

**109 – NORWEGIAN OIL AND GAS  
RECOMMENDED GUIDELINES**

**FOR THE**

**MANAGEMENT OF PANDEMIC  
INFLUENZA ON THE NORWEGIAN  
CONTINENTAL SHELF**



*Translated version*

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## **1. INTRODUCTION**

Norwegian Oil and Gas Association (Norwegian Oil and Gas) and the Norwegian Shipowners' Association (NR) recognize the possibility that a pandemic influenza may affect the oil industry.

In March 2006, a working seminar attended by representatives from the industry and the authorities was organized, at which the need for preparedness plans was discussed and a need for common guidelines on how to manage a pandemic influenza on the Norwegian Continental Shelf was expressed.

The Norwegian Oil and Gas Resource Group for Health and Working Environment have appointed a group to formulate proposals for common guidelines.

## **2. PURPOSE**

It is the objective of Norwegian Oil and Gas and NR that the industry should be prepared for the possibility that a pandemic influenza may at some time affect the industry.

Aim 1: Prevent employees who are sick from travelling out to the installations.

Aim 2: Efficient management of known or suspected cases of disease offshore.

### 3. PANDEMIC PHASES

Norwegian Oil and Gas refers to the pandemic phases issued by the World Health Organization (WHO).

#### WHO INFLUENZA PANDEMIC PHASES

PHASE	CHARACTERISTICS
<b>Phase 1</b>	<b>No new influenza virus subtypes in humans. An influenza virus that has caused human infection may or may not be present in animals (low risk to humans).</b>
<b>Phase 2</b>	<b>An influenza virus subtype in animals is circulating that poses a substantial risk of human disease. No new influenza virus has been detected in humans.</b>
<b>Phase 3</b>	<b>Human infection with a new subtype but no or rare instances of spread to a close contact.</b>
<b>Phase 4</b>	<b>Small cluster(s) with limited human-to-human spread has occurred.</b>
<b>Phase 5</b>	<b>Large cluster(s) but spread is still localized (substantial pandemic risk).</b>
<b>Phase 6</b>	<b>Pandemic phase: increased and sustained transmission in the general population.</b>

### 4. LIMITATIONS

These guidelines are not intended to replace internal policy documents or guidelines for the management of a pandemic influenza issued by individual companies operating on the Norwegian Continental Shelf.

## **5. DISTRIBUTION OF RESPONSIBILITIES**

It is the responsibility of the companies to establish internal control systems or integrating these guidelines into their own plans.

## **6. REFERENCES**

Norwegian Institute of Public Health  
Norwegian National Influenza Pandemic Preparedness Plan  
WHO – Pandemic Influenza  
County Governor and County Medical Officer of Rogaland

## **7. GUIDELINES**

### Managing cases of known or suspected influenza on an offshore installation

- The patient should be instructed on how to use face masks or surgical masks (suitable types: P2 and P3) when he/she works closely with others (nurses use similar masks for clinical examinations).
- The patient should be isolated and treatment should be initiated in consultation with the duty doctor/responsible physician.
- The patient should be evacuated as soon as possible by means of dedicated transport (for example helicopter). Transport personnel should use appropriate protective equipment.
- Subsequent onshore transportation of the patient should be determined in consultation with the duty doctor or responsible physician. Close cooperation with local health authorities is expected regarding the choice of appropriate destination (appropriate medical facility, transport home or to designated hotel).
- Information and notification to relevant health authorities must comply with specific requirements.
- Keep travelling and visits to offshore installations to a minimum for the duration of the pandemic.

## 7.1 Pandemic Influenza – Preparedness Plan for Offshore Installations

### Antiviral medication for use on offshore installations

Type	Amount	Unit	Comments
Neuraminidase inhibitor <b>Tamiflu (oseltamivir)</b>	Installations should have sufficient stocks to cover one course of 10 tablets for at least 25% of the POB.	<b>Pack of 10 capsules</b>	For treatment: 1 tablet twice daily for 5 days. For post-exposure prophylaxis: 1 tablet once daily for 7-14 days.
Antibiotics <b>Amoxicillin (500mg)</b>	Installations should have sufficient stocks to cover one course of 30 tablets for at least 10% of the POB.	<b>Available in packs of 10, 30 or 100 capsules (30 tablets per course)</b>	First choice for treating bacterial pneumonia.
Antibiotics <b>Azithromycin (500mg)</b>	Installations should have sufficient stocks to cover one course of 5 tablets for at least 2% of the POB.	<b>Available in packs of 30 tablets.</b>	For treatment: (1 tablet once daily for 5 days.

- The nurse should agree with the duty doctor/responsible physician as soon as possible on treatment with Tamiflu 75 mg twice daily for 5 days.
- The nurse should agree on treatment for everyone who has been in close contact with the patient (see below) in consultation with the duty doctor/responsible physician. Treatment of people who have been in close contact with the patient is also known as post-exposure prophylaxis (PEP).

Definition of **close contact** in an offshore working environment:

- Colleagues who share sleeping quarters with the patient and who have slept in the same room as the patient and/or spent a total of four hours or more in the same room as the patient one day before the onset of illness or later.
- Medical personnel who examined a patient without using personal protective equipment from the day before the patient contracted the illness or later.
- All other forms of contact are normal contact and do not require treatment.

### Other precautions at hospitals

- Employees who develop fever and respiratory symptoms should be isolated from other visitors.
- Employees with fever and respiratory symptoms should be examined in separate rooms.
- Patient rooms and any other rooms that are used should be cleaned in accordance with recommendations. Used medical equipment such as stethoscopes should be disinfected (with, for example 70% alcohol).

### List of personal protective equipment

No.	Description	Unit	Amount
1	Protective glasses, polycarbonate	Single	For nurses only.
2	Face mask/surgical mask, grade P2 – P3		For nurses, patients and transport personnel, where appropriate)
3	Surgical gloves, different sizes (e.g. 6.5, 7.5 and 9), anatomic form, latex, reusable, non-sterile.	Pair	For nurses and cleaning personnel only.
4	Plastic aprons	Single	For nurses only.
5	Disinfectant	1000 ml bottle	One per examination room (and one extra in stock)
6	Waste containers for biohazardous waste, large, labelled “Biohazardous waste”), polypropylene.	Single	For use in the clinic only.
7	Waste containers for biohazardous waste, small, labelled “Biohazardous waste”), polypropylene.	Single	For use in the clinic only.

## 7.2 Pandemic Influenza – Information to Personnel Travelling to/from the Norwegian Continental Shelf and Personal Health Statement

### What types of influenza are there?

We distinguish between three types of influenza:

1. **Pandemic influenza** is the term used to describe an influenza disease that is caused by a completely new virus against which humans have no immunity. This virus will spread rapidly across the world and may cause more serious diseases.
2. **Avian influenza (“bird flu”)** is a disease that occurs among birds. Occasionally the avian influenza 'goes wrong' and infects a human being, who may then contract “human bird flu”, but humans are not particularly susceptible to this type of virus.
3. **Seasonal influenza** occurs every winter. This is caused by a virus which differs only slightly from preceding years' viruses, so many of us will be partly immune to it. Few humans will therefore be infected, and the disease is not so serious. Influenza is an annually recurring infectious disease that affects large numbers of people. The most common influenza types which cause epidemics are types A and B. New strains of types A and B occur every year. New strains are named after the places in which they are first detected.

### How is influenza transmitted?

Through droplets or direct contact. Influenza is transmitted if you breathe in droplets of the influenza virus produced by infected persons who cough or sneeze, so-called close-contact droplet infection. Infection can also occur through direct contact. A small infectious dose is enough to cause illness. The incubation period from infection to the onset of symptoms is usually two days but varies from between one and three days. A person is contagious from the day on which the symptoms begin to appear and for the following three to five days.

People who have had influenza from one particular strain of a virus will normally have immunity against it for many years. They may also be immune to similar strains (so-called “cross-immunity”).

### What are the symptoms?

In the case of influenza, the onset of symptoms is sudden, with fever, muscular aches and pains, headache, affected general state of health and a dry cough. Stomach ailments are rare but can occur, particularly in children. Influenza normally lasts for seven to ten days. In addition to the viral illness, complications may occur in the form of bacterial infections in the lungs, sinuses or middle ear.



### **How can influenza be confirmed?**

**An influenza diagnosis is usually confirmed on the basis of a patient's medical history and symptoms.**

If swabs are taken from nasal or throat secretions at an early phase in the course of the illness, an influenza virus can be detected and the virus type established. Blood tests can also be taken to detect antibodies in the blood. In this case an initial test must be taken early in the course of the illness and a second test must be taken 10-14 days later so that the two samples can be compared.

### **What types of treatment are available?**

In the case of an influenza disease it is more a matter of treating the symptoms rather than the actual viral infection. Paracetamol is an over-the-counter medication which reduces fever and relieves pain. Acetylsalicylic acid can also be used. Patients who in addition contract a bacterial infection may require antibiotics.

Treatment with the antiviral medications zanamivir or oseltamivir (Tamiflu) may shorten the course of the illness by 1- 2.5 days. Such treatment only works if it is started within two days of the onset of the first symptoms.

### **What should I do if I think I have contracted influenza?**

General advice to prevent infection would be to wash hands frequently and avoid coughing and sneezing on other people.

*If you think you have contracted influenza, you should not travel offshore. You should contact the occupational health service to seek guidance on what to do.*

*You should not travel offshore before you are symptom-free.*

NB! Section on special circumstances relating to requirements for the personal health statement.

**PERSONAL HEALTH STATEMENT FOR USE AT HELIPORTS IN THE EVENT OF AN INFLUENZA EPIDEMIC**

**I have read the information concerning influenza.**  
**I confirm that I have no symptoms of influenza at present.**

**I am aware that I must notify the offshore nurse immediately if I begin to show symptoms or signs of influenza.**

**Name: .....**

**National Identity Number: .....**

**Company: .....**

**Employee number: .....**

**Installation: .....**

**Date and signature:**

**.....**

**This statement will be put into use on the instructions of the installation's responsible physician.**  
**This statement should be completed by all passengers on departure and should be sent to the offshore nurse on the installation in the same dispatch system as the outgoing flight's medical correspondence/medication envelopes.**

### **7.3    Guidelines for Handling Birds on Offshore Installations**

#### **Background**

Avian influenza (“bird flu”) is spread by a virus between birds. In very rare cases it can also infect human beings and lead to serious respiratory disease. A necessary precondition for transmission from bird to human being is close contact. The virus is predominantly transmitted via excrement or respiratory secretions. Prevention is based on good hygiene practices, particularly that of good hand hygiene.

#### **Facts about avian influenza**

Avian influenza is a respiratory illness in birds which is caused by an influenza virus. It was first detected in South-East Asia and has since spread throughout large areas of the world. In very rare cases it can also infect human beings. When this occurs, the virus causes serious diseases with high mortality rates. The chances of this occurring are negligible and require close contact to enable the virus to be transmitted to a human being. Experience shows that this occurs among farmers and bird breeders who live in close contact with birds. The virus is normally not transmitted between human beings but it can change character, which may then lead to this happening. Such a situation would lead to a pandemic, i.e. a worldwide influenza epidemic.

#### **Control measures**

- Avoid feeding birds.
- Regular cleaning of areas contaminated with bird droppings. The purpose of this is to remove the cause of contagion. NB: Avoid contact with bird droppings during the cleaning process (see below).
- All employees are responsible for maintaining good standards of hygiene. Gloves should be used when moving around the platform. Hands should be washed when returning to the living quarters. Gloves that are contaminated with bird droppings must be disposed of.
- Avoid close contact with birds.
- The likelihood of being infected by avian influenza while using high-pressure hoses to remove bird droppings is almost negligible. Normal protective equipment for high-pressure hosing (masks, safety glasses, gloves and overalls) provides adequate protection.
  - Additional equipment:
    - Disposable overalls – if contact is unavoidable.
    - Chemical-resistant gloves – if contact is unavoidable.
    - Rubber boots.
    - Half masks P1/P2 – only necessary for high-pressure hosing or in the likelihood of airborne dust.
    - Tight-fitting safety glasses and face shields – for high-pressure hosing.

- Dehydration kills the virus. The risk of infection from airborne dust from bird excrement due to wind or helicopter traffic is considered to be low. No additional protection is considered necessary.
- Disposable plastic gloves and regular face masks should be used when removing bird carcasses. Bird carcasses should be placed in plastic sacks and disposed of in the appropriate waste containers
- In the event of large numbers of bird carcasses or in the event of certain high-risk species (water birds such as ducks, swans, geese, seagulls or waders), the local branch of the Norwegian Food Safety Authority should be contacted. Should the Norwegian Food Safety Authority recommend that samples be sent for analysis, the National Veterinary Institute's recommendations should be complied with:

### **Equipment**

Disposable plastic gloves, strong transparent plastic bags/sacks, strong twine and absorbent paper (newspaper or similar).

### **Procedure for collecting samples**

Put on plastic gloves. Place absorbent paper (newspaper) in the bottom of plastic bag/sack No. 1. Place the bird in plastic bag/sack No. 1, making sure that it does not come into contact with the outer surface of the bag/sack or the clothes of the person collecting the sample. Pull the gloves off inside out and place them in the bag/sack along with the bird carcass. Seal the bag/sack with twine. Place bag/sack No. 1 inside bag/sack No. 2 and seal this with twine. Place the plastic-wrapped bird carcass in a suitable outer packaging (a strong box) before dispatching. Enter the name of the sample taker/dispatcher, a brief description of the bird species, the place and date of collection and other relevant observations in a plastic bag and place this in the outer packing before sealing. Dispatch the package to the laboratory by the fastest possible means of delivery.

Clothes which come into contact with bird carcasses can be washed with regular washing powder at 70° C. Interior surfaces which may be contaminated should be thoroughly cleaned with regular cleaning agents.