibration or movement;
- (b) handling of loads entailing risks, particularly of a dorsolumbar nature;
- (c) noise;
- (d) ionising radiation (See Directive 80/836/Euratom OJ No. L 246, 17. 9. 1980, p. 1);
- (e) non-ionising radiation;
- (f) extremes of cold or heat;
- (g) movements and postures, travelling - either inside or outside the establishment - mental and physical fatigue and other physical burdens connected with the activity of the worker within the meaning of Article 2 of Council Directive 92/85/EEC.

### 2. Biological agents

Biological agents of risk groups 2, 3 and 3 as defined in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 (S.I. 2010/323), in so far as it is known that these agents or the therapeutic measures necessitated by such agents endanger the health of pregnant women and the unborn child and in so far as they do not yet appear in Annex B.

### 3. Chemical agents

The following chemical agents in so far as it is known that they endanger the health of pregnant women and the unborn child and in so far as they do not yet appear in Annex B:

- (a) substances and mixtures which meet the criteria for classification under Regulation (EC) No 1272/2008 of the European Parliament and of the Council in one or more of the following hazard classes and hazard categories with one or more of the following hazard statements;
  - germ cell mutagenicity, category 1A, 1B or 2 (H340, H341);
  - carcinogenicity, category 1A, 1B or 2 (H350, H350i, H351);
  - reproductive toxicity, category 1A, 1B or 2 or the additional category for effects on or via lactation (H360, H360D, H360FD, H360Fd, H360Df, H361, H361d, H361fd, H362);
  - specific target organ toxicity after single exposure, category 1 or 2 (H370, H371).

;



(b) chemical agents in Annex I to Directive 2004/37/EC of the European Parliament and of the Council of 19 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (OJ No. L 158, 30.04.2004, p. 50) ("Directive 2004/37/EC");

(c) mercury and mercury derivatives;

(d) antimitotic drugs;

(e) carbon monoxide;

(f) chemical agents of known and dangerous percutaneous absorption.

## B. Processes

Industrial processes listed in Annex I to Directive 2004/37/EC.

## C. Working conditions

Underground mining work.



**NON-EXHAUSTIVE LIST OF AGENTS AND WORKING CONDITIONS****A. Pregnant workers**

Pregnant workers may under no circumstances be obliged to perform duties for which the assessment has revealed a risk of exposure which would jeopardise safety or health to the following agents and working conditions

**1. Agents****(a) Physical agents**

Work in hyperbaric atmosphere, e.g. pressurized enclosures and underwater diving.

**(b) Biological agents**

The following biological agents:

- toxoplasma,

- rubella virus,

unless the pregnant workers are proved to be adequately protected against such agents by immunisation.

**(c) Chemical agents**

Lead and lead derivatives in so far as these agents are capable of being absorbed by the human organism.

**2. Working conditions**

Underground mining work.

**B. Workers who are breastfeeding**

Workers who are breastfeeding may under no circumstances be obliged to perform duties for which the assessment has revealed a risk of exposure, which would jeopardise safety or health, to the following agents and working conditions.

**1. Agents****(a) Chemical agents**

Lead and lead derivatives in so far as these agents are capable of being absorbed by the human organism.

**2. Working conditions**

Underground mining work.





**NON-EXHAUSTIVE LIST OF RISKS TO NEW AND EXPECTANT MOTHERS  
AND WAYS OF AVOIDING OR REDUCING THEM**

	<b>Risk</b>	<b>How to avoid risk</b>
<b>PHYSICAL AGENTS</b>		
<b>Shocks, vibration including whole body vibration or movement</b>	<p>Regular exposure to shocks, low frequency vibration, for example working in fast craft, may increase the risk of miscarriage. Long-term exposure to vibration does not cause foetal abnormalities but occurs with heavy physical work, so there may be an increased risk of pre-maturity or low birth weight.</p> <p>Exposure to vibration or whole body vibration could result in foetal lesions and or is likely to disrupt placental attachment.</p>	<p>Pregnant workers and those who have recently given birth should be advised to avoid work likely to involve uncomfortable whole body vibration, especially at low frequencies, or where the abdomen is exposed to shocks or impacts. They should not be allocated duties on rescue boats or high speed vessels that may be subject to sustained or high levels of vibration. Breast-feeding workers are at no greater risk than other workers.</p> <p>The general requirements in relation to vibration at work on board merchant ships and fishing vessels can be found in the Merchant Shipping and Fishing Vessels (Control of Vibration at Work) Regulations; SI 2007 No. 3077 and guidance is available in Marine Guidance Notice MGN 353 (M+F)</p> <p>Guidance on whole body vibration can be found in the Marine Guidance Notice: MGN 436 (M+F)</p>
<b>Manual handling of loads where there is risk of injury particularly of a dorsolumbar nature</b>	<p>Pregnant workers are especially at risk from manual handling injury, for example hormonal changes can affect the ligaments therefore increasing the susceptibility to injury.</p> <p>Postural problems may increase as the pregnancy progresses.</p> <p>There can also be risks for those who have recently given birth, for example after a caesarean section there will be a temporary limitation on lifting and handling capacity.</p>	<p>The changes the employer should make will depend on the risks that are identified in the assessment and the circumstances particular to ship-board duties, for example it may be possible to alter the nature of the task so that risks from manual handling are reduced for all workers including new and expectant mothers, or it may be necessary to address the specific need of the worker and reduce the amount of physical work, or provide aid for her to reduce the risks she faces.</p> <p>The general requirements in relation to manual handling at work on board merchant ships and fishing vessels can be found in the Merchant Shipping and Fishing Vessels (Manual Handling Operations) Regulations; SI 1998 No. 2857 and guidance is available in Marine Guidance Notice MGN 90 (M+F)</p>



	<p>The risk of injury will increase when manual handling is performed in combination with frequent adoption of a standing position or walking.</p>	
<p><b>Movements and postures, travelling, mental and physical fatigue and other physical burdens connected with the activity of new or expectant mothers</b></p>	<p>Fatigue from standing and other physical work has long been associated with miscarriage, premature birth and low birth weight.</p> <p>Changes in posture while carrying out manual handling operations will increase the risk of injury.</p> <p>Excessive physical or mental pressure may cause stress and can give rise to anxiety and raised blood pressure.</p> <p>Working in confined spaces which cannot be adjusted sufficiently to take account of the increased abdominal size. This could lead to strain or sprain injuries as dexterity, agility, co-ordination, speed of movement, reach and balance may also be impaired, and an increased risk of accidents may need to be considered.</p> <p>Pregnant workers may experience problems in working at heights, for example ladders or platforms.</p>	<p>Employers need to ensure that hours of work, the volume of work and pacing of work are not excessive and that where possible employees themselves have some control over how their workload is organised and if necessary are able to change their posture to remain comfortable.</p> <p>Employers need to ensure that seating is provided where appropriate.</p> <p>Longer or more frequent rest breaks will help to reduce or avoid fatigue.</p> <p>Adjustments to workstations or work procedures may help to remove postural problems and the risk of accidents occurring.</p> <p>The general requirements in relation to working at height on board merchant ships and fishing vessels can be found in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Work at Height Regulations SI 2010 No.332 and guidance is available in Marine Guidance Notice MGN 410 (M+F)</p>
<p><b>Noise</b></p>	<p>There appears to be no specific risk to expectant or new mothers or to the</p>	<p>The requirements of the Merchant Shipping and Fishing Vessel (Health &amp; Safety) (Control of Noise at Work) Regulations; SI</p>



	foetus. Prolonged exposure to loud noise may lead to raised blood pressure and increased tiredness.	2007 No. 3075 should be sufficient to meet the needs of new or expectant mothers.
<b>Ionising radiation</b>	<p>Exposure to ionising radiation involves risks to the unborn child so employers should take steps to limit the exposure of the expectant mother and the unborn child.</p> <p>In relation to breastfeeding workers who work with radioactive liquids or dusts, there is a possibility that contamination of the mother's skin could expose the child to radiation. There may also be a risk from radioactive contamination breathed in or ingested by the mother and transferred via the placenta to the unborn child.</p>	<p>When preparing a risk assessment the employer must take into account the risks arising from radiation exposure to those who are pregnant or breastfeeding and, in particular, the likely doses to the foetus or the infant.</p> <p>The risk assessment should take into account the possibility of breastfeeding workers receiving radioactive contamination and they should not be employed in work where the risk of contamination is high.</p> <p>Further guidance can be found in HSE's Approved Code of Practice and Guidance for Work with Ionising Radiation: <a href="http://www.hse.gov.uk/pUbns/priced/l121.pdf">http://www.hse.gov.uk/pUbns/priced/l121.pdf</a></p>
<b>Non-ionising radiation, electromagnetic fields and waves (e.g. radio-frequency radiation)</b>	Exposure to electric and magnetic fields within the current recommendations is not known to cause harm to the foetus or the mother. However, extreme over-exposure to radio-frequency radiation could cause harm by raising the body temperature.	<p>Exposure to electric and magnetic fields should not exceed the recommendations on human exposure published by the Radiation Protection Division of the <a href="#">Public Health England</a></p> <p>Employers should also refer to the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Artificial Optical Radiation) Regulations 2010 SI 2010 No. 2987 and Marine Guidance Note MGN 428 (M+F).</p>
<b>Extremes of heat or cold</b>	Pregnant workers tolerate heat less well and may more readily faint or be more liable to suffer from heat stress. The risk is reduced after the birth, but it is not certain how quickly improvement will be noticed.	<p>Pregnant workers should take great care when exposed to extremes of heat for prolonged periods of time.</p> <p>Rest facilities and ready access to refreshments should be provided, as appropriate to ship type.</p>
<b>Nutrition</b>	Eating healthily during pregnancy will help the expectant mother get all the vitamins and minerals	It is important for an expectant mother to eat a variety of foods every day to ensure that right balance of nutrients.



	needed to help the unborn child develop and grow and to keep the expectant mother fit and healthy.	<a href="http://www.nhs.uk/Conditions/pregnancy-and-baby/pages/healthy-pregnancy-diet.aspx">www.nhs.uk/Conditions/pregnancy-and-baby/pages/healthy-pregnancy-diet.aspx</a>
<b>Work in hyperbaric atmospheres, e.g. pressurised enclosures</b>	Possible harmful effects of exposure to increased pressure on a foetus	A diver who is pregnant or suspects they are pregnant should not dive.
<b>BIOLOGICAL AGENTS</b>		
<b>Biological agents which are classed as group 2 biological agent, group 3 biological agent or group 4 biological agent (as defined in the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations SI 2010 No. 323 (“the Biological Agents Regulations”), insofar as it is known that such agents, or the therapeutic measures necessitated by them, endanger the health of pregnant women and the unborn child.</b>	<p>The risks of infection are generally no greater for those at work than for other members of the public, but some of these biological agents are more prevalent abroad.</p> <p>Some biological agents may be transmitted through the placenta while the child is in the womb, during breast-feeding or through close contact between the mother and child (e.g. Hepatitis B, HIV, Herpes, tuberculosis and cytomegalovirus).</p> <p>Employers should consider the risks posed by toxoplasma and rubella virus.</p>	<p>Employers should refer to the Biological Agents Regulations and Merchant Shipping Notice 1889 (M+F). They should also refer to Chapter 21 of The Code of Safe Working Practices for Merchant Seafarers; to MGN 399 (M+F) for guidance for seafarers working abroad and to the Ship’s Captains Medical Guide for guidance on the prevention of disease</p> <p>Adequate protection against such agents by immunisation</p> <p>HSE has published guidance for employees and employers on their website.</p> <p><a href="http://www.hse.gov.uk/mothers/index.htm">www.hse.gov.uk/mothers/index.htm</a></p>
<b>CHEMICAL AGENTS</b>		
<b>Substances and mixtures which meet the criteria for classification as hazardous within Annex I to Regulation (EC) No 1272/2008 (the CLP Regulation) whether or not that chemical agent is classified under that Regulation.</b>	<p>(a) H340, H341: germ cell mutagenicity, category 1A, 1B or 2</p> <p>(b) H350, H350i, H351 : carcinogenicity, category 1A, 1B or 2</p> <p>(c) H360, H360D, H360FD, H360Fd, H360Df, H361, H361d, H361fd, H362: reproductive toxicity, category 1A, 1B or 2 or</p>	<p>Packaged substances carried as cargo will fall under International Maritime Dangerous Goods Code.</p> <p>Substances in use may not be labelled with health warnings if purchased outside the European Economic Area.</p>



<p><b>Lead and lead derivatives insofar as they are capable of being absorbed by the human organism</b></p> <p><b>Mercury and mercury derivatives</b></p> <p><b>Antimitotic drugs</b></p>	<p>the additional category for effects on or via lactation</p> <p>(d) H370, H371: specific target organ toxicity after single exposure, category 1 or 2</p> <p>The actual risk to health these substances may cause can only be determined following a risk assessment of a particular substance at the place of work. Although the substances listed may have the potential to endanger health or safety there may be no risk in practice; for example if the received exposure is below the level which may cause harm.</p>	<p>Employers are required to assess the health risks to workers arising from any such work, and where appropriate prevent or control the risks. Assessments should have regard to women who are pregnant or who have recently given birth.</p> <p>In addition, the risk to any woman of reproductive age should be assessed.</p>
<p><b>Carcinogens including but not limited to those listed in Annex 1 of Marine Guidance Note MGN 356.</b></p>	<p>The actual risk to health these substances may cause can only be determined following a risk assessment of a particular substance at the place of work.</p>	<p>Employers are required to assess the health risks to workers arising from any such work, and where appropriate prevent or control the risks. Assessments should have regard to women who are pregnant or who have recently given birth.</p> <p>Employers should refer to the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Carcinogens and Mutagens) Regulations 2007 SI 2007 No. 3100 and Marine Guidance Note MGN 356.</p>



<p><b>Chemical Agents of known of and dangerous percutaneous (i.e. that may be absorbed through the skin). This includes some pesticides.</b></p>	<p>The HSE guidance booklet EH40/2005 – Workplace Exposure Limit (ISBN9780717664467) is updated annually and contains tables of inhalation exposure limits for certain hazardous substances. Some of these substances can also penetrate intact skin and become absorbed into the body causing ill-health. These substances are marked “Sk” in the tables. As with all substances, the risks will depend on the way that the substance is being used as well as on its hazardous properties. Absorption through the skin can result from localised contamination; for example from a splash on the skin or clothing or in certain cases from exposure to high atmospheric conditions of vapour.</p>	<p>Employers should also refer to The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations SI 2010 No. 330 and Merchant Shipping Notice MSN 1888 (M+F) and MGN 593 (M+F).</p>
<p><b>Carbon monoxide</b></p>	<p>Carbon monoxide readily crosses the placenta and can result in the foetus being starved of oxygen. Data on the effects of exposure to carbon monoxide on pregnant women is limited but there is evidence of adverse effects on the foetus. Both the level and duration of maternal exposure are important factors in the effect on the foetus.</p>	<p>Pregnant women may have heightened susceptibility to the effects of exposure to carbon monoxide. They should not be allowed to carry out duties on car decks of ferries where there is an increased risk of exposure.</p>



<b>WORKING CONDITIONS</b>		
<b>Work with display screen equipment (DSE/VDU)</b>	<p>There has been widespread anxiety about radiation emissions from the display screen equipment and possible effects on pregnant workers. However, there is no substantial evidence that these concerns have any foundation. HSE has the statutory function of providing information and advice on all radiation matters to Government Departments and the advice below summarises scientific understanding.</p>	
	<b>Risk</b>	<b>How to avoid risk</b>
	<p>The levels of ionising and non-ionising electromagnetic radiation which is generated by display screen equipment (VDU) are well below those set out in international recommendations for limiting risk to human health created by such emissions. HSE does not consider that such levels pose a significant risk to health. No special protective measures are therefore necessary to protect the health of people from this type of radiation.</p> <p>There has been considerable public concern about reports of higher levels of miscarriage and birth defects among some groups of VDU workers in particular due to electromagnetic radiation. Many scientific studies have been carried out but taken as a whole their results do not show any link between miscarriage or birth defects and working with VDUs. Research and reviews of the scientific evidence will continue to be undertaken and evaluated.</p>	<p>To avoid the problems caused by stress and anxiety, women who are pregnant or planning children and are worried about working with VDUs should be given the opportunity to discuss their concerns with someone adequately informed of the current authoritative scientific information and advice.</p> <p>However, it should be noted that in the light of scientific evidence, pregnant women do not need to stop working with VDUs.</p>
<b>PROCESSES</b>		
<b>Industrial processes</b>	<p>If work on ships involves or is associated with industrial processes which might pose a risk to new or expectant mothers then this should be considered in the risk assessment.</p>	<p>The actual risk to health associated with these processes can only be determined following a specific risk assessment at the place of work.</p>



<b>Employers should recognise the following aspects of pregnancy that may affect work:-</b>	
<b>Morning sickness</b>	Early shift work Exposure to nauseating smells
<b>Backache</b>	Standing Manual handling Posture
<b>Varicose veins</b>	Standing or sitting for extended periods of time
<b>Haemorrhoids</b>	Working in hot conditions
<b>Frequent visits to the toilet</b>	Difficulty in leaving job Site of work
<b>Increasing size</b>	Use of protective clothing Manual handling
<b>Tiredness</b>	Overtime Evening work
<b>Balance</b>	Problems working on slippery or wet surfaces Working at height
<b>Comfort</b>	Problems working in confined spaces

## ANNEX D

The following information has been published in MSN 1886 (M+F)

### **Pregnancy:**

The Doctor should discuss with the seafarer the:

- Complications, late limitations on mobility. Risk to the mother and child in the event of premature delivery at sea
- Advice on risks and limitations in advanced and during early stages of pregnancy.
- Uncomplicated pregnancy – see MSN 1890 (M+F)
  - Case by case assessment if there are risk factors or complications. The seafarer must make informed personal decision about the excess risks from premature delivery at sea.

### **Abnormal pregnancy - Temporarily unfit on diagnosis**

