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Shipping Guidance Notice – 162
Biological Agents Exposure on vessels
UK Maritime & Coastguard Agency – Marine Guidance Note MSN 1889 (M+F)
(To be read in conjunction with MLN – 017(b) (as amended)

To: MLC Shipowners, Operators, and Masters

1. References

- Maritime & Coastguard Agency – Marine Guidance Note MSN 1889 (M+F) (as amended)
- Gibraltar Merchant Shipping (Maritime Labour Convention) Regulations 2013
- Maritime Labour Convention 2006 Regulation 4.3 / Standard A4.3
- Maritime Labour Notice (MLN) – 017(b) - Health and Safety Policies and Programs

2. Summary

The purpose of this Shipping Guidance Notice (SGN) is to bring to the attention of MLC shipowners, operators, and Masters of Gibraltar registered vessels, the United Kingdom Maritime & Coastguard Agency's, Marine Guidance Note MSN 1889 (M+F) *(amendment 5 at the time of publication of this SGN).*

Maritime Labour requirements place responsibilities on both member states and MLC shipowners in respect of occupational health protection as part of managing the overall health and safety of the vessel.

MSN 1889 (M+F) centres on the potential exposure of workers and seafarers to biological agents from various potential sources related to a variety of equipment or processes on vessels, and provides guidance to MLC shipowners, on managing the associated risks.

3. Application

The Gibraltar Maritime Administration endorses the use of the guidance contained within MSN 1889 (M+F) (as amended) by MLC shipowners as part of risk assessments and the development of any subsidiary mitigating measures in respect of biological agents' exposures to workers and seafarers on Gibraltar registered vessels.

The exception in respect of MSN 1889 (M+F), is that any associated mandatory legislative requirements would be in respect of Gibraltar regulations and requirements as opposed to the references to the United Kingdom's as contained within MSN 1889 (M+F).

4. Enclosures

MSN 1889 (M+F) Amendment 5 is appended to this SGN, and additionally available via; MSN 1889 M+F Amendment 5

Steve Gomez - Chief Surveyor
For & on behalf of the Maritime Administrator

Issue date: 25 September 2025

All notices are available through www.gibraltarship.com

This Shipping Guidance Notice has been issued electronically and does not carry a signature or official stamp. A signed and stamped copy is available upon request.

Maritime & Coastguard Agency

MERCHANT SHIPPING NOTICE

MSN 1889 (M+F) Amendment 5 The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 as amended

Notice to all ship, yacht and fishing vessel owners, operators and managers and other employers of seafarers, masters, officers and seafarers on merchant ships and yachts, skippers and crew on fishing vessels and small commercially operated vessels.

This notice should be read in conjunction with MGN 636 (M) Amendment 4 and MGN 587 (F) Amendment 1 ILO Work in Fishing Convention : Health and Safety Responsibilities which give guidance on the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997.

This notice replaces MSN 1889(M+F) Amendment 4.

Summary

The purpose of this merchant shipping notice is to give detailed information required to comply with the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 as amended ("the Biological Agents Regulations").

This notice provides guidance on the biological agents regulations;

• shipowners and employers must assess the risks to those working on their ships from exposure to biological agents.

• health surveillance may be required.

Relationship with the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010

• the biological agents regulations need to be read together with this merchant shipping notice as it sets out many of the details, standards and formalities which must be observed in order to comply with the legal obligations under those regulations. Failure to comply with those obligations may be a criminal offence under the biological agents regulations:

Annex 1 contain an indicative list of activities which would not involve a deliberate intention to work with or use biological agents.

Annex 2 shows the biohazard sign.

Annex 3 contains the recommended code of practice on vaccination

Annex 4 contains practical recommendations for the health surveillance of workers.

Annex 5 contains indications concerning containment measures and containment levels.

Annex 6 contains useful sources of information.

The biological agents regulations implement Directive 2000/54/EC on the protection of workers from risks related to exposure to biological agents at work and form part of the UK's retained law. All the obligations in the EU legislation mentioned in MSN 1889 (M+F) Amendment 5, which have affect in the UK prior to the 1st January 2021, are retained in UK law, with any necessary modifications, after the end of the EU Exit implementation period.

1. Introduction

1.1 The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Biological Agents) Regulations 2010 as amended ("the Biological Agents Regulations") introduced requirements for the protection of workers from the risks related to exposure to biological agents.

1.2 The Health and Safety Executive ("HSE") and the Health and Safety Executive for Northern Ireland ("HSE(NI") have implemented the same protections for land-based workers, largely through the Control of Substances Hazardous to Health Regulations 2002 (as amended) and the Control of Substances Hazardous to Health Regulations (Northern Ireland) 2003 (as amended) respectively (referred to in this notice jointly as "COSHH").

1.3 The biological agents regulations ensure the protection of seafarers and workers on ships, including fishing vessels and other small vessels with workers on board, including those operating on inland waters.

1.4 This notice provides detailed information required to comply with the biological agents regulations. Details are at paragraph 24. It also seeks to provide general advice. More detailed guidance on "Contamination of Ships' Air Conditioning Systems by Legionella Bacteria" can be found in MGN 38 (M+F) Amendment 1 and guidance on "Prevention of Infectious Disease at Sea by Immunisation and Anti-Malaria Medication (prophylaxis)" is in MGN 652(M). More detailed information on biological agents in general and diseases arising from them can also be found on the websites of Public Health England, Health Protection Scotland, Public Health Wales or the Public Health Agency in Northern Ireland in the UK, and the Centers for Disease Control and Prevention in the United States. Contact details for these agencies are given in annex 6 to this merchant shipping notice together with details of other potential sources of information.

2. Biological agents and relevance to shipping

2.1 For the purposes of the biological agents regulations;

“biological agent” means micro-organisms, including those which have been genetically modified, cell cultures and human endoparasites, which may be able to provoke any infection, allergy or toxicity.

According to their potential effects on humans, these are split into 4 groups as follows:

“group 1 biological agent” means a biological agent that is unlikely to cause human disease - These are not listed in the HSE publication, the Approved List of Biological Agents (“the Approved List”) but paragraph 4.5 below sets out the basic requirements for dealing with such agents.

“group 2 biological agent” means a biological agent that can cause human disease and might be a hazard to workers but is unlikely to spread to the community and for which there is usually an effective prophylaxis or treatment available.

“group 3 biological agent” means a biological agent that can cause severe human disease, presents a serious hazard to workers and may present a risk of spreading to the community but for which there is usually an effective prophylaxis or treatment available.

“group 4 biological agent” means a biological agent that causes severe human disease, is a serious hazard to workers and may present a high risk of spreading to the community and for which there is usually no effective prophylaxis or treatment available.

2.2 Biological agents in Groups 2-4 are listed in the approved list which can be downloaded from the HSE website at the address given in annex 6.

2.3 Exposure to biological agents falls into three main groupings as follows;

a) exposure resulting from a deliberate intention to work with a biological agent, i.e. work with biological agents that involves research, development, teaching or diagnosis. This is unlikely to occur on most ships, yachts, fishing vessels etc but may occur on specialised research ships;

b) exposure which arises out of the work activity but is incidental to it. Examples of activities in which there may be exposure of this kind and which could be relevant to workers on ships, yachts, fishing vessels etc include giving of first aid or other medical care, work on sewage treatment plant, work on the ship’s air conditioning and water systems, swimming pools and spas, waste disposal and food processing or carriage of animals as cargo;

c) exposure which does not arise out of the work activity itself, for example where a worker catches an infection from someone who he/she happens to come into contact with through work.

2.4 The biological agents regulations apply to groups (a) and (b) above, because they only apply where risks of exposure are directly work related. Where “group “c” applies under the biological agents regulations safety measures may still be appropriate under a general duty of care. For example, employers are required to ensure that workers employed by them have the necessary vaccinations to protect them against infections with which they may come into contact because of the area where the ship operates (see MGN 652(M)).

3. Meaning of “worker” (regulation 3)

3.1 The biological agents regulations apply to all persons working on board a ship. However, the provisions of the biological agents regulations are disapplied in respect of trainees on sail training vessels, operating under an MCA code of practice, solely for the purpose of receiving instruction in the principles of responsibility, resourcefulness, loyalty and team endeavour and to advance education in the art of seamanship or for the purpose of receiving instruction in navigation and seamanship for yachtsmen.

3.2 Such persons are not workers for the purposes of the regulations as they are not employed and are not reliant on their engagement on board for their livelihood. However, there is a general obligation placed on shipowners and employers by regulation 5(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 as amended (“the General Duties Regulations”) to ensure the health and safety of all persons on board, so far as is reasonably practicable, irrespective of whether or not they are workers.

4. Application (regulation 4)

4.1 The biological agents regulations apply to all activities of workers on UK registered vessels and government ships (other than Royal Navy vessels) wherever they are in the world and certain provisions also apply to non-UK ships in UK waters. The regulations apply to all types of commercially operated vessels, including yachts, fishing vessels and vessels operating only on inland waters.

4.2 Derogation for public service activities and civil protection activities

4.2.1 Regulation 4(2) provides a limited derogation from the requirements of the biological agents regulations in respect of vessels undertaking public service or civil protection activities where because of characteristics peculiar to the activity being undertaken, full compliance with the requirement of the biological agents regulations is not possible. This derogation is aimed at activities such as rescue or enforcement.

4.3 The derogation only applies

• to the specific provision(s) of the biological agents regulations with which compliance is not possible; and

• for the length of time compliance is not possible.

4.4 Where this derogation applies, the health and safety of those working on board must nevertheless be safeguarded as far as is reasonably practicable. All remaining provisions of the biological agents regulations, with which compliance remains possible, continue to apply in full and full compliance with all the requirements of those regulations will be required as soon as the activity concerned is no longer being undertaken.

4.5 In this context “activity” is considered to refer to specific occasions on which an activity is undertaken and not to an ongoing period during which such activities might periodically occur.

4.6 For the purposes of the derogation referred to in paragraph 4.2 above, “Public service activities” covers the activities of the armed forces, HM Coastguard, HM Revenue and Customs, immigration officers, police, prison officers, the security and intelligence services and similar organisations. Note - Ferries, whether operated by a public body or not, are not covered by the “Public service activities” derogation. “Civil protection services” covers the fire and rescue, ambulance, and search and rescue services. This derogation also applies to any

vessel engaged in search and rescue activities when answering a distress call or when requested to do so by HM Coastguard or the appropriate authority of another state.

4.7 Further derogations

4.7.1 The preventive, precautionary and record keeping requirements contained in regulations 8 to 20 of the biological agents regulations do not have to be complied with in respect of a group 1 biological agent when the risk assessment shows there to be no identifiable health risk to workers. However there remains a duty on employers and workers when working with such agents to observe good occupational safety and hygiene procedures.

4.8 Where the risk assessment shows that

• the activity does not involve a deliberate intention to work with or use a biological agent but may result in workers being exposed; and

• the result of the risk assessment shows the requirements in those regulations to be unnecessary. A further derogation, from the requirement to comply with the provisions of regulations 8, 10, 11 and 13 to 20 is also included in respect of the activities listed in annex 1 of this notice.

4.9 For ease of reference a “note” drawing attention to these derogations has been placed at the beginning of each of the sections below which provide guidance on the requirements of regulations 8 to 20. This should be read prior to undertaking any of the measures contained in the remainder of each of the sections.

5. Application of related legislation (regulation 5)

5.1 The provisions of the general duties regulations remain fully in force and apply to all work involving potential exposure to Biological Agents except where the biological agents regulations have introduced more stringent requirements. In such circumstances the more stringent requirements of the biological agents regulations will apply.

5.2 Regulation 5(2) provides that the provisions of the biological agents regulations will apply to genetically modified organisms except where there are more stringent provisions, for example in the Genetically Modified Organisms (Deliberate Release and Risk Assessment – Amendment) Regulations 1997, the Genetically Modified Organisms (Contained Use) Regulations 2014, or the Genetically Modified Organisms (Deliberate Release) Regulations 2002. See HSE’s publication L29 for more details.

5.3 The biological agents regulations do not apply to land-based workers (e.g. contractors, stevedores and other port workers) to whom COSHH apply. The HSE/HSE(NI) Regulations only apply within UK waters or to UK offshore installations. Should a land- based worker be on a vessel when it goes outside UK limits, the HSE regulations will cease to apply and the biological agents regulations will then apply to that worker.

5.4 The biological agents regulations and COSHH are intended to provide equivalent protection to workers, whichever regime applies in particular circumstances, and compliance with COSHH in respect of chemical agents will ensure compliance with the biological agents regulations within the UK.

6. Assessment of health risks (regulation 6)

6.1 Regulation 7 of the general duties regulations requires employers to undertake a general assessment of the risks to their workers arising from the work they are undertaking. The biological agents build on that requirement by requiring that employers' risk assessments establish whether the possibility of exposure to biological agents exists and, if so, what category such agents fall into, who is at risk from them, and what the potential exposure to such agents is likely to be.

6.2 The most likely risk sources on ships and fishing vessels would seem to be work involving food preparation, contact with animals and/or products of animal origin, health care, work with air conditioning and water supply systems or work involving waste disposal and sewage plant. Further comments on each of these are given below;

- food preparation - Potential for exposure as a result of incorrect storage, handling and preparation of food, as well as failure to take necessary hygiene measures.

- contact with animals and/or products of animal origin MCA takes the view that "contact with .....products of animal origin" should be construed as covering meat products or the waste products of animals being transported, the disposal of droppings etc from any vermin which may have got on board, souvenirs etc bought by crew members or passengers which are made from skins or other parts of animals which could potentially have been diseased or which have been washed in water containing biological agents.

- health care - The most likely route of exposure is infection resulting from contact with a person already suffering from a biological infection or who is a "carrier". This could potentially occur by a variety of means, e.g. direct contact, or handling or laundering of used bed linen where a person infected with a biological agent is being treated on board. Special precautions may need to be taken where a ship is trading to areas where diseases listed as hazardous biological agents are prevalent and it is not clear what illness the person concerned is suffering from. Guidance on general nursing is contained in chapter 3 of the Ship Captains' Medical Guide.

- Where treatment given to a person on a ship includes the giving of an injection, there is a potential risk of a "needle stick injury" when the person responsible for giving the injection pricks themselves with the needle of the syringe after using it. Where the person being injected is a sufferer or carrier of a biological infection, this could result in the transmission of that biological agent to the carer even where the injection was given for an unconnected reason. Section 3.14 of the Code of Safe Working Practices for Merchant Seafarers provides advice.

- work with air conditioning and water supply systems - Legionnaire's Disease can be found in tiny droplets of water (aerosols) or in droplet nuclei (the particles left after the water has evaporated). A review by the World Health Organisation in 2000 also identified a wide range of other agents which had affected passengers and crew during gastrointestinal disease outbreaks. Factors contributing to outbreaks included inter alia contaminated bunkered water, inadequate disinfection of potable water, potable water contaminated by sewage on ship, and poor design and construction of potable water storage tanks.

- work involving waste disposal and sewage plant - In the case of refuse disposal consideration should be given to the disposal of clinical waste especially or waste products from the patient themselves where the presence of any category 3 or 4 biological agent is known or suspected. The excrement in raw sewage is understood to be a potential major source of harmful micro-organisms, including bacteria, viruses and parasites.

6.3 Employers will generally already have in place the necessary precautionary measures either as a result of the requirements of the general duties regulations, MCA or industry guidance or arising from experience in such matters over the years. However, where any operator/employer is new to shipping or is proposing to operate new routes an initial or replacement detailed assessment of the risks to workers arising from the presence or potential presence of biological agents on ships operated by them should be undertaken as part of the general risk assessment required under the general duties regulations. New risk assessments should also be undertaken whenever there are changes in cargo carried; working practices etc. General guidance on the process of risk assessment is contained in MGN 636 (M) Amendment 4 and Chapter 1 of the Code of Safe Working Practices for Merchant Seafarers. In addition, the approved list referred to in paragraph 2.3. above is a useful source of information on particular agents and their categories. Information on how to obtain copies of these publications and other useful publications is given in annex 6 to this notice.

7. Classification of biological agents (regulation 7)

7.1 Regulation 7 of the biological agents regulations contain provisions relating to the classification, by employers, of biological agents of groups 2, 3 or 4 that do not appear in the approved list. These provisions, referred to in paragraphs 7.2 and 7.3 below are unlikely to apply to the vast majority of employers in the maritime and fishing sectors as they relate to the production or classification of biological agents. They are included for completeness.

7.2 Under regulation 7 of the biological agents regulations an employer is required to provisionally classify any agent of groups 2, 3 or 4 that does not appear in HSE's approved list of biological agents as a group 2, group 3 or group 4 biological agent according to its level of risk of infection. Where there is any doubt about the group to which it is to be assigned, it is to be assigned to the highest appropriate group. Following the assigning of any such provisional classification, the employer is to inform in writing Seafarer Safety and Health Branch of the Maritime and Coastguard Agency, on behalf of the Secretary of State, of any such provisional classifications. Contact details are at the end of this notice. In addition, written notification shall be provided to the HSE's Policy Advisor on Biological Agents.

8. Replacement of harmful biological agents (regulation 8)

8.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section.

8.2 Where the risk assessment identifies a potential risk arising from work with or use of biological agents, the employer should endeavour to remove that risk completely by discontinuing use of the biological agent(s) concerned. However, where that is not possible, because of the nature of the work activity being undertaken, the employer should endeavour to replace the biological agent concerned with another biological agent or other substance which when used in that work activity is either not dangerous or is less dangerous to the health of workers who might be exposed to it. In this context "less dangerous" should be taken to mean the least dangerous alternative available.

9. Reduction of risks (regulation 9)

9.1 Note - the derogation referred to in paragraph 4.5 of this notice is relevant to this section.

9.2 Where the employer's risk assessment indicates that risks to workers' health and safety remain despite any measures taken in accordance with paragraph 8.2 above, the employer is

required to prevent such risks as far as is reasonably practicable. Where it does not prove reasonably practicable to prevent a risk of exposure to biological agents, the employer shall reduce the potential risk of exposure to as low a level as possible by taking appropriate measures including the following;

a) keeping the number of workers exposed or likely to be exposed as low as possible;

b) where appropriate, designing any work processes and engineering control measures to avoid or minimise the release of biological agents in the ship;

c) implementing collective protection measures. Where these measures do not fully prevent exposure, individual protection measures such as the provision of appropriate Personal Protective Equipment may need to be put in place. Further information on the provision of Personal Protection Equipment is contained in the Merchant Shipping and Fishing Vessels (Personal Protective Equipment) Regulations 1999 (SI 1999/2205) and merchant shipping notice MSN 1870(M+F) amendment 5;

d) taking appropriate hygiene measures, such as those referred to in paragraphs 11.2 and 11.3 below, as are compatible with the aim of the prevention or reduction of the accidental transfer or release of a biological agent from the ship;

e) using the biohazard sign depicted in annex 2 to this notice and other relevant warning signs. Further information on the provision and use of Safety Signs and Signals is contained in the Merchant Shipping and Fishing Vessels (Safety Signs and Signals) Regulations 2001 (SI 2001/3444) and MGN 556 (M+F) amendment 2;

f) ensuring that appropriate plans are drawn up and put in place to deal with any accidents which might occur and could potentially involve biological agents;

g) testing, where it is necessary and technically possible, for the presence, outside the primary physical confinement, of biological agents used at work;

h) providing where appropriate means for safe collection, storage and disposal of waste by workers including the use of secure and identifiable containers, after suitable treatment; and

i) introducing arrangements for the safe handling and transport of biological agents within the ship.

The majority of these measures are directed towards the actual use of, or work with, biological agents (paragraph 2.3(a)). Nevertheless, the precautions set out in sub- paragraphs (a), (c), (d), (e) and (h) may be of relevance to the provision of medical care on board when it is known, or suspected, that the person being treated is infected with a category 3 or 4 biological agent. In addition, sub-paragraph (a) may however also be appropriate for certain category 2 biological agents (for example rubella or mumps) when there are workers on board who could be susceptible to them.

10. Information for the Secretary of State (regulation 10)

10.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section.

10.2 Where the risk assessment has revealed a risk to workers' health and safety, the Maritime and Coastguard Agency, on behalf of the Secretary of State, may request the employer to provide information covering, for example, the results of the risk assessment, the activities in

which workers have been exposed or may have been exposed and the number of workers who have been exposed. However, given the derogation referred to in paragraph 10.1 such requests are considered unlikely to occur as a result of normal operations other than perhaps where outbreaks of Norovirus, Legionella or other infectious diseases have occurred.

11. Hygiene and individual protection (regulation 11)

11.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section.

11.2 Where there is a risk of exposure to biological agents, employers are required to put hygiene and individual protection measures in place. These measures including ensuring that;

a) eating, drinking or smoking in areas where there is a risk of contamination by biological agents is prohibited;

b) workers are provided with protective or special clothing appropriate to the biological agent(s) which the risk assessment has identified as potentially putting them at risk;

c) appropriate and adequate washing and toilet facilities, including eye washes and skin antiseptics, is provided for workers at risk;

d) protective equipment is properly stored in a well-defined place and is checked and whenever possible cleaned before, and in any case after, each use; and

e) defective equipment is properly repaired or replaced before further use; and,

f) procedures are in place covering the taking, handling and processing of samples of human or animal origin.

11.3 Measures are also required to be put in place to ensure that any working clothes, protective equipment and protective or special clothing which are, or may have been, contaminated by biological agents are;

a) removed on leaving any working area within the ship where activities involving biological agents takes place;

b) decontaminated and cleaned or, if necessary, destroyed; and

c) kept separate from other clothing pending the taking of the steps described in paragraph (b).

11.4 Whilst the measures set out in paragraphs 11.2 and 11.3 appear primarily to cover work with, or use of, biological agents, depending on the outcome of the employer's risk assessment certain of those measures may also be relevant to work with ships' waste, including sewage, or to the provision of medical care.

12. Information and training for workers (regulation 12)

12.1 Note - The derogation referred to in paragraph 4.5 of this notice is relevant to this section.

12.2 Where the derogation referred to in paragraph 12.1 does not apply, employers are required to provide workers and/or their representatives with sufficient, relevant and appropriate information and training on;

a) potential risks to the health of workers as a result of exposure to biological agents:

b) precautions that have been, or are to be, taken to prevent the exposure of workers to any biological agents that are, or could potentially be, present;

c) hygiene requirement as set out in section 11 above;

d) the wearing and use of protective equipment and clothing; and

e) the measures to be taken by workers both to prevent incidents which could potentially result in exposure to biological agents as well as when an incident actually occurs.

12.3 Training under paragraph 12.2 is to be;

a) given prior to any worker(s) commencing any work involving contact, or potential contact, with biological agents;

b) adapted to take account of new or changed risks - for example when quantities or types of biological agents change; and

c) repeated periodically where necessary - for example when new workers commence work with biological agents or will be, or could potentially be, exposed to such agents.

12.4 There is no derogation applicable to these provisions in respect of activities listed in annex I to this notice. It is therefore necessary to comply with these requirements whenever a risk of exposure, or potential exposure, to biological agents of groups 2 - 4 has been identified by the employer's risk assessment. This could include the provision of medical care on board or work with sewage systems. In the case of work with sewage systems for example information should normally include advice on any immunisations which are required. MGN 652 (M) gives advice.

13. Worker information in particular cases (regulation 13)

13.1 Note - the derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section.

13.2 Employers must provide workers with written instructions and, where appropriate, arrange for notices to be displayed, setting out the procedure to be followed in the case of—

a) a serious accident or incident involving the handling of a biological agent; and

b) the handling of any group 4 biological agent.

This is most likely to apply to ships with laboratories on board that handle biological agents or to ships carrying hazardous cargoes containing biological agents or to livestock carriers where there is a possibility that the livestock concerned might be infected with a biological agent. In such circumstances, employers may need to take specialist advice in order to be able to provide appropriate information to workers, where such advice is not available "in house".

14. List of exposed workers (regulation 14)

14.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section

14.2 Employers are required to keep a list of workers exposed to group 3 or group 4 biological agents indicating the type of work done and, whenever possible, the biological agent to which they have been exposed as well as records of exposures, accidents and incidents as appropriate. For some types of work, such as normal patient management when providing medical care, the risk may not be significant and so a list may not be needed. However, where a patient is suspected of being infected with a group 3 or 4 agent, additional control and containment measures may be required. As this risk is significant workers involved should be listed as being potentially exposed. Similar considerations may arise where sewage plant maintenance is undertaken, or waste management is undertaken, if it is known or suspected that anyone on board might be infected with a group 3 or 4 biological agent or that exposure to a group 3 or 4 biological agent might arise for any other reason.

14.3 The list required by regulation 14 is not the same as a health surveillance record kept in accordance with regulation 17. The decision whether to keep a list will rest with the employer and will depend upon the results of the risk assessment. However, it should be noted that such a list will be required where there is a likelihood of exposure not just when there has been an incident or accident. In line with the approach adopted by the Health and Safety Executive in their Approved Code of Practice for COSHH, the list should be kept in whatever format is considered most appropriate by the employer. Any health or medical surveillance records kept are however likely to be subject to the requirements of the Data Protection Act 2018 and the EU General Data Protection Regulation 2016/679.

15. Consultation with workers (regulation 15)

15.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section.

15.2 Employers must consult workers and their representatives on matters covered by the biological agents regulations in accordance with the requirements of regulation 20 of the general duties regulations which will include matters such as the findings of the risk assessment in relation to exposure or potential exposure of workers to biological agents and arrangements for health and safety training related to biological agents.

16. Notification to the Secretary of State (regulation 16)

16.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section.

16.2 The Seafarer Safety and Health Branch of the Maritime and Coastguard Agency, on behalf of the Secretary of State, is to be notified at least 30 days in advance before use is made for the first time of any group 2, 3 or 4 biological agent.

17. Health Surveillance (regulation 17)

17.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section.

17.2 Health surveillance is required for workers for whom the employer's risk assessment has revealed a risk to their health and safety arising from exposure, or potential exposure, to biological agents. These requirements build on the general requirements for health surveillance introduced by the general duties regulations and require the employer to ensure that arrangements are in place to ensure that such workers are kept under appropriate health surveillance by a doctor or other appropriately qualified and competent person or body. In addition, the employer shall ensure that, in accordance with annex 3 of this notice, effective vaccines are made available to any worker not already immune to the biological agent to which he/she is exposed or is likely to be exposed.

17.3 The arrangements referred to in paragraph 17.2 are for the employer to arrange but must be such as to permit a worker to undergo such health surveillance as is considered appropriate both before exposure and at regular intervals thereafter. If, as a result of such health surveillance, a worker is found to be suffering from an infection or illness which is suspected to be the result of exposure to biological agents, the doctor or body responsible for the health surveillance must offer health surveillance to other workers on that ship who have been similarly exposed. In addition, the employer must undertake a further risk assessment to ascertain the cause of the infection or illness and take the measures, provided for in this notice, to remove the risk to workers.

7.4 In providing health surveillance of workers the doctor or body responsible for the health surveillance of workers on a ship shall have regard to the practical recommendations for the health surveillance of workers in annex 4 to this notice and shall, in any case, ensure that individual medical records are kept; and propose appropriate protective or preventive measures to be taken in respect of any individual worker. In addition, the doctor or body concerned shall provide each worker on request with access to the results of health surveillance which concern that worker as well as with appropriate information and advice in respect of any health surveillance which they may need to undergo following the end of exposure.

17.5 Where the doctor or body responsible for health surveillance receives a request from a worker or employer for a review of the results of health surveillance, they shall undertake that review with a view to determining whether the health surveillance currently provided is adequate to address the risks to which workers are potentially exposed.

17.6 Where a worker catches a disease, or dies, as a result of exposure to a biological agent, the doctor or body responsible for the health surveillance of that worker shall notify the Secretary of State (in practice Seafarer Safety and Health Branch of the Maritime and Coastguard Agency) of such disease or death. The contact details are at the end of this notice.

17.7 Further guidance is set out in annex 4 of this notice, as well as in MGN 636 and the Code of Safe Working Practice for Merchant Seafarers. More specialist health surveillance may be necessary in certain circumstances and employers may need to seek specialist occupational health advice in such an eventuality.

18. Record keeping (regulation 18)

18.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section.

18.2 The list of workers referred to in paragraph 14 above, as well as individual medical records arising from the carrying out of any health surveillance, are required to be kept for at least 10 years following the end of exposure. In cases where the effect of a disease may be

long-term, records may be required to be kept for 40 years. Medical advice from the health surveillance provider should be sought on the appropriate retention period.

18.3 Should the employer cease trading the records are to be made available to the Secretary of State for Transport (in practice the Seafarer Safety and health Branch of the Maritime and Coastguard Agency).

19. Health and veterinary care facilities (regulation 19)

19.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section. “Health care facility” may include a “ship’s hospital” or similar facility where one is required to be provided on board.

19.2 Where any health or veterinary care facilities exist on board a ship, the employer will need to take particular account of the risks of infection from human patients or animals and the materials and specimens taken from them where it is known or suspected that they might be suffering from a category 3 or 4 biological infection or in certain circumstances a category 2 infection. In such circumstances, the employer should give consideration to the need to specify appropriate decontamination and disinfection procedures. In order to minimise the risk of infection in isolation facilities where there are human patients or animals that are, or are suspected of being, infected with group 3 or group 4 biological agents, the employer should seek to apply, as far as is reasonably practicably, the appropriate containment measures set out in annex 5 of this notice.

19.3 Further advice can be found in the Ship Captain’s Medical Guide.

20. Special measures for industrial processes, laboratories and animal rooms (regulation 20)

20.1 Note - The derogations referred to in paragraphs 4.5 and 4.6 of this notice are relevant to this section.

20.2 The provisions contained in regulation 20 only apply to vessels which undertake industrial processes using biological agents or which have laboratories or animal rooms on board. MCA is not aware of any vessels where this applies. In these circumstances it is not considered necessary to provide any further information in this notice.

20.3 In the unlikely event that any vessel, either now or in the future, does come within the scope of regulation 20, details of any requirements to be complied with can be found in schedule 3 part 3 of COSHH (this reference is correct for both the HSE COSHH and the HSE (NI) COSHH).

21. Duties of other persons (regulation 21)

21.1 Where the employer concerned does not have responsibility for the operation of the vessel, any duty placed on the employer is extended to “any person who has control of that matter” to which the regulation in question relates. This is in recognition of the situation on many ships that more than one employer can be responsible for the workers on board and effectively means that, whilst every employer is responsible for their own workers, an overall duty in respect of all workers on board, irrespective of who employs them, will be placed on the person(s) responsible for the actual operation of the vessel.

21.2 In addition to the duty referred to in paragraph 21.1 above, a duty is also placed on all workers requiring them to make full and proper use of all protective equipment provided by the employer, and to give effect to all instruction and training with which they have been provided.

22. Offences, penalties and detentions (regulations 22 - 29)

22.1 Any contravention of the biological agents regulations is an offence and detention powers are available if conditions on board ship are clearly hazardous to health and safety. In addition, the regulations specify maximum penalties, in line with other health and safety regulations, which may be imposed on individuals, companies etc for non- compliance with the requirements of the regulations.

23. Prohibition on levy (regulation 30)

23.1 In complying with the requirements of the biological agents regulations, employers are not permitted to pass on any charge, or permit any charge to be passed on, to any worker.

24. References to this notice in the Biological Agents Regulations

24.1 The references to this notice in the biological agents regulations as amended are indexed below. This is the version of MSN 1889 (M+F) which is considered to be relevant until further notice.

Regulation 4(6): Regulations 8, 10, 11 and 13 to 20 do not apply in relation to any activity (including but not limited to those listed in annex 1) for which;

a) the risk assessment shows that the activity does not involve a deliberate intention to work with or use a biological agent but may result in workers being exposed; and

b) the result of that assessment shows that the requirements of those regulations are unnecessary.

Regulation 9(2)(e): Where prevention of exposure is not possible, in order to reduce the risk of exposure to harmful biological agents, the employer shall take measures including displaying the biohazard sign shown in annex 2.

Regulation 17(3): The employer shall ensure that effective vaccines are made available to any worker not already immune to the biological agent to which that worker is exposed or is likely to be exposed, having regard to the recommended code of practice on vaccines at annex 3.

Regulation 17(9): The doctor or body responsible for the health surveillance of workers on a ship shall have regard to the practical recommendations for the health surveillance of workers in annex 4 of the MSN.

Regulation 19(3): In isolation facilities where there are human patients or animals that are, or are suspected of being, infected with group 3 or group 4 biological agents, the employer shall select containment measures from those listed in column A of annex 5 in order to minimise the risk of infection.

Regulation 20(1)(a) to (d): For ships containing laboratories or rooms for laboratory animals that have been deliberately infected with group 2, group 3 or group 4 biological agents or

which are, or are suspected to be, carriers of such agents the employer shall adopt the containment measures specified in annex 5.

Regulation 20(2): For industrial processes using group 2, group 3 or group 4 biological agents the employer shall apply the containment principles in paragraph (1)(c) on the basis of the practical measures and appropriate procedures indicated in COSHH schedule 3 part III.

Regulation 20(4): For activities described in paragraphs (1) - (3) where it has not been possible to carry out a conclusive assessment of a biological agent but concerning which it appears that the use envisaged might involve a serious health risk for workers, the employer shall ensure that those activities are carried out in workplaces where the containment level corresponds to a least to level 3 as indicated annex 5.

More information

Seafarer Safety and Health Branch
Maritime and Coastguard Agency
Bay 2/17
Spring Place
105 Commercial Road
Southampton
SO15 1EG

Telephone: +44 (0)203 81 72250

Email: seafarersafety@mcga.gov.uk

Website: www.gov.uk/mca

Please note that all addresses and telephone numbers are correct at time of publishing.

Annex 1 - Indicative list of activities

1. Work in food production plants.

2. Work in agriculture.

3. Work activities where there is contact with animals and/or products of animal origin.

4. Work in healthcare, including isolation and post-mortem units.

5. Work in clinical, veterinary and diagnostic laboratories, excluding diagnostic microbiological laboratories.

6. Work in refuse disposal plants.

7. Work in sewage purification installations.

Annex 2 - Biohazard sign

Annex 3 - Recommended code of practice on vaccination

1. If the assessment referred to in regulation 6 of the biological agents regulations reveals that there is a risk to the health and safety of workers due to their exposure to biological agents for which effective vaccines exist, their employers should offer them vaccination.

2. Vaccination should be carried out in accordance with national law and/or practice. Workers should be informed of the benefits and drawbacks of both vaccination and non-vaccination.

3. Vaccination must be offered free of charge to workers.

4. A vaccination certificate may be drawn up which should be made available to the worker concerned and, on request, to the competent authorities.

Annex 4 - practical recommendations for the health surveillance of workers

1. The doctor and/or the authority responsible for the health surveillance of workers exposed to biological agents must be familiar with the exposure conditions or circumstances of each worker.

2. Health surveillance of workers must be carried out in accordance with the principles and practices of occupational medicine: it must include at least the following measures:

- keeping records of a worker's medical and occupational history,
- a personalised assessment of the worker's state of health.

- where appropriate, biological monitoring, as well as detection of early and reversible effects.

Further tests may be decided on for each worker when he is the subject of health surveillance, in the light of the most recent knowledge available to occupational medicine.

Annex 5 - indications concerning containment measures and containment levels

Preliminary note - the measures contained in this annex shall be applied according to the nature of the activities, the assessment of risk to workers and the nature of the biological agent concerned

A. Containment measures	**B. Containment levels**		
-	2	3	4
1. The workplace is to in the same building	No	Recommended	Yes
2. Input air and extract air to using (HEPA) or likewise	No	Yes, on extract air	Yes, on input and extract air
3. Access is to be restricted to nominated workers only	Recommended	Yes	Yes, via airlock
4. The workplace is to be sealable to permit disinfection	No	Recommended	Yes
5. Specified disinfection procedures	Yes	Yes	Yes
6. The workplace is to be maintained at an air pressure negative to atmosphere	No	Recommended	Yes
7. Efficient vector control eg. Rodents and insects	Recommended	Yes	Yes
8. Surfaces impervious to water and easy to clean	Yes, for bench	Yes, for bench and floor	Yes, for bench, walls, floor and ceiling
9. Surfaces resistant to acids, alkalis, solvents, disinfectants	Recommended	Yes	Yes
10. Safe storage of a biological agent	Yes	Yes	Yes, secure storage
11. An observation window, or, alternative, is to be present, so that occupants can be seen	Recommended	Recommended	Yes
12. A laboratory is to contain own equipment	No	Recommended	Yes
13. Infected material including animal is to be handled in a safe cabinet or isolator or other suitable containment	Where appropriate	Yes, where infection is by airborne route	Yes
14. Incinerator for disposal of animal carcasses	Recommended	Yes (available)	Yes, on site

Annex 6 - Useful sources of information

MCA publications;

MGN 38 (M+F) - Contamination of Ships' Air Conditioning Systems by Legionella Bacteria

MGN 652(M) - Prevention of Infectious Disease at Sea by Immunisations and Anti-Malaria Medication (prophylaxis)

Code of Safe Working Practices for Merchant Seafarers - This document must be available to all seafarers on board all UK registered ships except fishing vessels.

Ship Captain's Medical Guide - copies of this document are required to be carried on all seagoing or sea-fishing vessels with no limitation on length of trips. See MIN 718 (M+F).

Approved Doctor's Manual - A "read only" copy can be found on the MCA Website

Hard copies of the Code and Ship Captain's Medical Guide can also be purchased from TSO at the following address:-.

TSO Customer Services
18 Central Avenue
St Andrews Business Park
Norwich
NR7 0HR

Tel: 0333 202 5070

E-mail: esupport@tso.co.uk

HSE Publications

The Approved List of Biological Agents - an electronic only copy of which can be found on the HSE website.an electronic only copy of which can be found on the HSE website
Information on infection at work can also be found on HSE website

The above HSE documents, except the Approved List of Biological agents, can also be obtained thorough good booksellers or from:

Customer Services
PO Box 29
Norwich
NR3 1GN

Tel : 0333 2025070

Further information on HSE priced and free publications can be found on HSE Books website at https://books.hse.gov.uk**.** Leaflets and publications can also be found and downloaded from HSE's main website at **www.hse.co.uk.**

World Health Organization Publications

World Health Organization
Avenue Appia 20
CH - 1211 Geneva 27
Switzerland

Tel.: +41 22 791 2111

Public health organisations in the UK

Public information access office
Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG

Telephone: 020 7654 8158

E-mail: enquiries@phe.gov.uk

Health Protection Scotland
NHS National Services Scotland
Meridian Court
5 Cadogan Street Glasgow
G2 6QE

E-mail: NSS.ARHAIsonaar@nhs.scot

Telephone: 0141 300 1175

Web-site: https://publichealthscotland.scot/

Public Health Wales
2 Capital Quarter
Tyndall Street
Cardiff
CF10 4BZ

Telephone: 029 2022 7744

Email; general.enquiries@wales.nhs.uk

Website: www.publichealthwales.wales.nhs.uk

Public Health Agency in Northern Ireland
Linenhall Street Unit
12-22 Linenhall Street
Belfast
BT2 8BS

Telephone: 0300 555 0114

Contact page on website for e-mail enquiries; www.publichealth.hscni.net

Guidance for the management of norovirus infection in cruise ships - a copy of this booklet can be acquired, see MIN 718

US Centers for disease control and prevention

The Centers for Disease Control and Prevention, part of the US Department of Health and Human Services, has an extensive A-Z index on its website at **http://www.cdc.gov/** which provides information on many biological agents as well as other conditions. Alternatively they can be contacted at:-

Centers for Disease Control and Prevention,
1600 Clifton Rd,
Atlanta,
GA 30333,
U.S.A.

Tel - Public Inquiries: 1404 64331

There is a contact page on the website for enquiries by e-mail.

Note - the above list is not exhaustive and further useful information may be obtainable from other sources.

Other sources

The National Travel Health Network and Centre - https://travelhealthpro.org.uk/ - local agents in countries overseas, embassies of foreign countries in the UK or the UK Foreign and Commonwealth Office may also be able to provide advice on biological agents (e.g. malaria, Lassa fever, rabies, typhoid etc) that might be encountered when visiting a particular overseas country and on appropriate preventive measures, including vaccination, that can be put in place.