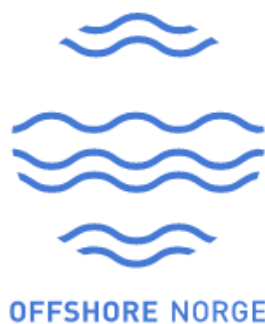


**014 – OFFSHORE NORGE  
RECOMMENDED GUIDELINES**

**FOR**

**HEALTH-RELATED PREPAREDNESS ON  
THE NORWEGIAN CONTINENTAL SHELF**



*Translated version*

## **FOREWORD**

These guidelines are recommended by Offshore Norge HSE Forum and Operations Committee. Furthermore, they have been approved by the director general of Offshore Norge.

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These guidelines have been developed with broad participation from interested parties in the Norwegian petroleum industry and are owned by the Norwegian petroleum industry, represented by the Offshore Norge. Offshore Norge is responsible for their administration.

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## **1. INTRODUCTION**

### **1.1 Purpose**

These guidelines will help the operator companies achieve a prudent organisation of health-related emergency preparedness for offshore petroleum operations.

### **1.2 Framework**

The Norwegian Petroleum Act with associated statutory regulations sets requirements for health-related emergency preparedness for offshore petroleum operations. This chapter lists the most important provisions which define and dimension that preparedness.

Section 9-2 of the Petroleum Act requires licensees to maintain an effective emergency preparedness at all times.

Section 6, litera b of the framework regulations defines health-related matters as: Matters concerning health services, preparedness in connection with health care and health services, transport of sick and injured persons, matters of hygiene, potable water supply, etc.

Section 16 of the framework regulations on health-related matters: Health-related matters shall be safeguarded in a prudent manner during all phases of the offshore petroleum activities. The responsible party shall ensure a sound health service for anyone who stays on facilities participating in offshore petroleum activities.

The guidelines to this section amplify the above-mentioned requirements as follows: The health service in the offshore petroleum activities should be of at least the same professional quality as the [local authority] health service.

Further details on the local authority health service are provided in the Norwegian Act on Local Authority Health and Care Services, etc (Health and Care Services Act).

Section 8 of the activities regulations on the health service: A physician shall have the professional responsibility for the health service. The necessary number of nurses shall at all times be present on the facility to ensure prudent safeguarding of the health service's tasks.

The roles and responsibilities of health personnel are described in the Norwegian Act on Health Personnel, etc (Health Personnel Act).

Section 9 of the activities regulations on the health service's tasks requires it to contribute to establishing health-related emergency preparedness as part of the enterprise's total preparedness.

The guidelines to this section amplify these requirements and include, for instance, counselling and professional guidance for the health personnel on a facility or vessel, communication with other health services, and prioritisation of transport for injured or ill personnel to land.

Section 10 of the activities regulations concerning an on-call physician requires the health service to have a physician on call at all times, who can be summoned to the facility at the shortest possible notice. During manned underwater operations, the company is expected to engage expertise in diving medicine.

The guidelines to this section specify that the requirement relating to arriving at the facility at the shortest possible notice implies that systems shall be set up to enable rapid and efficient organisation of helicopter transport.

Section 75 of the activities regulations requires the emergency preparedness organisation to be robust so it can handle hazards and accidents efficiently. The guidelines to section 75 specify that the emergency preparedness organisation means the personnel, including a physician, directly associated with the unit, area, external and regional resources. In order to ensure robustness, emphasis should be placed on each person's education and expertise, experience, physical suitability, personal qualities and experience from drills and training when selecting personnel.

### 1.3 Definitions and abbreviations

<b>Helicopter operator</b>	The party responsible for helicopter services, including SAR
<b>IMO</b>	International Maritime Organisation
<b>Itso</b>	Initial training shipboard operations
<b>SAR</b>	Search and rescue
<b>STWC</b>	Ship training, certification and watch keeping

### 1.4 References

Section 9-2, Norwegian Petroleum Act.

[https://lovdata.no/dokument/NL/lov/1996-11-29-72#KAPITTEL\\_9](https://lovdata.no/dokument/NL/lov/1996-11-29-72#KAPITTEL_9)

Section 16 of the framework regulations

[http://www.ptil.no/rammeforskriften/category381.html#\\_Toc440873998](http://www.ptil.no/rammeforskriften/category381.html#_Toc440873998)

Sections 8, 9, 10 and 75 of the activities regulations with guidelines

[http://www.ptil.no/aktivitetsforskriften/category379.html#\\_Toc503877010](http://www.ptil.no/aktivitetsforskriften/category379.html#_Toc503877010)

Norwegian Act on Health Personnel, etc (Health Personnel Act)

<https://lovdata.no/dokument/NL/lov/1999-07-02-64>

Norwegian Act on Local Authority Health and Care Services, etc (Health and Care Services Act)

<https://lovdata.no/dokument/NL/lov/2011-06-24-30>

Section 50, Regulations on qualifications and certificates for seafarers

<https://lovdata.no/dokument/SF/forskrift/2011-12-22-1523?q=Forskrift%20om%20kvalifikasjoner%20og%20sertifikater>

Regulations on standby ships

<https://lovdata.no/dokument/SF/forskrift/1991-10-16-853>

Mandatory minimum requirements for medical first aid and medical treatment for standby ships

<https://www.sdir.no/sjofart/regelverk/internasjonale-konvensjoner/stcw/tillegg-2-til-konferansens-sluttprotokoll/del-a/kapittel-vi/avsnitt-a-vi4/>

Chapter 4, Offshore Norge 002 Recommended guidelines for safety and emergency preparedness training

<https://www.norskoljeoggass.no/arbeidsliv/retningslinjer/helse-arbeidsmiljo-og-sikkerhet/sikkerhets--og-beredskapsopplaring/002-anbefalte-retningslinjer-for-sikkerhets--og-beredskapsopplaring/>

Basic safety course. IMO-60 STCW-95

National contingency plan against outbreaks of serious infectious diseases

[https://www.regjeringen.no/contentassets/69e6633a529c4bccbd1cf8f5773b9fb5/horingsnotat\\_nasjonal\\_beredskapsplan\\_utbrudd\\_alvorlige\\_smittsomme\\_sykdommer.pdf](https://www.regjeringen.no/contentassets/69e6633a529c4bccbd1cf8f5773b9fb5/horingsnotat_nasjonal_beredskapsplan_utbrudd_alvorlige_smittsomme_sykdommer.pdf)

## 2. CHANGES

Two Offshore Norge guidelines have been merged into a new guideline 014:

- 014 – Recommended guidelines for medical professional preparedness for activities on the Norwegian continental shelf
- 109 – Recommended guidelines for managing pandemic influenza on the Norwegian continental shelf

The following changes have been made in the revision of the new 014 – Recommended guidelines for health-related preparedness on the Norwegian continental shelf

- Guidelines 014 and 109 have been merged to create a new 014.
- The revised guidelines have been adapted to developments in recent years with diagnosis and treatment as well as with new interactive methods and communication equipment (in telemedicine, for example).
- The revised guidelines have been adapted to developments in the SAR service (related to technical equipment and expertise, for example).
- The revised guidelines specify more clearly that a prudent dimensioning of health-related preparedness must be based on a facility- and location-specific risk assessment.
- The revised guidelines clarify roles and responsibilities related to positions involved in the medical preparedness.
- The revised guidelines describe alternative arrangements for on-call physicians. This can provide operators with flexibility in choosing between centralised or decentralised on-call solutions.
- Guideline 109 has been withdrawn since its content has been restructured, greatly simplified and included in a new revised guideline 006.

## 3. DEVELOPMENTS IN HEALTH-RELATED PREPAREDNESS

Further developments have occurred in health-related preparedness since these guidelines were first established.

These advances have led to improvements in key areas, including medical evacuation.

- Area preparedness and the SAR service – substantial improvements have occurred in geographical coverage by SAR helicopters.

- Expertise development – clearer internal expertise requirements have been implemented for offshore nurses/medics, including requirements for education as well as expertise development and maintenance (such as simulator training, for example).
- Technological advances – telemedicine solutions are now easily available and advanced units for patient monitoring have been developed. On-call physicians can now talk with and observe patients from land, and patient data can be sent in real time directly to the on-call physician and the specialist health service on land. That contributes to more secure patient diagnosis, monitoring and treatment.
- Medical developments – advanced treatment of acute medical conditions, which previously had to be initiated in a hospital, can be started to a greater extent than before on the facility.
- Interaction – interaction between the health service in the petroleum industry and other stakeholders has improved.

These improvements make it possible to treat patients in a more effective way than before, and to meet relevant requirements with alternative methods.

## **4. HEALTH-RELATED PREPAREDNESS FUNCTIONS AND ORGANISATION**

This section describes relevant medical functions included in health-related preparedness for an offshore petroleum facility, and how these functions can be organised.

### ***1.5 Operator's responsible physician***

The operator is responsible for establishing and organising health-related preparedness in collaboration with the health service. Professional medical responsibility rests with the operator's responsible physician.

The operator's responsible physician must verify that the operator has diving medicine preparedness and expertise available in the event of manned underwater operations.

### ***1.6 Professionally responsible physician***

The operator or the party responsible for operating the facility must ensure that a professionally responsible physician is affiliated with the health service.

The professionally responsible physician is responsible for following up the organisation and quality of medical preparedness on the facility.

The professionally responsible physician will ensure guidance for and professional advice to the health personnel on the facility.



The professionally responsible physician is responsible for food hygiene, including the quality of potable water.

The professionally responsible physician serves as the infection control physician for the facility.

### **1.7 Contingency physician**

The contingency physician will form part of the operator's preparedness organisation in order to provide advice and guidance during emergencies.

The contingency physician will meet the preparedness organisation's need communication and interaction with external health resources, including both local authority and specialist health services.

In the event of an emergency, the contingency physician will have no other duties or commitments which could create a real-time clash.

### **1.8 On-call physician**

The on-call physician is responsible for treatment and will be available at all times to ensure prudent patient treatment. The on-call physician will provide medical advice and guidance to health personnel, other personnel or directly to the patient on the facility.

In consultation with the nurse/medic, the facility management and others who may be involved, the on-call physician will take decisions on sending patients ashore, the transport method and so forth.

The on-call physician is responsible for preparing a plan for further follow-up of the patient. Their treatment responsibility ceases once the other health service has taken over treatment if this is necessary.

The on-call physician functions as the infection control physician until the professionally responsible physician takes over.

The on-call physician service can be organised in various ways.

Regardless of how the service is organised, it is recommended that:

- a telemedicine solution is established on board and at the on-call physician, with opportunities for transmitting vital patient data in real-time from the facility to the on-call physician
- systematic simulator training is established for offshore nurses/medics in accordance with the acute-medicine treatment protocols
- an effective and adequate SAR preparedness is established

- circumstances where the on-call physician may need to travel to the facility are identified, an assessment of the time needed to reach the facility is conducted, and an appropriate transport solution is established.

If the operator choose a centralised organisation for the on-call physician service, all these recommendations must be implemented.

It could be appropriate for the on-call physician to participate in relevant drills.

## **1.9 Offshore nurse/medic**

The offshore nurse/medic is responsible for providing first aid in accordance with health legislation and the responsible party's procedures.

### **1.10 SAR service**

The SAR service will ensure SAR and acute medical treatment in accordance with the SAR operator's applicable treatment protocols until the onshore health service has taken over responsibility. A precondition is that the treatment protocols build on national health legislation. SAR personnel should train together to ensure a good professional standard.

#### **4.6.1 SAR paramedic**

The SAR paramedic is responsible for providing health assistance in accordance with health legislation, the guidelines and the SAR operator's treatment protocols approved by the professionally responsible physician.

#### **4.6.2 SAR rescue officer**

The SAR rescue officer is responsible for the technical rescue discipline and for assisting the SAR paramedic with acute medical treatment. This involves assisting the paramedic in examining, treating and transporting the patient. The SAR rescue office is responsible for ensuring the safety of the patient and the paramedic during hoisting operations.

### **1.11 Standby ship**

The standby ship can form part of the operator's preparedness. Crew on this ship could assist in a medical emergency. The shipping company is responsible for ensuring that the standby ship, as well as its crew, medicines and medical equipment, accord with the maritime regulations.

Medicines and medical equipment required on a standby vessels for responding to emergencies in accordance with the preparedness certificate are described in Offshore Norge guidelines 006 (in Norwegian only).

## **5. QUALIFICATIONS**

### ***1.1 Operator's responsible physician***

The operator's responsible physician must have Norwegian authorisation as a physician and knowledge of relevant legislation, statutory regulations and standards.

The operator can specify additional requirements for qualifications.

### ***1.2 Professionally responsible physician***

The professionally responsible physician should have:

- Norwegian authorisation as a physician, relevant supplementary expertise and at least five years of relevant medical experience
- knowledge of relevant legislation, statutory regulations and standards
- basic expertise on health-related preparedness and an overview over local health and rescue services
- updated knowledge of all aspects of the operator's relevant emergency organisation, health services and emergency response procedures
- knowledge of contractors' organisations, preparedness plans and interaction with the operator's preparedness organisation.

The professionally responsible physician should have general-medicine experience and insight.

### ***1.3 Contingency physician***

The contingency physician should have competence and experience relating to:

- Norwegian authorisation as a physician and relevant medical practice and experience
- knowledge of relevant legislation, statutory regulations and standards
- good knowledge of the operator's preparedness organisation and plans, as well as preparedness resources at contractors
- good knowledge of the facility's location and relevant accessible rescue resources
- good knowledge of the local authority and specialist health services and the interaction between these and the operator's preparedness organisation.

The operator should formulate a clear description of the role in order to clarify the interfaces between the contingency physician and other functions in the preparedness organisation.

### **1.12 On-call physician**

The on-call physician must have:

- Norwegian authorisation as a physician and relevant experience, preferably in general and/or acute medicine
- maintained their competence in general and acute medicine, including but not limited to advanced cardiopulmonary resuscitation, thrombolysis treatment and treatment of acute medical and surgical conditions
- good knowledge of the local and regional health and rescue services, and their interaction with the operator's preparedness organisation
- detailed knowledge of the operator's health-related preparedness, such as relevant work processes and procedures.

The person concerned should have at least three years of relevant praxis and professional experience from the Norwegian health service.

Because of the demanding communication challenges faced in health-related preparedness, particular requirements should be specified for Norwegian language skills.

### **1.13 Offshore nurse/medic**

An offshore nurse/medic must have:

- Norwegian authorisation
- regular training to maintain skills and qualifications in general and acute medical treatment.

An offshore nurse/medic should have a minimum of three years of relevant clinical experience.

### **1.14 SAR paramedic**

A SAR paramedic must have:

- Norwegian authorisation and a specialisation in anaesthesia

- regular training to maintain skills and qualifications in acute medical treatment and technical rescue procedures.

A SAR paramedic should have five years of relevant experience, including at least two years of experience with acute medicine.

### **1.15 SAR rescue officer**

A SAR rescue officer must have:

- medical competence for SAR offshore as described in the Norwegian national standard for rescue officers in the air ambulance service, the rescue helicopter service and SAR offshore. See the table below

<b><i>Qualification requirements (corresponding to one or more of the requirements described below)</i></b>
Specialist ambulance worker
Nurse
National paramedic
BSc in prehospital work
Authorisation as a health professional, see chapter 9, Act on Health Personnel of 2 July 1999 no 64 (Health Personnel Act)
Possible deviations must be approved by the chief medical officer/person with medical responsibility at the respective employer (SAR operator or owner)

- regular training to maintain skills and qualifications in acute medical treatment and technical rescue procedures.

### **1.16 Standby-ship crew**

Personnel with responsibility for medical treatment must be qualified pursuant to section 50 of the regulations on qualifications and certificates for seafarers.

Personnel who are to provide first aid must be qualified pursuant to section 49 of the regulations on qualifications and certificates for seafarers.

Personnel with responsibility for medical treatment and first aid must complete refresher training as specified in chapter 5 of Offshore Norge 002 Recommended guidelines for safety and emergency preparedness training.

“Medical treatment” in this context is identical with the term utilised in/subject to requirements by STCW 95 for ship’s officers.

An alternative training certificate, such as Itso, is acceptable providing it can be documented that the training meets the requirements specified in the regulation.

## **6. REPORTING**

The professionally responsible physician should ensure that necessary and mandatory reporting is made to the public authorities.

The on-call physician must notify the professionally responsible physician as quickly as possible of fatalities, serious and life-threatening conditions and possible outbreaks of epidemic (infectious) diseases.

The on-call physician must assess how far the injury or illness is caused by working environment conditions and/or could be significant for preparedness, and inform the operator of this.

For each consultation, the on-call physician must submit a medical report within a reasonable time to the professionally responsible physician.

## **7. RISK ASSESSMENT RELATED TO LOCATION**

The organisation and dimensioning of health-related preparedness will depend on the location and the available resources both offshore and on land. The operator should conduct a risk assessment as the basis for organising and dimensioning its health-related preparedness.

This risk assessment should take account of:

- the facility's geographic location
- resources in the area (offshore)
- distance from a hospital
- resources and infrastructure on land
- climatic conditions
- planned operations/activities
- other relevant factors.

The operator must implement measures which are suitable to compensate for special conditions. Examples of such measures could include:

- number of people on the facility with medical competence
- use of medical personnel with specialist expertise and qualifications
- quantity of medical equipment and/or medicines
- special medical equipment and/or medicines
- special health requirements for personnel on the facility
- operational measures which increase the availability of medical resources.

## **8. Health-related preparedness which should be initiated in the event of a possible epidemic/pandemic**

The responsible person must assess the consequences of a possible epidemic, and initiate appropriate measures to bring the position under control and prevent the spread of infection. See the company's preparedness/infection control plans.

This can be achieved by preventing personnel who are or could be infectious from travelling out to the facility. Furthermore, the spread of infectious disease can be prevented offshore through effective handling of recognised or suspected disease offshore.

The responsible person must establish procedures which should cover:

- isolation and treatment
- identification of close contacts
- special restrictions during a stay on board
- handling of food and drink
- hygiene measures
- medical transport
- evacuating/reducing personnel offshore
- checks on travellers going offshore
- reporting to the authorities
- interaction with partners, health services and the health authorities
- information to personnel

See also the national emergency preparedness plan for outbreaks of serious infectious diseases (in Norwegian only).

[https://www.regjeringen.no/contentassets/69e6633a529c4bccbd1cf8f5773b9fb5/horingsnotat\\_nasjonal\\_beredskapsplan\\_utbrudd\\_alvorlige\\_smittsomme\\_sykdommer.pdf](https://www.regjeringen.no/contentassets/69e6633a529c4bccbd1cf8f5773b9fb5/horingsnotat_nasjonal_beredskapsplan_utbrudd_alvorlige_smittsomme_sykdommer.pdf)