

INTERIM ADVICE FOR PREPAREDNESS AND RESPONSE TO CASES OF COVID-19 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 COVID-19

Version 3

20 February 2020

Summary of recent changes

The current update includes the following changes:

- Name of disease changed to “Coronavirus Disease 2019 (COVID-19)” replacing “2019-nCoV”.
- Updated advice in response to a confirmed case on board.
- Updated advice in case of outbreak with on-going transmission on board.
- Updated advice about cleaning and disinfection.
- Advice for pre-boarding screening and isolation plan.

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) (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>)¹⁻⁹ and the technical reports of the European Centre for Disease Prevention and Control¹⁰⁻¹⁶ (ECDC) (<https://www.ecdc.europa.eu/en/coronavirus/guidance-and-technical-reports>) about COVID-19 (as of 19 February 2020). Furthermore, this guidance has been prepared considering the evidence currently available about SARS-CoV-2 transmission (human-to-human transmission via respiratory droplets or contact), but it also contains some proactive guidelines considering the lack of evidence to exclude other transmission modes (airborne or after touching contaminated environmental surfaces). It should be noted that SARS-CoV-2 has been found in faecal samples without any further information on how this finding is implicated in the mode of transmission.

Certain aspects of response measures, including defining and managing contacts will depend on the number of cases that have been identified and whether one case or a cluster of cases in the same cabin have been identified, or an outbreak with on-going transmission on board occurs.

1. Maritime transport – cruise ship travel

1.1. Minimizing the risk for introduction of COVID-19 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 COVID-19, health risks for vulnerable groups and the importance of preventive measures².

Companies and travel agencies could also inform passengers that they will be refused from boarding the ship if they are ill or exposed to a COVID-19 confirmed patient. Pre-boarding screening efforts should be implemented to assess incoming travellers for any symptoms or previous exposure to COVID-19.

Before boarding, information should be provided to passengers and crew (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 events¹⁵ etc.); special considerations for high-risk groups; what to do

² Affected areas are defined by WHO in the latest statement of the International Health Regulations (2005) Emergency Committee regarding the outbreak of COVID-19 published in: <https://www.who.int/>.

in case of relevant symptoms; and the potential for an outbreak on board¹⁷. Advice to travellers includes:

- a) Frequently cleaning your hands by using soap and water or an alcohol-based hand rub.
- b) When coughing and sneezing covering your mouth and nose with a tissue or a flexed elbow – 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.

1.2. Education and raising passenger and crew awareness

1.2.1. Isolation plan for COVID-19

An isolation plan should be developed and be available on board, covering the following: definitions of a suspect case of COVID-19 and the close contacts; the isolation plan describing the location(s) where suspect cases should be temporary individually isolated until disembarkation; the communication plan between departments; hygiene rules for the isolation room including use of Personal Protective Equipment (PPE), cleaning and disinfection procedures, waste management, room service, laundry; management of close contacts and Passenger/Crew Locator Forms (PLF) data management. Staff on board should have knowledge to implement the isolation plan.

1.2.2. Raising crew awareness for detection of cases on board

Healthcare staff on board should be informed and updated about the outbreak of COVID-19, including 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 COVID-19.

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 COVID-19 (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 ship¹⁷.

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.

1.2.3. 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 medical masks and respirators
- Avoiding close contact with people suffering from acute respiratory infections¹⁸

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 (sterile viral transport media and sterile swabs to collect nasopharyngeal and nasal specimens) and packaging, disinfectants and hand hygiene supplies should also be carried on board¹⁷.

Adequate supplies of PPE should be carried on board including gloves, long-sleeved impermeable gowns, goggles or face shields, medical masks and FFP2/FFP3 masks.

Further details about supplies specific to COVID-19 can be found at (please see disease commodity package): <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 COVID-19

According to ECDC, the definition of a suspect case requiring diagnostic testing is as follows¹²: 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 COVID-19; **or** had a history of travel to [areas with presumed ongoing community transmission](#); **or** worked in or attended a health care facility where patients with COVID-19 were being treated.

1.4.2. Definition of a contact of a suspect case of COVID-19

It is advised that contact tracing activities begin immediately after a suspect case is identified on board without waiting for the laboratory results. 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^{3,11}.

All persons on board should be assessed for their exposure and classified as close contacts (high risk exposure) or casual contacts (low risk exposure). Two different definitions of contacts should be used depending on the number of confirmed cases identified on board.

- A. If only one case or a cluster of a few cases (e.g. persons sharing the same cabin) have been identified on board, then the following definitions of contacts should be applied:

Close contact (high risk exposure):

- a person who has stayed in the same cabin with a suspect/confirmed COVID-19 case;
- a cabin steward who cleaned the cabin of a suspect/confirmed COVID-19 case;
- a person who has had close contact within one meter, or was in a closed environment with a suspect/confirmed COVID-19 case (for passengers this may include participating in common activities on board or ashore, participating in the same immediate travelling group, dining at the same table; for crew members this may include working together in the same area of the ship or friends having face to face contact);
- a healthcare worker or other person providing direct care for a COVID-19 suspect/confirmed 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.

- B. If an outbreak on board a cruise ship occurs as a result of on-going transmission on board the ship (more than one case not staying in the same cabin), the assessment of exposure should be done among crew members and among passengers. If it is difficult to identify who the close contacts are, then all travellers on board could be considered as close contacts having had high risk exposure. However, this may be modified depending on the risk assessment of individual cases and their contacts conducted by the public health authorities.

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 secretions⁴.

WHO advises that the suspect patient should be asked to wear a medical 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, droplet precautions and airborne precautions^{16,19}. If not enough respirators are

available (e.g. for airborne precautions), droplet precautions should be applied (e.g. medical mask). In this specific case, the limitations and risks connected to its use should be assessed on a case-by-case basis.

Healthcare workers in contact with a suspect case of COVID-19 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 gloves^{14,16,20}. Disposable PPE should be treated as potentially infectious material and disposed of in accordance with the relevant rules. Non single-use PPE should be decontaminated in accordance with the manufacturer's instructions.

Detailed advice can be found at: [https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-(ncov)-infection-is-suspected) and <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 COVID-19 on board that meets the definition described in paragraph 1.4.1, the patient should be isolated in an isolation ward, cabin, room or quarters and infection control measures should be continued until disembarkation and transfer of the patient to the hospital ashore.

All persons entering the isolation room should apply standard precautions, contact precautions and airborne and droplet precautions as described in WHO guidance for infection control⁵.

Whenever possible, isolation rooms with mechanical ventilation should have negative pressure with minimum of 12 air changes per hour, while isolation rooms with natural ventilation, should be supplied with at least 160 litres/second⁴. All air handling units on board the ship should be adjusted to supply 100% outside air and no air recirculation should take place.

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 Illness¹⁷. 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>

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 where suitable facilities exist. The competent authority will inform the ship officers about the laboratory test results.

Guidance for clinical specimens collection are provided by WHO² at: <https://www.who.int/publications-detail/laboratory-testing-for-2019-novel-coronavirus-in-suspected-human-cases-20200117>

1.4.6. Reporting and notification

In accordance with the International Health Regulations (2005), the officer in charge of the ship must immediately inform the competent authority at the next port of call about any suspect case of COVID-19²¹.

For ships on international voyage, the 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.

Ship operators must facilitate application of health measures and provide all relevant public health information requested by the competent authority at the port. 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, laboratory diagnosis and care of the suspect case/cluster of cases of COVID-19 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 medical status of the suspect case/cluster of cases of COVID-19. It is important that all arrangements are conducted as quickly as is feasible to minimise the stay of symptomatic suspect case/cases on board the ship.

1.5. Management of contacts

The passenger or crew member that meets the definition of a suspect case if possible should be asked to provide information about the places that he/she visited and about his/her contacts, including the period from one day before the onset of symptoms on board the ship or ashore. This information will be used to identify the closed contacts.

1.5.1. Management of the close contacts

All travellers that fulfill the definition of a “close contact” should be asked to complete the Passenger/Crew Locator Forms (PLFs) (a word version can be downloaded from: <https://www.healthygateways.eu/LinkClick.aspx?fileticket=U133sZdEEH0%3d&tabid=98&portalid=0>) and be listed with their contact details and information regarding the places where they will be staying for the following 14 days. All close contacts should remain on board the ship in their cabins or at a facility ashore (in case the ship has docked at the turnaround port and if feasible), 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 all close contacts should be quarantined ashore and not allowed to travel internationally, unless this has been arranged following the WHO advice for repatriation. Considerations for quarantine measures are given in the WHO travel advice⁷: <https://www.who.int/emergencies/diseases/novel-coronavirus->

[2019/travel-advice](#). The above quarantine measures are all subject to the requirements of the local competent health authority.

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 COVID-19 symptoms (including fever of any grade, cough or difficulty breathing), avoiding social contact, avoiding travel, and remaining reachable for active monitoring¹¹. The close contacts should immediately inform the 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 COVID-19¹¹. 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.

1.5.2. Management of the casual contacts

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

- 1) All casual contacts should be requested to complete PLFs with their contact details and the locations where they will be staying for the following 14 days. 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.
- 2) Information should be provided to all casual contacts as follows:
 - Details of symptoms and how the disease can be transmitted.
 - They should be asked to self-monitor for COVID-19 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 COVID-19¹¹.

1.5.3. Reporting information to the competent authorities about contacts

Both embarking and disembarking ports must be notified immediately of contacts being on board and the measures taken. Information in the PLFs should be provided to the competent authorities in accordance with the legislation for sharing personal data for public health purposes.

1.6. Disembarkation

The suspect case should disembark in a controlled way to avoid any contact with other persons on board the ship and wear a medical mask. Personnel escorting the patient during the medical evacuation should wear suitable PPE (gloves, impermeable gown, goggles, FFP2/FFP3 respirator).

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

disinfected as described in paragraph 1.10, by staff trained to clean and disinfect cabins during gastroenteritis outbreaks²².

1.7. Other health measures

The port health authority, after conducting an inspection and risk assessment according to IHR (2005) Article 27 will decide on the health measures to be taken on board the ship. In the event that the affected cruise ship where the COVID-19 confirmed case was identified calls at a port other than the turn-around port, the authority may decide in consultation with the ship owner and if feasible, to end the cruise if health measures (cleaning and disinfection) cannot be satisfactorily completed while travellers are on board the ship. Infectious waste should be disposed of in accordance with the port authorities' procedures. The next cruise can start when the thorough cleaning and disinfection has been satisfactorily completed. If on-going transmission occurred on board the ship, cruise lines are advised to explore the possibility of starting the next cruise with new crew, if this is feasible.

1.8. 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 COVID-19 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 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.
- e) Details about isolation (place, when started, names of persons entered the room and provided care).

1.9. Active surveillance (case finding)

Case finding among passengers and crew should be initiated after a suspect case has been identified 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. Active surveillance activities should be conducted for 14 days after the COVID-19 confirmed case was identified. Findings should be recorded.

1.10. Cleaning and disinfection

Environmental persistence of SARS-CoV-2 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 surfaces²³ and SARS-CoV up to 7 days²².

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.

Medical facilities, cabins and quarters occupied by patients and contacts of COVID-19 should be cleaned and disinfected in accordance with the WHO guidance for infection prevention and control during health care when COVID-19 infection is suspected. All other areas should be cleaned and disinfected according to the procedures applied in response to Norovirus gastroenteritis outbreak⁴.

Interim guidance for environmental cleaning in non-healthcare facilities exposed to SARS-CoV-2 can be found at: <https://www.ecdc.europa.eu/en/publications-data/interim-guidance-environmental-cleaning-non-healthcare-facilities-exposed-2019>

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)⁴. Staff who will perform cleaning and disinfection should be trained to use PPE.

Air filters should be replaced by trained persons using proper PPE and treated as infectious waste. The air handling units should be cleaned and disinfected.

It might be essential that the ship will remain at the port for the time period essential required to perform the thorough cleaning and disinfection on board the ship.

2. Maritime transport – Cargo ship travel

2.1. Minimizing the risk for introduction of persons with acute respiratory syndrome due to COVID-19 onto the ship

Crew visiting affected areas³ 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 COVID-19^{6,18} including:

- a) Frequently cleaning your hands by using soap and water or an alcohol-based hand rub.
- b) When coughing and sneezing covering your mouth and nose with a tissue or a flexed elbow – 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 COVID-19.
- f) When visiting areas 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.

³ Affected areas are defined by WHO in the latest statement of the International Health Regulations (2005) Emergency Committee regarding the outbreak of COVID-19 published in: <https://www.who.int/>.

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 medical masks or respirators
- Avoiding close contact with people suffering from acute respiratory infections¹⁸

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 long-sleeved gown, goggles or face shields, medical masks and FFP2/FFP3 respirators.

Further details about supplies specific to COVID-19 can be found at (please see technical guidance for disease commodity package): <https://www.who.int/health-topics/coronavirus>

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 COVID-19; **or** had a history of travel to [areas with presumed ongoing community transmission](#); **or** worked in or attended a health care facility where patients with COVID-19 were being treated. The patient should be isolated in an isolation ward, cabin, room or quarters with infection control measures¹².

All persons entering the isolation room should apply gloves, impermeable gowns, goggles and medical 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)²¹. 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 COVID-19.

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 medical mask. Personnel escorting the patient during the medical evacuation should wear suitable PPE (gloves, impermeable gown, goggles and medical 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 COVID-19 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 COVID-19, then all close contacts should be quarantined for 14 days in facilities ashore according to instructions from the competent authorities (active monitoring by public health authorities, for 14 days from last exposure; daily monitoring for COVID-19 symptoms, including fever of any grade, cough or difficulty breathing; avoid social contact; avoid travel; remain reachable for active monitoring)¹¹.

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References

1. World Health Organization. Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected. Interim guidance, 2020.
2. World Health Organization. Laboratory testing for 2019 novel coronavirus (2019-nCoV) in suspected human cases, 2020.
3. World Health Organization. Global Surveillance for human infection with novel coronavirus (2019-nCoV). Interim guidance v3 2020.
4. World Health Organization. Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected. Interim guidance. 28 January 2020 2020. https://www.who.int/docs/default-source/coronaviruse/clinical-management-of-novel-cov.pdf?sfvrsn=bc7da517_2.
5. World Health Organization. Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected. Interim guidance. 25 January 2020, 2020.
6. World Health Organization. Updated WHO advice for international traffic in relation to the outbreak of the novel coronavirus 2019-nCoV. 27 January 2020. 2020. <https://www.who.int/ith/2020-27-01-outbreak-of-Pneumonia-caused-by-new-coronavirus/en/> (accessed 27 January 2020).
7. World Health Organization. Key considerations for repatriation and quarantine of travellers in relation to the outbreak of novel coronavirus 2019-nCoV. 11 February 2020 2020. https://www.who.int/ith/Repatriation_Quarantine_nCoV-key-considerations_HQ-final11Feb.pdf?ua=1 (accessed 13/2/2020).
8. World Health Organization. Advice on the use of masks in the community, during home care and in healthcare settings in the context of the novel coronavirus (2019-nCoV) outbreak. 2020.
9. World Health Organization. Interim guidance. Management of ill travellers at Points of Entry – international airports, seaports and ground crossings – in the context of COVID-19 outbreak 2020.
10. European Centre for Disease Prevention and Control. Laboratory testing of suspect cases of 2019 nCoV using RT-PCR 16 Jan 2020]. 2020. <https://www.ecdc.europa.eu/en/publications-data/laboratory-testing-suspect-cases-2019-ncov-using-rt-pcr> (accessed 20/01/2020).
11. European Centre for Disease Prevention and Control. Public health management of persons having had contact with cases of novel coronavirus in the European Union. Stockholm: ECDC, 2020.
12. European Centre for Disease Prevention and Control. Case definition and European surveillance for human infection with novel coronavirus (2019-nCoV). 2020. <https://www.ecdc.europa.eu/en/case-definition-and-european-surveillance-human-infection-novel-coronavirus-2019-ncov>.
13. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT. Infection prevention and control for the care of patients with 2019-nCoV in healthcare settings
Stockholm ECDC, 2020.
14. European Centre for Disease Prevention and Control. Guidance on community engagement for public health events caused by communicable disease threats in the EU/EEA. Stockholm, 2020.
15. European Centre for Disease Prevention and Control. Guidelines for the use of non-pharmaceutical measures to delay and mitigate the impact of 2019-nCoV. Stockholm, 2020.
16. European Centre for Disease Prevention and Control. . Infection prevention and control for the care of patients with 2019-nCoV in healthcare settings. Stockholm, 2020.
17. EU SHIPSAN ACT JOINT ACTION (20122103) - European Commission Directorate General for Health and Food Safety. European Manual for Hygiene Standards and Communicable Diseases Surveillance on Passenger Ships. Second ed: EU SHIPSAN ACT JOINT ACTION (20122103); 2016.
18. World Health Organization. WHO advice for international travel and trade in relation to the outbreak of pneumonia caused by a new coronavirus in China. 10 January 2020 2020. https://www.who.int/ith/2020-0901_outbreak_of_Pneumonia_caused_by_a_new_coronavirus_in_C/en/ (accessed 20/1/2020).

19. European Centre for Disease Prevention and Control. LEAFLET - Advice to healthcare workers: management of patients with 2019-nCoV infection 2020. <https://www.ecdc.europa.eu/en/publications-data/advice-healthcare-workers-management-patients-2019-ncov-infection> (accessed 31/01/2020).
20. (ECDC) ECfDPaC. Advice to healthcare workers: management of patients with 2019-nCoV infection 2020, 2020.
21. World Health Organization. International Health Regulations (2005). Third ed. Geneva; 2016.
22. European Centre for Disease Prevention and Control. Interim guidance for environmental cleaning in non-healthcare facilities exposed to SARS-CoV-2. Stockholm: ECDC, 2020.
23. van Doremalen N, Bushmaker T, Munster VJ. Stability of Middle East respiratory syndrome coronavirus (MERS-CoV) under different environmental conditions. *Euro Surveill* 2013; **18**(38).