



INTERIM ADVICE FOR PREPAREDNESS AND RESPONSE TO CASES OF 2019-nCoV ACUTE RESPIRATORY DISEASE AT POINTS OF ENTRY IN THE EUROPEAN UNION (EU)/EEA MEMBER STATES (MS)

Advice for ship operators for preparedness and response to the outbreak of 2019-nCoV acute respiratory disease

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Introduction

This interim advice was prepared after a request from the European Commission's Directorate-General for Health and Food Safety (DG SANTE). An ad-hoc working group was established with members from the EU HEALTHY GATEWAYS joint action consortium. Names and affiliations of the working group members who prepared this document are listed at the end of the document.

The working group produced the following advice, considering current evidence, the temporary recommendations from the World Health Organization (WHO) and the technical reports of the European Centre for Disease Prevention and Control (ECDC) about the 2019-nCoV acute respiratory disease outbreak (as of 3 February 2020).

1. Maritime transport - cruise ship travel

1.1.Minimizing the risk for introduction of persons with acute respiratory syndrome due to 2019-nCoV acute respiratory disease outbreak onto the ship

Travel companies and travel agencies may provide pre-travel information to customers about health issues with their travel package. In this context, information regarding the symptoms of 2019-nCoV acute respiratory disease, health risks for vulnerable groups and the importance of preventive measures such as delaying travel may be provided before the voyage, especially to persons coming from or passing through the affected areas².

Before boarding, information may be provided to passengers and crew who are coming from affected areas, or to all passengers and crew before embarking (e.g. verbal communications, leaflets, electronic posters etc.). The information should include: symptoms of Acute Respiratory Illness (ARI) including fever and sudden onset of respiratory infection with one or more of the following symptoms: shortness of breath, cough or sore throat; hygiene rules (hand washing, coughing and sneezing etiquette, disposal of dirty tissues, social distancing, elimination of handshaking events etc.); special considerations for high-risk groups; what to do in case of relevant symptoms; and the potential for an outbreak on board¹.

Crew arriving on board from affected areas (as defined by WHO in the website https://www.who.int/) should be informed about the symptoms of ARI. Further, they should be monitored daily by a health care staff on board for 14 days after leaving the affected area for any symptoms of ARI, and be asked to immediately report any relevant symptoms to the ship doctor and supervisor.

² Affected areas are defined by WHO in the latest statement of the International Health Regulations (2005) Emergency Committee regarding the outbreak of 2019-nCoV acute respiratory disease published in: https://www.who.int/.





Cruise ships visiting affected areas should provide information to passengers and crew in accordance with the WHO advice (or official country-specific advice) for international travel and trade in relation to the outbreak of 2019-nCoV acute respiratory disease ^{2,3} including:

- a) Frequently cleaning your hands by using an alcohol-based hand rub or soap and water.
- b) When coughing and sneezing covering your mouth and nose with a flexed elbow or tissue throw tissue away immediately and wash hands.
- c) Avoiding close contact with anyone who has fever and cough.
- d) Seeking immediate medical care if you develop fever, cough and difficulty breathing and sharing your previous travel history with your health care provider.
- e) Avoid visiting live markets in areas currently experiencing cases of 2019-nCoV acute respiratory disease.
- f) When participating in excursions ashore, avoiding the consumption of raw or undercooked animal products. Raw meat, milk or animal organs should be handled with care, to avoid cross-contamination with uncooked foods, as per good food safety practices.

1.2. Education and raising passenger and crew awareness

1.2.1. Raising crew awareness for detection of cases on board

Healthcare staff should be informed and updated about the outbreak of 2019-nCoV acute respiratory disease and any new evidence and guidance available for health care staff.

Cruise lines should provide guidance to crew regarding the recognition of the signs and symptoms of ARI including fever and sudden onset of respiratory infection with one or more of the following symptoms: shortness of breath, cough or sore throat.

Crew should be reminded of the procedures that are to be followed when a passenger or a crew member on board displays signs and symptoms indicative of ARI (for example to inform their designated supervisor/manager or medical staff, and perform duties based on instructions from their supervisor depending on the position etc.). Crew should also be reminded about the procedures to be followed during an outbreak of other respiratory illnesses, such as using the Influenza Like Illness outbreak management plan, which should be available on board the ship¹.

Information about immediate reporting of relevant symptoms to supervisors and the medical team, for both themselves and other crew or passengers, should be provided to all crew.

1.2.2. Personal hygiene measures

Cruise lines should continue to provide guidance and training of their crews, related to reducing the general risk of ARI:

- Hand washing techniques (use of soap and water, rubbing hands for at least 20 seconds etc.)





- When hand washing is essential (e.g. after assisting an ill traveller or after contact with environmental surfaces they may have contaminated etc.)
- When hand rubbing with an antiseptic can be used, instead of hand washing and how this can be done
- Respiratory etiquette during coughing and sneezing with disposable tissues or clothing
- Appropriate waste disposal
- Use of respiratory masks
- Avoiding close contact with people suffering from acute respiratory infections²

1.3. Supplies and equipment

Adequate medical supplies and equipment should be available on board to respond to an outbreak as described in the WHO (2007) recommended medicines and equipment by the International Medical Guide for Ships 3rd edition.

Adequate supplies of sample medium and packaging, disinfectants and hand hygiene supplies should also be carried on board¹.

Adequate supplies of PPE should be carried on board including gloves, impermeable gowns, goggles, surgical masks and FFP2/ FFP3 masks.

Further details about supplies specific to the 2019-nCoV acute respiratory disease can be found at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance

1.4. Management of a suspect case

A flow diagram for the management of a suspect case and contacts, as well as the procedures of free pratique from the time of identification of a suspect case, until the ship will be allowed to depart can be downloaded from the following link:

https://www.healthygateways.eu/Portals/0/plcdocs/Flow chart Ships 3 2 2020.pdf

1.4.1. Definition of a suspect case of 2019-nCoV acute respiratory disease

According to ECDC, the definition of a suspect case requiring diagnostic testing is as follows⁴: Patients with acute respiratory infection (sudden onset of at least one of the following: cough, sore throat, shortness of breath) requiring hospitalisation or not, **AND** in the 14 days prior to onset of symptoms, met at least one of the following three epidemiological criteria: were in close contact with a confirmed or probable case of 2019-nCoV acute respiratory disease; **or** had a history of travel to areas with presumed ongoing community transmission of 2019-nCoV; **or** worked in or attended a health care facility where patients with 2019-nCoV acute respiratory disease were being treated.

1.4.2. Definition of a contact of a suspect case of 2019-nCoV acute respiratory disease





It is advised that contact tracing activities begin immediately after a suspect case is identified, in order to find the close contacts and allow all other travellers to continue their activities without restrictions. The close contacts can be requested to remain on board until the laboratory results of the suspect case become available. If the laboratory results are positive, then the measures to be applied to closed contacts are described in paragraph 1.4.7. For the purpose of beginning contact tracing immediately and avoiding delays of travels, the following definitions have been developed to be applied on board ships, adapting the definitions by WHO and ECDC^{5,6}.

Close contact (high risk exposure):

- a person who has stayed in the same cabin with a suspect 2019-nCoV acute respiratory disease case;
- cabin steward who cleaned the cabin of the suspect 2019-nCoV acute respiratory disease case:
- a person who has had face-to-face contact or was in a closed environment with a suspect 2019-nCoV acute respiratory disease case, including participating with them in on board or ashore activities, or dining at the same table;
- a person in the same immediate travelling group participating in common activities on board or ashore;
- a healthcare worker or other person providing direct care for a 2019-nCoV acute respiratory disease suspect case.

Casual contact (low risk exposure):

 Casual contacts are difficult to define on board a confined space such as a cruise ship, therefore, it is advised to consider as casual contacts all travellers on board the ship who do not fulfill the criteria for the definition of a close contact.

1.4.3. Precautions at the ship medical facility

All patients should be asked to cover their nose and mouth with a tissue when coughing or sneezing. Thorough hand washing should take place after any contact with respiratory secretions⁷.

WHO advises that the suspect patient should be asked to wear a surgical mask as soon as they are identified and be evaluated in a private room with the door closed, ideally in an isolation room if available. Any person entering the room should apply standard precautions, contact precautions and airborne precautions.

Healthcare workers in contact with a suspect case of 2019-nCoV acute respiratory disease, should wear PPE for contact, droplet and airborne transmission of pathogens: FFP2 or FFP3 respirator tested for fitting, eye protection (e.g. goggles or face shield), a long-sleeved water-resistant gown and gloves⁸.

Detailed advice can be found at: https://www.ecdc.europa.eu/en/publications-data/infection-prevention-and-control-care-patients-2019-ncov-healthcare-settings

1.4.4. Isolation





Following preliminary medical examination, if the ship's medical officer determines that there is a suspect case of 2019-nCoV acute respiratory disease on board that meets the definition described in paragraph 1.4.1, the suspect case should be isolated in an isolation ward, cabin, room or quarters and infection control measures should be continued until they no longer have respiratory symptoms.

All persons entering the isolation room should apply standard precautions, contact precautions and airborne precautions.

However, if the illness does not meet the suspect case definition (paragraph 1.4.1) but the individual has respiratory symptoms, the individual should not be allowed to return to public areas of the ship or interact with the public, but where applicable should be asked to follow the standard procedure for isolation of individuals with Influenza Like Illness¹. Detailed guidance is provided in the European Manual for Hygiene Standards and Communicable Disease Surveillance on Passenger Ships, Part B, Guideline I: http://www.shipsan.eu/Home/EuropeanManual.aspx

All contacts of a suspect case on board a ship should be identified and monitored as described in paragraph 1.4.7.

1.4.5. Laboratory testing

Laboratory examination of clinical specimens for the persons who meet the definition of a suspect case should be arranged in cooperation with the competent authorities at the port. The competent authority will inform the ship officers about the laboratory test results.

Guidance for clinical specimens collection are provided by WHO⁹ at: https://www.who.int/publications-detail/laboratory-testing-for-2019-novel-coronavirus-in-suspected-human-cases-20200117

1.4.6. Reporting and notification

The competent authority of the next port of call must always be informed if a suspect case of an infectious disease or death has occurred on board (IHR 2005, Article 28)¹⁰. For ships on international voyage, the International Health Regulations (IHR) Maritime Declaration of Health (MDH) should be completed and sent to the competent authority in accordance with the local requirements at the port of call.

The officer in charge of the ship should immediately alert the competent authority at the next port of call (and the cruise line head office) regarding the suspect case to determine if the necessary capacity for transportation, isolation, and care is available at the port. The ship may be asked to proceed to another port in close proximity if this capacity is not available or if warranted by the critical medical status of the suspect case of 2019-nCoV acute respiratory disease.

1.4.7. Contact tracing and management of contacts





The passenger or crew member that meets the definition of a suspect case should be interviewed and provide information about the places that the patient visited and about his/her contacts, including the period from one day before the onset of symptoms on board the ship or ashore.

All contacts should be listed with their contact details and information regarding the places where they will be staying for the following 14 days. Furthermore, all contacts should be classified as contacts that have had high risk exposure ('close contact') or low risk exposure ('casual contacts').

Management of contacts

All contacts that fulfil the definition of a "close contact" (see paragraph 1.4.2) should be asked to complete the Passenger Locator Forms and remain on board the ship at their cabins or at a facility ashore, in accordance with instructions received by the competent authorities, until the laboratory results for the suspect case are available.

If the laboratory results of the suspect case are positive, then they should disembark and be quarantined ashore in accordance with the instructions provided by the competent authorities.

According to the ECDC technical report quarantine measures will include: active monitoring by the public health authorities for 14 days from last exposure, daily monitoring for 2019-nCoV acute respiratory disease symptoms (including fever of any grade, cough or difficulty breathing), avoiding social contact, avoiding travel, and remaining reachable for active monitoring⁵.

Persons in contact with a confirmed case should immediately self-isolate and contact health services in the event of any symptom appearing within 14 days. If no symptoms appear within 14 days of their last exposure, the contact person is no longer considered to be at risk of developing 2019-nCoV acute respiratory disease⁵.

Implementation of these specific precautions may be modified depending on the risk assessment of individual cases and their contacts conducted by the public health authorities.

All casual contacts should be requested to complete Passenger Locator Forms with their contact details and the locations where they will be staying for the following 14 days. All casual contacts (see definition in paragraph 1.4.2) of a suspect case of 2019-nCoV acute respiratory disease should be informed about the suspect case on board. They should be allowed to continue with their planned activities without any restrictions (e.g. continue the voyage, disembark, or continue with onward travel etc.). Implementation of these precautions may be modified depending on the risk assessment of individual cases and their contacts conducted by the public health authorities. Further instructions may be given by the health authorities.

If the laboratory results of the suspect case are positive, then casual contacts should be provided with the following information and advice:

- Details of symptoms and how the disease can be transmitted.
- They should be asked to self-monitor for 2019-nCoV acute respiratory disease symptoms, including fever of any grade, cough or difficulty breathing, for 14 days from their last exposure.
- They should be asked to immediately self-isolate and contact health services in the event of any symptom appearing within 14 days. If no symptoms appear within 14 days of their





last exposure, the contact person is no longer considered to be at risk of developing 2019-nCoV acute respiratory disease⁵.

Both embarking and disembarking ports must be notified immediately of contacts being on board and the measures taken.

1.5.Disembarkation

If the medical officer for the port determines that the ill crew member or passenger meets the definition of a suspect case of 2019-nCoV acute respiratory disease (see paragraph 1.4.1), the crew member or passenger should disembark in a controlled way to avoid any contact with other persons on board the ship and wear a surgical mask. Personnel escorting the patient during the medical evacuation should wear suitable PPE (gloves, impermeable gown, goggles, mask).

As soon as the suspect case has been removed from the cruise ship, the cabin or quarters where the suspect case was isolated and managed, the cabin or quarters should be thoroughly cleaned and disinfected.

The competent authority should give free pratique when they are satisfied that the public health measures have been implemented satisfactorily. The public health authority should ensure that the following measures have been implemented satisfactorily: disembarkation of the suspect case or cases, completion of the PLFs contact tracing, disembarkation of close contacts, information to all travellers on board about the symptoms and signs of the disease, who to contact in case the relevant symptoms develop in the following 14 days, cleaning and disinfection, and disposal of infectious waste. After measures have been completed satisfactorily, the ship should be allowed to continue the voyage.

1.6. Record keeping in the medical log

Records should be kept about the following:

- a) any person on board who has visited the medical facility and meets the definition of a suspect case of 2019-nCoV acute respiratory disease described in paragraph 1.4.1. and the isolation and hygiene measures taken at the isolation place;
- b) any person meeting the definition of a close contact and casual contact described in paragraph 1.4.2 and the results of monitoring of his/her health;
- c) contact details of casual contacts who will disembark and the locations where they will be staying in the following 14 days (completed PLFs);
- d) results of active surveillance.

1.7. Active surveillance (case finding)

Case finding among passengers and crew should be initiated by the ship's medical staff in order to detect any new suspect cases. Case finding should include directly contacting passengers (e.g.





passenger surveys) and crew, asking about current and recent illness, and checking if any person meets the criteria of a suspect case. Findings should be recorded.

1.8. Cleaning and disinfection

The time of environmental survival of 2019-nCoV is currently unknown. SARS-CoV may survive in the environment for several days. MERS-CoV may survive >48hours at 20°C, 40% relative humidity comparable to an indoor environment, on plastic and metal surfaces¹¹.

While case management is in progress on board a cruise ship, a high level of cleaning and disinfection measures should be maintained on board as per the outbreak management plan available on the ship.

Cabins and quarters occupied by patients and contacts of 2019-nCoV acute respiratory disease should be cleaned and disinfected according to cleaning and disinfection protocols of infected cabins (as per protocols for Norovirus gastroenteritis outbreak level). Thorough cleaning of environmental surfaces with water and detergent and application of common disinfectants (such as sodium hypochlorite) used during outbreak procedures for Norovirus should be applied.

Laundry, food service utensils and waste from cabins of suspect cases and contacts should be handled as infectious, in accordance with the outbreak management plan provided on board for other infectious diseases (Norovirus gastroenteritis).





2. Maritime transport - Cargo ship travel

2.1.Minimizing the risk for introduction of persons with acute respiratory syndrome due to 2019-nCoV acute respiratory disease onto the ship

Crew arriving on board from affected areas or crew on ships visiting affected areas should be informed about the symptoms of ARI (fever and sudden onset of respiratory infection with one or more of the following symptoms: shortness of breath, cough or sore throat). Further, they should be asked to immediately report any relevant symptoms to the designated officer.

Ships visiting affected areas should provide information to crew according to the WHO advice for international travel and trade in relation to the outbreak of pneumonia caused by 2019-nCoV acute respiratory disease^{2,3} including:

- a) Frequently cleaning your hands by using an alcohol-based hand rub or soap and water.
- b) When coughing and sneezing covering your mouth and nose with a flexed elbow or tissue throw tissue away immediately and wash hands.
- c) Avoiding close contact with anyone who has fever and cough.
- d) Seeking immediate medical care if you develop fever, cough and difficulty breathing and sharing your previous travel history with your health care provider.
- e) Avoid visiting live markets in areas currently experiencing cases of 2019-nCoV acute respiratory disease.
- f) When participating in excursions ashore, avoiding the consumption of raw or undercooked animal products. Raw meat, milk or animal organs should be handled with care, to avoid cross-contamination with uncooked foods, as per good food safety practices.

The International Maritime Organization (IMO) has issued a Circular advising IMO Member States, seafarers and shipping at:

http://www.imo.org/en/MediaCentre/HotTopics/Pages/Coronavirus.aspx

2.2. Education and raising crew awareness

2.2.1. Raising crew awareness for detection of cases on board

Shipping companies should inform crew about recognition of the signs and symptoms of ARI including fever and sudden onset of respiratory infection with one or more of the following symptoms: shortness of breath, cough or sore throat. Any person with symptoms of ARI should inform the supervisor immediately.





2.2.2. Personal hygiene measures

Shipping companies should refresh training of their crew about hygiene measures:

- Hand washing technique (use of soap and water, rubbing hands for at least 20 seconds etc.)
- When hand washing is essential (e.g. after assisting an ill traveller or after contact with environmental surfaces they may have contaminated etc.)
- When hand rubbing with an antiseptic can be used, instead of hand washing and how this can be done
- Respiratory etiquette during coughing and sneezing with disposable tissues or clothing
- Appropriate waste disposal
- Use of respiratory masks
- Avoiding close contact with people suffering from acute respiratory infections² Infographics from WHO are available at: https://www.who.int/health-topics/coronavirus

2.3. Supplies and equipment

Adequate medical supplies and equipment should be available on board as described in the WHO (2007) recommended medicines and equipment by the International Medical Guide for Ships 3rd edition.

Adequate supplies of PPE should be carried on board including gloves, impermeable gown, goggles and surgical masks.

Further details about supplies specific to 2019-nCoV acute respiratory disease can be found at: https://www.who.int/internal-publications-detail/disease-commodity-package---novel-coronavirus-(ncov)

2.4. Management of a suspect case

2.4.1. Isolation

If any person on board fulfils the following criteria, he/she should be isolated immediately and the next port of call should be informed:

Patients with acute respiratory infection (sudden onset of at least one of the following: cough, sore throat, shortness of breath) requiring hospitalisation or not, **AND** in the 14 days prior to onset of symptoms, met at least one of the following three epidemiological criteria: were in close contact with a confirmed or probable case of 2019-nCoV acute respiratory disease; **or** had a history of travel to areas with presumed ongoing community transmission of 2019-nCoV; **or** worked in or attended a health care facility where patients with 2019-nCoV acute respiratory disease were being treated. The patient should be isolated in an isolation ward, cabin, room or quarters with infection control measures⁴.

All persons entering the isolation room should apply gloves, impermeable gowns, goggles and surgical masks.

2.4.2. Reporting to the next port of call





The competent authority of the next port of call must always be informed if a suspect case of an infectious disease or death has occurred on board (IHR 2005, Article 28)¹⁰. For ships on international voyage, the International Health Regulations (IHR) Maritime Declaration of Health (MDH) should be completed and sent to the competent authority according to the local requirements at the port of call.

The officer in charge of the ship should immediately alert the competent authority at the next port of call regarding the suspect case to determine if the necessary capacity for transportation, isolation, and care is available at the port. The ship may be asked to proceed to another port in close proximity if this capacity is not available, or if warranted by the critical medical status of the suspect case of 2019-nCoV acute respiratory disease.

2.4.3. Disembarkation

Disembarkation of the ill person should take place in a controlled way to avoid any contact with other persons on board the ship and the ill person should wear a surgical mask. Personnel escorting the patient during the medical evacuation should wear suitable PPE (gloves, impermeable gown, goggles and surgical mask).

The ship may be allowed to proceed to its next port of call after the health authority has determined that public health measures have been completed satisfactorily.

2.4.4. Cleaning, disinfection and waste management

As soon as the suspect case had been removed from the ship, the cabin or quarters where the suspect case with the 2019-nCoV acute respiratory disease was isolated and managed should be thoroughly cleaned and disinfected by staff who are trained to clean surfaces contaminated with infectious agents using PPE.

Laundry, food service utensils and waste from cabins of suspect cases and contacts should be handled as infectious, in accordance with procedures for handling infectious materials available on board.

2.4.5. Management of contacts

The health authority will conduct a risk assessment and all contacts of the suspect case should be identified and follow the instructions of the public health authorities, until the laboratory results of the suspect case are available. If the laboratory examination of the suspect case is positive for 2019-nCoV acute respiratory disease, then all close contacts should be quarantined for 14 days (active monitoring by public health authorities, for 14 days from last exposure; daily monitoring for 2019-nCoV symptoms, including fever of any grade, cough or difficulty breathing; avoid social contact; avoid travel; remain reachable for active monitoring)⁵.





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