

INTERIM GUIDANCE FOR PREPAREDNESS AND RESPONSE TO CASES OF COVID-19 AT POINTS OF ENTRY IN THE EUROPEAN UNION (EU)/EEA MEMBER STATES (MS)

Interim advice for restarting cruise ship operations after lifting restrictive measures in response to the COVID-19 pandemic

Version 1

30 June 2020

The EU HEALTHY GATEWAYS Joint Action has received funding from the European Union, in the framework of the Third Health Programme (2014-2020). The content of this document represents the views of the author only and is his/her sole responsibility; it cannot be considered to reflect the views of the European Commission and/or the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA) or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.

1. Introduction

In January 2020 the EU HEALTHY GATEWAYS joint action switched from operating under the inter-epidemic mode to operating in an emergency mode, at the request of the European Commission's Directorate-General for Health and Food Safety (DG SANTE). As stated in the Grant Agreement, the objective of the emergency mode is to support coherent response of EU MS according to Decision No 1082/2013/EU and the implementation of temporary recommendations issued by the World Health Organization (WHO). Under this emergency mode, EU HEALTHY GATEWAYS is available to respond to any specific requests from DG SANTE or EU MS to provide technical support, advice or ad-hoc training at points of entry as needed.

An ad-hoc working group was established with members from the EU HEALTHY GATEWAYS joint action consortium. The 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 guidance, considering the Communications issued by the Commission: a) "A European roadmap to lifting coronavirus containment measures"(1), b) "Towards a phased and coordinated approach for restoring freedom of movement and lifting internal border controls"(2), c) "COVID-19: EU Guidance for the progressive resumption of tourism services and for health protocols in hospitality establishments"(3), d) "COVID-19: Guidelines on the progressive restoration of transport services and connectivity"(4), e) "Tourism and transport in 2020 and beyond"(5). Moreover, current evidence, the temporary recommendations from the WHO (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>) (6-28) and the technical reports of the European Centre for Disease Prevention and Control (29-46) (ECDC) (<https://www.ecdc.europa.eu/en/coronavirus/guidance-and-technical-reports>) on COVID-19 (as of 30 June 2020) were taken into consideration. Lastly, this guidance has been prepared considering the evidence currently available about SARS-CoV-2 transmission (human-to-human transmission via respiratory droplets or contact), and also contains some proactive guidelines considering the lack of evidence to exclude other transmission modes (airborne or after touching contaminated environmental surfaces) (47). 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. The virus can be transmitted from both asymptomatic and symptomatic infected people, as well as from a person that is infected even two days before showing symptoms.

The guidance provided in this document is based on the current situation of the pandemic, and will be revised as needed after considering the epidemiological situation.

2. Purpose

Cruise ships are semi-closed environments providing shared facilities for many people on board the ship. Since the beginning of the COVID-19 epidemic, outbreaks have been reported on board cruise ships affecting both passengers and crew. Unprecedented challenges were faced by both the cruise ship industry, the public health authorities and all related sectors in dealing with cruise ship evacuations and management of outbreaks of COVID-19. As on-going transmission is currently reported in many countries worldwide and considering that several cases are asymptomatic, it is expected that both asymptomatic and symptomatic COVID-19 cases will most likely occur on board

cruise ships, as in similar touristic venues ashore. In addition to measures aimed at excluding infected persons from boarding a cruise ship, early detection and isolation of the first case, disembarkation, and quarantine of close contacts² in facilities ashore are all essential elements for effectively preventing future COVID-19 outbreaks on board cruise ships. Implementation of the International Health Regulations 2005 provisions by both the competent authorities at ports and the ship operators in regard to the availability of contingency plans at designated ports and on board ships and core capacities for health measures application, are imperative to prevent COVID-19 outbreaks, as well as passengers and crew members from being stuck at sea in the future.

The purpose of this document is to provide general guidance to EU/EEA MS and to cruise lines about options for measures on travel and tourism that could be applied after lifting the restrictive measures implemented in response to the COVID-19 pandemic.

Public health risks for COVID-19 transmission are a new reality globally. Similar to other holiday-makers, for cruise passengers, those exist not only while travelling on board cruise ships, but during the entire journey beginning from home to the cruise ship, including the sites of embarkation/disembarkation, and at all destinations visited en route.

The current guidance provides a list of measures to reduce the risk for introduction of COVID-19 onto the ship, transmission during cruise ship voyage, embarkation and disembarkation, and further provides options for preparedness to respond to potential COVID-19 cases among travellers (passengers and crew).

A strategy for reducing the risks for COVID-19 among cruise ship passengers and crew should cover the entire process, beginning at the time of booking and extending until passengers and crew have returned to their homes. National policies for accepting incoming tourists to cross borders and to board cruise ships at the turnaround ports should also be considered in cruise line plans.

It is suggested that a gradual approach to restarting cruise ship operations should be considered. When resuming operations, cruise lines may initially consider using itineraries of a short duration (e.g. 3 to 7 days) and to perhaps limit the number of port visits in the itinerary. The willingness and capacity of countries included in the itinerary should be explored, and arrangements should be in place to accept possible or confirmed COVID-19 cases disembarking from cruise ships, as well as possible contacts and anyone else wishing to disembark.

² A contact of a COVID-19 case is any person who had contact with a COVID-19 case within a timeframe ranging from 48 hours before the onset of symptoms of the case to 14 days after the onset of symptoms. If the case had no symptoms, a contact person is defined as someone who had contact with the case within a timeframe ranging from 48 hours before the sample which led to confirmation was taken to 14 days after the sample was taken. Furthermore, a contact is defined as:

- a person who has stayed in the same cabin with a possible/confirmed COVID-19 case;
- a cabin steward who cleaned the cabin of a possible/confirmed COVID-19 case;
- a person who had face-to-face contact within two metres for more than 15 minutes, or physical contact, or unprotected direct contact with infectious secretions of a COVID-19 case or was in a closed environment with a possible/confirmed COVID-19 case for more than 15 minutes (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 close proximity in the same area of the ship or friends having face to face contact);
- a healthcare worker or other person providing care for a COVID-19 case, without recommended PPE or with a possible breach of PPE

3. Essential prerequisites

According to the International Health Regulations (IHR) 2005, designated ports must have the capacities to provide appropriate public health emergency response, by establishing and maintaining a public health emergency contingency plan. Interoperability of the port public health emergency contingency plan with the cruise ship contingency plan/outbreak management plan should be ensured.

For each cruise ship operating in the waters of an EU MS, a ship contingency plan/outbreak management plan for responding to a COVID-19 event should be prepared by the operating cruise line and submitted to the competent authority of at least one of the ports of call (preferably the home port or another port which can provide sufficient facilities in the cruise ship itinerary), in order to be reviewed and ensure interoperability with the port public health emergency contingency plan. In particular, before cruise lines resume operations, competent authorities in the EU MS and ship operators should ensure that the following conditions are met and have been fully addressed in this cruise ship contingency plan/outbreak management plan:

3.1. Monitoring of epidemiological situation, rules and restrictions worldwide

Before starting journeys and throughout cruise ship operations, it is essential that cruise lines monitor the epidemiological situation worldwide and at the cruise ship destinations, as well as at the places of origin of incoming passengers and crew (ECDC's COVID-19 Country Overview page: http://covid19-country-overviews.ecdc.europa.eu/#1_introduction). This will help assess the risk and adapt policies for screening and evaluating cruise ship passengers and crew members from countries with a high incidence of COVID-19, and furthermore to avoid destinations in countries with a high incidence of COVID-19. Cruise lines should have access to real-time information on the situation regarding borders, travel restrictions, travel advice, public health measures and safety measures at the destination ports (48). The European Commission has a dedicated website with an interactive map combining information from Member States and the tourism and travel industry, which is available at: https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-and-transportation-during-coronavirus-pandemic_en (48).

3.2. Written contingency plan/outbreak management plan for COVID-19

Each cruise ship should have in place a written contingency plan/outbreak management plan for the prevention and control of possible cases of COVID-19 as described and in paragraph 5.1.2.

3.3. Arrangements for medical treatment and ambulance services

Before starting journeys, cruise ship operators should check and ensure with ports of call that, if needed, arrangements can be made for passengers and crew members to receive medical treatment (48) ashore (including possible air evacuation if needed). This should be clearly

described in both written contingency plans of cruise ships and at least of one of the ports of call (preferably the home port, with the possibility of also using other ports during the voyage).

3.4. Arrangements for repatriation

Before starting journeys, cruise ship operators should ensure with ports along the route that, if needed, repatriations and crew changes can be organised (48). It is suggested that cruise lines have in place repatriation plans for passengers and crew members, considering different scenarios for partial or complete ship evacuation in the event of a COVID-19 outbreak. Cruise ships' home ports (or at least one of the ports of call) should have airports operating international flights allowing repatriation of passengers and crew as necessary. Criteria for allowing repatriation and air travel based on exposure to COVID-19 cases and laboratory results of passengers and crew should also be considered in the planning process by the competent authorities at ports and the cruise ship operator. In addition, airline public health policies and public health policies of home countries should be considered in planning of repatriation processes.

3.5. Arrangements for quarantine of close contacts (exposed passengers or crew members with negative RT-PCR test results for SARS-CoV-2)

Before starting journeys, arrangements should be made between the cruise line and the local authorities of the home port (or at least one of the ports of call) for quarantine³ facilities and procedures to be followed for close contacts. The facilities should be agreed upon and pre-specified (e.g. hotels), as well as the cost recovery for the health measures implementation. Residents of the country of disembarkation could be quarantined at home, according to local rules and procedures. Transport plans and hygiene protocols should be included in the contingency plan of the port, as well as the cruise ship contingency plan/outbreak management plan.

The procedures for management of close contacts can be found in the EU HEALTHY GATEWAYS Interim advice for ship operators for preparedness and response to the outbreak of COVID-19, available at: <https://www.healthygateways.eu/Novel-coronavirus>.

Close contacts that have been exposed to a confirmed case of COVID-19 should disembark as soon as possible, and be quarantined and monitored (self-monitored or otherwise according to the country procedures) for a period of 14 days in quarantine facilities ashore. Different scenarios with the expected numbers of persons to be quarantined should be considered and included in the planning and arrangements.

³ Quarantine: the restriction of activities and/or separation from others of suspect persons who are not ill or of suspect baggage, containers, conveyances or goods in such a manner as to prevent the possible spread of infection or contamination.

3.6. Arrangements for isolation of asymptomatic/ pre-symptomatic travellers (passengers or crew members with positive RT-PCR test results for SARS-CoV-2)

Before starting journeys, arrangements should be made between the cruise line and the local authorities of the home port (or at least one of the ports of call) for isolation⁴ procedures and facilities for asymptomatic/ pre-symptomatic infected travellers (persons with positive RT-PCR test results for SARS-CoV-2). The facilities should be pre-specified (e.g. hospitals, hotels), as should the cost recovery for the health measure implementation. Any person who has tested positive for SARS-CoV-2 should disembark as soon as possible, be isolated in a facility ashore and monitored until the ECDC criteria for discharge are met (49). Different scenarios with the expected number of persons to be isolated should be considered and included in the planning and arrangements made between the cruise line and the local authority.

3.7. Adequate testing capacity for SARS-CoV-2 infection on board or in cooperation with shore-based laboratories

Before starting journeys, arrangements should be made to ensure that cruise ships have adequate laboratory testing capacity for SARS-CoV-2 on board or through arrangements with shore side laboratories, to be used when a passenger or crew member is suspected of being infected (48). Arrangements should be made between the cruise line and laboratories ashore to ensure that RT-PCR tests can be organised and conducted ashore. Medical staff should be trained in sample collection and the field laboratory testing performance on board the cruise ship would need to be verified, with their routine use quality assured in accordance with national regulations and international professional standards for medical laboratory services. The ECDC guidelines for clinical specimens' collection and testing should be followed (50).

3.8. Training of crew about COVID-19

All persons intending to work on board (ship officers, crew members) as well as external contractors who interact with passengers or crew on board or ashore should complete training about COVID-19, as described in paragraph 5.1.1. For external contractors, this training may be conducted internally, or they may be supplied with written guidance describing the symptoms and requesting them to report symptoms, perform hand hygiene frequently, practise physical distancing and wear face masks.

Regular table-top exercises or drills should be conducted (e.g. before resuming operations and thereafter on a monthly basis) to test training of all staff on procedures related to prevention, surveillance and response to COVID-19, response time, department cooperation, procedures and equipment. A drill/table-top exercise normally includes participant instructions, scenario and evaluation tools.

⁴ Isolation: separation of ill or contaminated persons or affected baggage, containers, conveyances, goods or postal parcels from others in such a manner as to prevent the spread of infection or contamination.

3.9. Commitment for immediate reporting to the next port of call of any possible case

An essential pre-requisite for resuming cruise ship operations is the immediate reporting of any possible case of infection, including possible⁵ COVID-19 cases, to the next port of call by submitting the Maritime Declaration of Health (MDH). Early detection and immediate reporting are key factors for preventing outbreaks of COVID-19 on board ships. Before cruise ship operations begin, all involved parties (National Single Window, ship agents, port state control authorities, and health authorities at all levels) must ensure that written and clearly defined procedures are agreed upon and implemented for immediate reporting through the MDH of any possible case of infection, to the health authority at the next port of call.

Any previous practice/policies for reporting of Influenza-Like Illness (ILI) aggregated data at the end of voyages should be stopped. This approach should be replaced by actively looking for any person on board meeting the definition of a possible COVID-19 case, immediately reporting to the next port of call, and activating a ship contingency plan/outbreak management plan for management of the case and contacts.

It is suggested that EU MS competent authorities at the port level use the SHIPSAN Information System (SIS) to record health measures taken in response to possible or confirmed COVID-19 cases on board cruise ships. In parallel, the authorities at central level must always be informed by the authorities at a local level.

3.10. Estimation of the maximum number of passengers and crew on board cruise ships

Cruise ship operators should reduce the number of passengers and crew on board to ensure that measures related to physical distancing on board ships can be maintained, and that temporary isolation and quarantine of passengers and crew can take place individually in cabins.

When estimating the maximum number of passengers and crew on board expect from ensuring physical distancing cruise ship operators are advised to ensure they are able to individually and temporarily isolate or quarantine (in a single cabin) possible COVID-19 cases/contacts:

- 5% of passengers and 5% of crew on board (until disembarkation and quarantine/isolation according to the contingency plan/outbreak management plan will take place), for ships where it will not be possible to disembark crew and passengers who need to be quarantined or isolated within 24 hours from detection of the first possible COVID-19 case, according to the ship contingency plan/outbreak management plan.

⁵ Possible case: any person with at least one of the following symptoms: cough, fever, shortness of breath, sudden onset of anosmia, ageusia or dysgeusia. Additional less specific symptoms may include headache, chills, muscle pain, fatigue, vomiting and/or diarrhoea (source: Case definition for coronavirus disease 2019 (COVID-19), as of 29 May 2020. <https://www.ecdc.europa.eu/en/covid-19/surveillance/case-definition>).

- 1% of passengers and 1% of crew for ships where it will be possible to disembark crew and passengers who need to be quarantined or isolated within 24 hours from detection of the first possible COVID-19 case.

These proportions apply only to the initial phase of restarting operations, and will be re-considered and revised as appropriate depending on the epidemiological situation. Moreover, as far as possible, it is advised that the maximum number of crew members living in the same cabin should be two persons.

Consideration should be given to embarking a sufficient number of critical staff on board, in order to respect and maintain the Minimum Safe Manning requirements in case of a COVID-19 outbreak on board.

3.11. Focused inspection on COVID-19 prevention and control for resuming cruise ship voyages by EU HEALTHY GATEWAYS

EU HEALTHY GATEWAYS will support the competent health authorities in EU MS to perform focused inspections on board each cruise ship and ashore, and review procedures and written plans of each cruise ship and cruise line, to ensure that the below mentioned measures are met by both the cruise ship operator and the port authority. The EU HEALTHY GATEWAYS joint action will support the inspections by providing: a checklist based on the advice document; training of inspectors working at local authorities (through webinars); scheduling at an EU level to avoid duplication of inspections; and the EU database to record inspections. The inspections will be scheduled in cooperation with the companies and the competent authorities. It will not be necessary to conduct the inspection before starting the cruise ship operations. This could be arranged at any date and at any port, in agreement with the company and the inspectors.

4. Options for measures to prevent COVID-19 infectious passengers from starting holidays

4.1. Exclusion policy

Cruise lines should develop an exclusion policy with regard to COVID-19 and inform the travelling public about the policy through their travel agents, travel companies, cruise line operators and other businesses operating in the tourism sector. Harmonisation of this policy in the cruise industry, or consistent wording would facilitate acceptance and understanding by the public. Symptomatic and potentially exposed passengers should be discouraged from travelling, as is in place for air travel. In this respect, any person experiencing symptoms compatible with COVID-19, or if identified, anyone who has been in contact during the last 14 days with a confirmed case of COVID-19, or anyone who is tested positive for SARS-CoV-2 by RT-PCR would not be accepted on board cruise ships.

4.2. High risk groups

As long as the pandemic continues, special precautions may be applied to passengers and crew belonging to high risk groups. Passengers in high risk groups including people over 65 years of age or people of any age with underlying medical conditions (chronic diseases including cardiovascular disease, diabetes, respiratory diseases and immunocompromised individuals) should be advised to visit a doctor for pre-travel medical consultation to assess if they are fit to travel. Activities and services on board cruise ships could be organized according to age group, so that older individuals are separated from other age groups. Crew members in high risk groups could work in positions where there is little or no interaction with other individuals. Moreover, advanced respiratory protection may be used specifically by crew members belonging to vulnerable groups.

4.3. Exclusion policy information

Cruise line operators and tour operators should provide all relevant information about the exclusion policy, as well as any pre-requisites and country specific rules on their websites and electronic reservation systems. Ideally, it should be obligatory to read the information in order to complete the reservation. These materials should be available in the national language, English and, where needed, other languages based on the most common language profiles of the passengers travelling on the respective cruise ship. Moreover, relevant information could be shared directly with passengers via email, text message, mail, website or other means of communication.

5. Preparedness for responding to COVID-19 events on board cruise ships

5.1. General principles

5.1.1. *Information, education and communication*

Communication strategy and training plans

A communication strategy should be designed and implemented targeting the travelling public and the crew, defining the messages, the appropriate communication means and timing. The communication plan should cover processes related to ticketing, at pre-arrival, at the terminal, on board, as well as the procedures in case of a COVID-19 event.

Each cruise ship operator should design a training plan for their employees, with regular and on-going training. For example, a short webinar covering the topics listed in the following paragraph could be conducted.

Training content for crew

Cruise line operators should provide training and instructions to their crew regarding the recognition of the signs and symptoms compatible with COVID-19. Attention should be given to crew well-being.

Cruise line crew should be reminded of the procedures that should be followed when a passenger or a crew member displays signs and symptoms indicative of COVID-19. Each member of the crew should be trained in their role and responsibilities to implement measures as per the contingency plan/outbreak management plan. It is suggested that training takes place every 30 days.

Crew should also be instructed that if they develop symptoms compatible with COVID-19, they should not come to work. If symptoms develop while working, the crew should immediately self-isolate, wear appropriate personal protective equipment (PPE) and inform their designated supervisor/manager and medical crew immediately. Symptoms should be reported for both themselves and other crew members or passengers, if noted.

The cruise ship operator should also reassure crew that those who report symptoms and are unable to work will continue to be paid.

Cruise line operators should also provide training and instructions to crew regarding physical distancing measures, managing crowds, use of PPE, as well as protocols for cleaning and disinfection.

Crew who visit or stay in local areas at the various destinations should be informed in a timely manner about any national or local preventive measures or laws established by local or national public health authorities regarding COVID-19.

Medical crew on board should be trained in appropriate sample collection as well as storage and transport of the samples.

Information and communication to passengers

Cruise lines, travel companies and travel agencies should provide relevant pre-travel information about mitigating the risk of COVID-19 infection to their passengers and crew as a part of their travel information. In this context, information regarding the symptoms of COVID-19, the associated health risks especially for vulnerable groups, and the importance of preventive measures should be provided together with bookings. To support on board preventive measures, cruise lines may share details of recommended personal hygiene items to carry during their travel from home and during their time on board the ship (e.g. alcohol-based hand rub solution, PPE etc.).

Companies and travel agencies should inform travellers that they may be refused boarding if they have symptoms which are compatible with COVID-19, have had positive RT-PCR test results for SARS-CoV-2 or have been exposed to a COVID-19 confirmed case, as per the company's exclusion policy. The ticketing process should include information regarding the latest health and safety considerations, including those posed by COVID-19. During the ticketing process passengers should be informed about eligibility requirements.

Content of information and communication messages to crew and passengers

Before travelling, and, if applicable, regularly during the voyage, information should be provided to passengers and crew members (e.g. through electronic posters, recorded messages etc.). The information should include:

- boarding screening measures where applied;
- any requirements for COVID-19 testing prior to travel/embarkation;
- symptoms compatible with COVID-19, including sudden onset of at least one of the following: newly developed cough, fever, shortness of breath, sudden loss of taste/smell;
- likelihood of being denied boarding if they have developed symptoms or have been in contact during the last 14 days with a COVID-19 patient;
- advice on the risk of travelling for all individuals with chronic diseases (cardiovascular disease, diabetes, respiratory diseases) and immunocompromised individuals;
- recommendation for passengers over 65 years of age to consult with their medical care provider to obtain advice on their ability to travel;
- hygiene measures: hand washing with soap and water or hand hygiene with alcohol-based hand rub solution (containing at least 60% ethanol or 70% isopropanol), respiratory (coughing and sneezing) etiquette, disposal of used tissues, physical distancing (including the elimination of handshaking), use of face masks, avoiding touching the nose, eyes and mouth without previously washing hands (38) etc.;
- actions to take in case COVID-19 compatible symptoms develop;
- rules and health measures implemented on board cruise ships at the destination (e.g. physical distancing, use of face masks⁶ (medical mask if available or non-medical “community” mask), disembarkation);
- the need to immediately report to cruise ship crew if they develop respiratory symptoms during travel, including means of reporting to crew (e.g. providing dedicated number or location to contact), crew will then inform the designated officer for the contingency plan/outbreak management plan implementation;
- the need to self-isolate and seek immediate medical care (including how to seek medical care) if developing fever, cough, difficulty breathing, sudden loss of taste/smell, and to share previous travel history with the health care provider.

⁶ **Medical face mask (also known as surgical or procedure mask):** medical device covering the mouth, nose and chin ensuring a barrier that limits the transition of an infective agent between the hospital staff and the patient. They are used by healthcare workers to prevent large respiratory droplets and splashes from reaching the mouth and the nose of the wearer and help reduce and/or control at the source the spread of large respiratory droplets from the person wearing the face mask. Medical face mask comply with requirements defined in European Standard EN 14683:2014.

Non-medical face masks (or “community” masks): include various forms of self-made or commercial masks or face covers made of cloth, other textiles or other materials such as paper. They are not standardized and are not intended for use in healthcare settings or by healthcare professionals (European Centre for Disease Prevention and Control. Using face masks in the community. Stockholm: ECDC; 2020.) <https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-use-face-masks-community.pdf>

5.1.2. Contingency planning on board

Operators of cruise ships should have in place written contingency plan/outbreak management plans for the prevention and control of COVID-19 transmission on board the ship. For the implementation and execution of the written plan, one dedicated position/named individual/coordinator (e.g. a ship officer with alternate) or an outbreak management committee should be appointed, who will be designated in the written plan. It is good practice to have a dedicated Public Health Officer or medical person who will coordinate the execution of the company's infection prevention and control program. The contingency plan/outbreak management plan should include the following as applicable:

A. Preventive measures

- Physical distancing
- Personal hygiene rules
- PPE use
- Health monitoring of symptoms for cruise ship crew, and when applicable passengers through daily contactless temperature measurements and record keeping
- Procedures for responding to a -possible case (temporary isolation, arrangements for medical examination and laboratory testing)
- Standard Operating Procedures (SOP) for cleaning and disinfection covering all types of surfaces and materials, defining the disinfectants and the methods to be used
- SOP for laundry of linen and clothing
- SOP for cleaning and disinfection of body fluid spills in the environment
- Food safety management (e.g. dining and food service arrangements)
- Potable water safety management
- Recreational water safety management
- Ventilation of indoor areas
- Communication plan including reporting public health events to the competent authorities
- Data management of health and screening documents (e.g. Passenger/Crew Locator Forms, Maritime Declaration of Health)

B. Measures for response and management of a possible case COVID-19

- Isolation/quarantine plan of the possible case and their close contacts
- Collaboration with the national competent authorities for contact tracing, quarantine of contacts and isolation of cases
- Cleaning and disinfection procedures of contaminated spaces, objects and equipment (daily and final cleaning and disinfection)
- Communication strategy for informing the contacts of a confirmed COVID-19 case among the passengers/crew, retrospectively

5.1.3. Supplies and equipment

Adequate medical supplies and equipment should be available on board cruise ships to respond to a case or an outbreak. Adequate supplies of disinfectants and hand hygiene supplies should be carried on board cruise ships and also made available at the embarkation facilities. Supplies of PPE including gloves, long-sleeved impermeable gowns, goggles or face shields, medical face masks and filtering face-piece (FFP) respirators (prioritized for use during aerosol generating procedures) should also be carried on board. An adequate supply of RT-PCR diagnostic panel test kits and equipment for collecting specimens to be tested at ashore facilities or on board should be available.

Adequate supplies of PPE for use by passengers and crew should also be available (please see Annex 1).

Further recommendations for the type of PPE required according to the job position and the setting can be found here: <https://www.healthygateways.eu/Novel-coronavirus>

Further details about supplies specific to COVID-19 can be found at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance> (please see disease commodity package).

Additional medical crew should be considered to be available on board if required (e.g. based on passenger load/demographics etc.) in order to support surveillance, testing and case management.

6. Options for measures to prevent COVID-19 infectious travellers (passengers and crew) from boarding cruise ships

Pre-boarding screening aims at assessing the presence of symptoms and/or the exposure to COVID-19 cases of arriving travellers. Travellers identified as exposed to or potentially infected with COVID-19 will be quarantined or isolated and treated, respectively.

Pre-boarding screening can identify symptomatic travellers and those who truthfully declare their past exposure. Screening measures may not identify mild symptoms, asymptomatic, incubating travellers or those concealing symptoms (e.g. by using antipyretics) (52-54). Those travellers may not be detected and therefore may still board the ship.

Pre-boarding screening measures are generally conducted as a two-step process: primary screening and secondary screening (57, 58). Primary screening normally includes an initial assessment by personnel, who may not be public health or medically trained. This may include observing travellers for any signs of infectious disease and checking their body temperature. This can be supported by completion of a health screening questionnaire on the day of departure, asking about the presence of relevant symptoms and/or exposure to any COVID-19 cases. An example pre-boarding health declaration questionnaire is included in **Annex 2**. Where feasible, the use of electronic questionnaires is preferable to hard copy questionnaires, in order to help minimise crew contact. Requirements under the General

Data Protection Legislation ([GDPR](#)) must be followed for any personal data collected from individuals, in hard copy or electronically.

Travellers who have COVID-19 compatible signs or symptoms, or have been potentially exposed to SARS-CoV-2, should be referred to secondary screening. Secondary screening should be carried out by personnel with public health or medical training. It includes an in-depth interview, a focused medical (and if necessary laboratory) examination, and a second temperature measurement (56). Possible cases should not be allowed to embark, and a decision about allowing embarkation should be taken after considering the laboratory results, the symptoms and exposure. A standard policy should be implemented for denial of boarding to any exposed or symptomatic possible case among passengers and crew.

As an additional layer of measures applied, cruise lines could consider performing laboratory molecular testing for SARS-CoV-2 to all incoming passengers, ideally before boarding to start a cruise. When the laboratory results become available, and if positive results are found, then the contingency plan/outbreak management plan for management of cases available on board should be activated and implemented.

However, laboratory testing should not give a false sense of security, since it has several limitations: a) it cannot detect travellers with incubating infection, b) negative test results can be confounded by the stage of infection and the amount of viral RNA in clinical specimens collected, c) the diagnostic sensitivity is related with the characteristics of the RT-PCR or equivalent test, d) the sensitivity is related with quality/adequacy of specimen sampling and specimen transport and storage conditions before testing e) practicalities arising due to large number of specimens collected and the availability of laboratory tests.

Pooling of five samples from asymptomatic persons per pool before RNA extraction and RT-PCR amplification could be considered (according to guidance provided from international organizations) after proper validation in the laboratory. This can increase testing capacity with existing equipment. If there is a positive result from a pooled sample, then RT-PCR needs to be repeated for the individual samples within this pool, to identify the infected person(s), thus potentially substantially reducing the number of tests needed (51).

Testing passengers for antibodies as a condition for boarding ships is not supported by the current scientific knowledge. There are uncertainties about the immune response to SARS-CoV-2 (e.g. duration of human antibodies), as well as the performance of available specific antibody testing methods (laboratory based and point-of-care); therefore, antibody tests cannot be used at this point for inclusion or exclusion of passengers. However, passengers or crew members that have recently recovered from COVID-19 and the ECDC criteria for discharge have been met, may avoid measures such as RT-PCR test for SARS-CoV-2. ECDC guidance for discharge and ending isolation in the context of widespread community transmission of COVID-19 can be found here: <https://www.ecdc.europa.eu/sites/default/files/documents/covid-19-guidance-discharge-and-ending-isolation-first%20update.pdf>

7. Measures for preventing and limiting transmission of COVID-19 on board cruise ships

7.1. Health monitoring and laboratory testing

Routine on board health monitoring for all crew can help with early detection of symptomatic COVID-19 cases. Daily contactless temperature measurement and immediately reporting to supervisors of any mild or severe symptoms compatible with COVID-19 is of high importance. Any crew with a temperature at or above 38°C should immediately self-isolate, be provided with appropriate PPE and inform their designated supervisor/manager and medical crew. Salaries should continue to be paid in these cases. In the event of a possible COVID-19 case on board, the frequency of contactless temperature measurement of crew may be increased (e.g. to twice per day). However, body temperature measurement should be considered as an additional layer of measures applied, which has its own limitations: not all COVID-19 cases will have fever; incubating patients will not present with fever and fever can be masked with antipyretics.

Before resuming operations, cruise lines should perform laboratory molecular testing for SARS-CoV-2 to all crew members that are already on board the cruise ships, as well as to the incoming crew members (new employments or crew returning to the ship from home leave). If positive results are found, then the contingency plan/outbreak management plan for management of cases available on board should be activated and implemented, as described in the EU HEALTHY GATEWAYS advice “Advice for ship operators for preparedness and response to the outbreak of COVID-19” available here: <https://www.healthygateways.eu/Novel-coronavirus>.

In addition to this, periodic testing for SARS-CoV-2 can be conducted for all crew members at regular intervals (e.g. every two weeks) using the pool sample methods described in paragraph 6. This practice should be considered as an additional layer of measures applied, and should not create a false sense of security. Other control measures should be implemented in addition to laboratory testing (e.g. hand hygiene, physical distancing, PPE, cleaning and disinfection etc.).

Daily contactless temperature measures for all passengers may also be conducted to support early detection of symptomatic COVID-19 cases. Any passenger with a temperature at or above 38°C should immediately self-isolate, report symptoms to medical staff for further evaluation and be provided with appropriate PPE. In the event of a possible COVID-19 case on board, the frequency of contactless temperature measurement may be increased (e.g. to twice per day).

7.2. Protecting vulnerable groups

Efforts should be made to protect passengers and crew that belong to vulnerable groups (see paragraph 4.2). For example, crew belonging to vulnerable groups could be assigned responsibilities that have no direct interaction with passengers if this is feasible. If it is not feasible, advanced respiratory protection could be used for daily work activities.

Consideration should be given to passengers requiring assistance, and those with reduced mobility.

7.3. Limiting interaction

In order to limit interaction among passengers, among crew, and between crew and passengers, it may be possible to divide passengers and crew into cohorts with appropriate numbers of people. Each group could be given scheduled times for food service, embarking and disembarking and participating in some on board activities. If it is not possible to maintain separate cohorts/groups on board, cohorts/groups should be maintained for shore based activities. Interaction between each cohort should be avoided as much as possible. This will help in the management of any potential COVID-19 case and their contacts, and should help to limit the number of exposed persons, as well as tracing possible close contacts.

This is particularly important for crew members where physical distancing and interaction cannot be avoided in the work place.

In case cohorts cannot be guaranteed because of operational constraints, operators should implement ad hoc risk mitigation measures.

All crew designated to work with identified possible/confirmed COVID-19 cases should ideally have cabins in similar locations and dine together as a group, which minimises their traversal of the ship through common areas.

7.4. Physical distancing

Physical distancing of at least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) should be maintained at waiting areas and during boarding at transport stations, by adopting special markings and controlled entry measures. When physical distancing cannot be maintained, the use of face masks should be required.

Cruise ship crew could oversee the process and compliance with physical distancing measures. Operating procedures could be implemented to control the flow of passengers. Moreover, to decrease crowding and support physical distancing, outdoor spaces could be utilized for group events and procedures like muster drills could be staggered.

Special floor markings could be considered at all possible traveller congestion points, such as ticket offices, passenger services, bars, restaurants, shops, entertainment areas and shared toilets to ensure physical distance is maintained.

If appropriate physical distancing cannot be guaranteed, the use of protective transparent (e.g. glass or plastic) panels should be considered at places such as reception areas, at bars and restaurants.

Each port terminal should conduct an initial assessment and identify the areas where passengers and crew queue in order to implement measures ensuring physical distancing, including signage, audio announcements, floor markings, directional arrows for traveller flows and management by crew. This should include outdoor sunshades where travellers gather during the summer months to await boarding. During embarkation/disembarkation, several gangways should be used if possible to avoid crowding of passengers.

Where there are permanent non-moving seats either indoors or outdoors, there should be special markings on where a passenger is and is not allowed to sit, in order to maintain physical distance.

7.5. Personal hygiene measures

Good hand hygiene should be maintained, with frequent and thorough hand washing conducted by passengers and crew using soap and water. If hands are not visibly soiled, then alcohol-based hand rub solutions may be used (these should contain at least 60% ethanol or 70% isopropanol). The use of gloves should not replace good hand hygiene; gloves can provide a false sense of security.

Stations with alcohol-based hand rub solutions (containing at least 60% ethanol or 70% isopropanol) should be available at all entrances/gangways to the ship and in other areas such as crew/work areas, check-in areas, entertainment venues, casinos, bars and restaurants.

Cruise ship operators should provide information to passengers and cruise ship crew on hand hygiene related issues, and where necessary the appropriate facilities and equipment (59):

- Hand washing techniques (use of soap and water, rubbing hands for at least 20 seconds etc.)
- When hand washing is essential (frequent and meticulous hand washing must be performed and can be done for example before boarding and after disembarkation, after assisting an ill traveller or after contact with environmental surfaces they may have contaminated, prior to eating/drinking, after using restrooms etc.)
- When hand rubbing with an alcohol-based solution can be used, instead of hand washing and how this can be performed
- Respiratory etiquette during coughing and sneezing with disposable tissues or clothing
- Avoid touching with hands the eyes, nose or mouth
- Appropriate waste disposal
- Use of face masks (medical masks and non-medical 'community' masks)
- Avoiding close contact with people suffering from acute respiratory infections

7.6. Respiratory etiquette

Respiratory etiquette should be advised: the nose and mouth should be covered with disposable paper tissues when sneezing or coughing and then the tissue should be disposed

of immediately in a no touch bin, followed by meticulous hand hygiene using water and soap or an alcohol-based hand rub solution. It is important to have relevant supplies available in different areas around the cruise ship (e.g. tissues or paper towels and disposable gloves, no touch bins etc.). If disposable paper tissues are not available, coughing or sneezing into the elbow is recommended.

Information about respiratory etiquette should be provided to passengers via recorded communications, leaflets, infographics, electronic posters etc.

7.7. Preventing droplet transmission by the use of face masks

Face masks (medical masks, or if not available non-medical “community” masks) should be used at the terminal stations and on board cruise ships while indoors by cruise ship crew and passengers, as described in Annex 1. If the passenger does not arrive with their own face mask, face masks could be made available for passengers at the terminal. Additional PPE could be provided upon request on board the ship.

Information about the correct use of face masks should be provided to passengers via audio messages, leaflets, TV, infographics, websites or electronic posters etc. and at the terminal stations. Further advice for the use of face masks in the community is available in Annex 1 and from the following:

- ECDC: <https://www.ecdc.europa.eu/en/publications-data/using-face-masks-community-reducing-covid-19-transmission>
- WHO: [https://www.who.int/publications/i/item/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](https://www.who.int/publications/i/item/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)
- EU HEALTHY GATEWAYS joint action: <https://www.healthygateways.eu/Novel-coronavirus>

7.8. Adequate ventilation

The following recommendations are based on the ECDC guidance: “Heating, ventilation and air-conditioning systems in the context of COVID-19” (available here: <https://www.ecdc.europa.eu/en/publications-data/heating-ventilation-air-conditioning-systems-covid-19>) and on the REHVA guidance: “How to operate and use building services in order to prevent the spread of the coronavirus disease (COVID-19) virus (SARS-CoV-2) in workplaces”.

The ventilation of all occupied spaces of the ship should operate continuously; the ventilation rate should be such as to provide as much outside air as possible. The use of timers or CO2 detectors that control the ventilation rate (demand-control ventilation) should be avoided. The minimum required air changes per hour for each space on the ship should be respected, and if possible, the air changes per hour should be further increased in order to reduce the risk of transmission. When possible, direct air flow should be diverted from

groups of passengers. Exhaust fans of bathrooms should be functional and operate continuously.

All of the air handling units (AHUs) should be switched from recirculation to 100% outside air by closing the recirculation dampers (via the Building Management System or manually) whenever possible. In case it is not possible to completely stop the recirculation of the air, the ship should explore improving air filtration as much as possible and using HEPA filters or Ultraviolet Germicidal Irradiation (UVGI).

In case any of the AHUs have heat recovery equipment (such as enthalpy wheels or plate heat exchangers), they should be inspected in order to ensure that leakages between the supply and the exhaust air is avoided.

All maintenance works related to the HVAC system, including changing the central outdoor air and extract air filters should be conducted according to the usual maintenance schedule. Duct cleaning should be avoided during the COVID-19 pandemic. Regular filter replacement and maintenance work shall be performed with common protective measures including adequate PPE. The medical facilities as well as the designated isolation spaces, should be connected to separate AHU's. If aerosol-generating procedures are performed in the medical facilities of the ship, then the area should be under negative pressure and achieve at least 10 air changes per hour. The return air from the medical facilities and the isolation spaces should be either be HEPA-filtered or exhausted to the outside.

7.9. Cleaning and disinfection

Enhanced cleaning and disinfection should be implemented in accordance with the EU HEALTHY GATEWAYS guidance on "Suggested procedures for cleaning and disinfection of ships during the COVID-19 pandemic (Version 2 – 20/04/2020)" and with an increased frequency in shared public areas/facilities (dining rooms, entertainment venues etc.) and for surfaces that are frequently touched by crew and passengers (e.g. handrails, elevator buttons). Other items that are frequently touched in common areas such as magazines/brochures, should be removed and information provided in alternative ways, including through announcements, additional signage or directly to mobile devices. Special protocols for cleaning and disinfection should be implemented after a possible or confirmed COVID-19 case has been identified on board. There should be adequate PPE for the cleaning crew available on board (e.g. gloves, face masks, gowns).

EU HEALTHY GATEWAYS guidance produced on suggested procedures for cleaning and disinfection of ships during the pandemic of COVID-19 (VERSION 2 - 20/04/2020) can be found

here:

https://www.healthygateways.eu/Portals/0/plcdocs/EU_HEALTHY_GATEWAYS_COVID-19_Cleaning_Disinfection_ships_21_4_2020_F.pdf?ver=2020-04-21-154731-953

This document includes advice about specifications for the training of cleaning crew and use of PPE, information about the cleaning equipment and materials to be used, and a summary

of antimicrobial agents effective against coronaviruses. It further outlines suggested procedures for cleaning and disinfection for different areas of the ships.

7.10. Special considerations for cabins

Between check out and check in, all cabins should be thoroughly cleaned and adequately ventilated (for at least one hour after cleaning and disinfection, and before the next passengers enter). It is advised that any item that cannot be cleaned and disinfected between cabin occupancies should be removed from the cabin (e.g. shared multiple use items such as menus, magazines and other objects that cannot be disinfected, coffee or tea packaging, mini bar products etc.).

Moreover, it is recommended to remove coffee machines, kettles, and all mini bar products from the cabin, unless these products are offered from a dispenser or can be disinfected between occupancies. It is preferable that the above devices or mini bar products be made available upon a passenger's request, so that their disinfection is ensured. The mini bar can be used as a refrigerator by passengers and should be disinfected after each check out.

A disposable cover should be placed on the TV and the air-conditioning remote controls to facilitate proper disinfection, unless these items can be easily and adequately cleaned and disinfected.

All types of surfaces and materials which may be touched, including textile surfaces (e.g. sofas, cushions, rugs, furniture, wallpaper) should be cleaned between occupancies.

During occupancy of a cabin by the same passenger/passengers, clothing and towels should be changed upon a passenger's request or routinely, but it is recommended that routine changes are made less frequent than normal (e.g. avoid changing of towels twice daily).

For natural ventilation of spaces, doors and windows (if applicable) should be opened daily.

It is recommended that individual alcohol-based hand rub solutions are placed in each cabin, which passengers can carry with them when moving outside of the cabin.

Specific advice for cleaning and disinfection of affected cabins is given in the EU HEALTHY GATEWAYS guidance on suggested procedures for cleaning and disinfection of ships during the pandemic of COVID-19 (VERSION 2 - 20/04/2020), available here: https://www.healthygateways.eu/Portals/0/plcdocs/EU_HEALTHY_GATEWAYS_COVID-19_Cleaning_Disinfection_ships_21_4_2020_F.pdf?ver=2020-04-21-154731-953.

7.11. Food safety rules

Food hygiene rules must be strictly followed as described in the "[European Manual for Hygiene Standards and Communicable Disease Surveillance on passenger ships](http://www.shipsan.eu/Home/EuropeanManual.aspx)" available here: <http://www.shipsan.eu/Home/EuropeanManual.aspx>. The additional special provisions for preventing COVID-19 in food service areas and food operations should be

described in a written plan, and crew should be trained on the procedures based on their specific duties.

During food loading and storage, precautions such as physical distancing, use of PPE and hand hygiene should be applied. Crew should be reminded to avoid contact with potentially contaminated items/surfaces (e.g. packaging, invoices, products, equipment) and then touch their face, nose, mouth etc. Where necessary, external packaging may be disinfected or removed to avoid any potential contamination of environmental surfaces on board the ship food areas.

It is recommended that self-service food operations are avoided, and if this is not feasible, these facilities can operate only if additional specific hygiene management precautions are implemented as described in the following paragraphs. It is preferable that food is delivered by crew to passengers in closed packages or wrapped when it is delivered.

Disposable salt, pepper and other relevant containers should be used unless these containers can be disinfected between uses. Cutlery, plates, trays, napkins, soft drinks, straws etc. should be handed by crew to the passengers; the passengers should not collect these items themselves.

Physical distance should be maintained by travellers at all food service areas, including à la carte restaurants, specialty restaurants, service areas/breakfast areas, indoor and outdoor bars etc. It is recommended to limit food service provided in public areas of the ship. It is also recommended that only persons staying in the same cabin and/or persons from the same household or same travelling unit dine at the same table. A distance of 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) between chairs of different tables should be maintained.

It is also recommended that crew and passengers are divided into cohorts (designated groups) and are served food at different times to limit interactions. In addition, limiting seating capacities in dining areas or using reservations to control passenger crowds could be implemented. The duration that restaurants are open could be extended to allow the rotating attendance of passengers in cohorts. The frequency of food service could also be increased to limit crowding and ensure physical distancing is maintained.

Special care should be taken to keep physical distances of 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) among crew working in the galley or other food areas.

Any person entering/working in the galley should wash their hands and wear a face mask (see Annex 1). Only food handlers should be allowed to enter the galley. In case visitors (e.g. maintenance staff) must enter the galley, they should perform hand hygiene and be provided with the appropriate PPE (medical mask, hair covering, apron etc.), which will be available at the entrance of the galley.

Passengers should disinfect their hands (with an alcohol-based hand rub solution) upon entering and exiting the food service areas. Crew members could be present to monitor passenger compliance, especially during peak service times.

Towels, tablecloths and utensils should be washed even if they have not been used. Restaurant linen should always be changed between passengers.

If it is not possible to avoid buffet service (especially in the crew food service area), then the following precautions should be used:

- If hand washing stations are not available, at the entrance of the buffet area passengers and crew should be provided with an alcohol-based hand rub solution, and crew should ensure that passengers or crew disinfect their hands.
- The required physical distance should be maintained at all times in the service area.
- Suitable protection (e.g. sneeze guards/transparent dividers) should be installed between passengers/crew who will be served and the food, in order for the food to be completely protected from all sides (except the side where the crew member can serve food).
- Only the designated crew should be allowed to serve food. Crew serving food should wear appropriate PPE (face masks, disposable gloves) and should follow strict hygiene rules. Under no circumstances should crew or passengers who will be served food use any commonly shared utensils or other items. These should be removed from the service so that only a designated crew can distribute them.
- Self-service of dispensed items, plates, cutlery, utensils by passengers or crew should not be allowed. Food handlers should serve any dispensed items (for example water, coffee, juice etc.). Food handlers should wear appropriate PPE (face masks, disposable gloves) and follow strict hygiene rules.

Individual dining options, including room service, are recommended to provide food to passengers' cabins, in order to avoid overcrowding in restaurants and other food service areas. Room service crew should maintain appropriate physical distancing and use PPE. All normal food hygiene standards and precautions should be followed during the transport of food on board. Particular care should be taken with the safe collection and warewashing of room service items and utensils that have been used by passengers.

Crew providing individual dining options, including room service, should endeavour to maintain physical distance and use PPE. It is preferable that crew not enter the cabin, but rather deliver food to the door. Likewise, used plates and utensils should be collected by crew from outside the door.

7.12. Reducing face-to-face interactions

On-line bookings, orders and purchases should be encouraged, as well as the use of contactless cards for payments. Forms that need to be completed may be made available on-line for electronic completion.

Where face-to-face interaction without physical distancing between crew and passengers cannot be avoided, then protective screens or barriers may be used instead, where feasible.

7.13. Special considerations at reception

Reception staff should be able to provide passengers with details about the on board communicable disease controls and policies, as well as measures that have been taken to address possible cases of COVID-19 on board. Furthermore, reception staff should inform passengers how to get medical advice on board, and may also be able to provide PPE when requested.

It is recommended that written information, videos or electronic posters are made available to provide basic health instructions translated into English, and other languages based on the most common language(s) spoken by passengers and crew members on board. In addition where feasible, health advice may be provided through a mobile phone application.

Special equipment should be available (e.g. disposable gloves, face masks, and alcohol-based hand rub solutions) in the event that a possible case is identified, or if a passenger seeks help at reception.

Reception staff should be able to recognize the signs and symptoms of COVID-19 and report any issues directly to medical staff.

The use of a sneeze guard/transparent screen at the reception and other service and information points is recommended.

Alcohol-based hand rub solutions should be available for use by passengers at the reception desk. Crew should also monitor and encourage compliance with good hand hygiene in this area.

Regular cleaning and disinfection of reception desks/counters is recommended. Key cards should be disinfected (see paragraph 7.9).

In order to maintain appropriate physical distancing, the cruise ship should configure the reception desk, add deck markings at distances of at least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) where passengers will stand/proper distance marking in the waiting area, properly arrange furniture and manage the queue to reduce waiting times and avoid crowding. Overcrowding during check-in and check-out should be avoided and physical distances should be maintained.

It is recommended to use electronic alternatives for check-in and check-out (e.g. mobile concierge or use of electronic devices that can be disinfected after each use). The possibility of using an outdoor based check-in may also be considered. It is recommended that passenger expenses are paid electronically where possible (cash should be accepted only in exceptional cases) and that bills, invoices and receipts are sent electronically, as well.

7.14. Nursery and play areas for children

It is preferable to operate the outdoor children's play areas only or maximise their use. If this is not possible, the number of children using the indoor areas should be reduced to levels which help staff maintain physical distancing. The areas should be cleaned and disinfected according to the protocol on board and as required in the European Manual for Hygiene Standards and Communicable Disease Surveillance on Passenger Ships (available here: <http://www.shipsan.eu/Home/EuropeanManual.aspx>).

The number of children in the outdoor children's play areas/playgrounds may also be limited at one time. Consideration may be given to cohorting groups of children for the duration of the voyage. The child centre staff should monitor children for any signs or symptoms compatible with COVID-19, and the child exclusion policy should include possible COVID-19 cases. Child activities should be limited to those where physical distancing measures can be adhered to.

7.15. Entertainment venues

Overcrowding should be prevented in these areas (e.g. theatres) to maintain appropriate physical distancing, and the frequency of entertainment events may be increased to reduce numbers. The maximum allowable capacity of venues should be defined so that physical distancing of at least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) is maintained.

Alcohol-based hand rub solutions should be made available to passengers at the entrance of entertainment venues, with crew members monitoring compliance of hand hygiene. Additional alcohol-based hand rub solution equipment (e.g. dispensers) may also be provided in entertainment venues. It is recommended that facilities are cleaned and disinfected after each use.

7.16. Casinos

Physical distancing of least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) should be applied in all casino areas. Face masks should be worn as described in Annex 1.

Casino layouts should be reviewed so that physical distancing of least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) is respected and the maximum capacity of passengers allowed to enter the casino area should be determined to avoid overcrowding. At gaming tables, the number of players per table should also be estimated and defined to help ensure physical distancing measures are maintained.

Staff should supervise all casino areas to ensure that the capacity limits and all other measures are respected.

Floor markings should be placed in the entrance to the casino area to ensure physical distancing measures are respected in case lines or queues form, and if necessary seats may be removed or taken out of use from slot and electronic gaming machines, and from gaming tables where they are closer together than 1.5 metres.

Appropriate signage should be displayed at the entrance of the casino area informing passengers of the maximum capacity limits in the casino, advising them to apply regularly alcohol-based hand rub solutions, not to touch their face and to respect physical distancing measures.

Slot and electronic gaming machines and gaming tables should be positioned so as to maintain the physical distancing measures between passengers. Physical distancing at slot and electronic gaming machines and at gaming tables may be achieved by relocating the machines or tables, removing chairs, by disabling some slot and electronic gaming machines to create appropriate distances between them and by adding protective screens.

Staff should ensure that passengers do not congregate around slot and electronic gaming machines and around gaming tables.

It is recommended that food service is suspended in the casino area.

Alcohol-based hand rub solutions should be placed at the casino entrances and passengers should be advised to use them when entering and exiting the area as well as throughout the casino area.

Cleaning and disinfection should follow routine procedures, but with an increased frequency in the casino area.

Slot and electronic gaming machines should be cleaned and disinfected between use. This should be done by staff where possible. Additionally, passengers may be provided with disinfectant wipes or solutions to wipe frequently touched hand contact surfaces.

7.17. Hairdressers, beauty salons, gyms and shared facilities

This paragraph applies to the following services and facilities: massage services, beauty salons, hairdressers, gyms, saunas, Hammams and spas. Hygiene rules on those facilities must be strictly followed as described in the "[European Manual for Hygiene Standards and Communicable Disease Surveillance on passenger ships](http://www.shipsan.eu/Home/EuropeanManual.aspx)" available here <http://www.shipsan.eu/Home/EuropeanManual.aspx>.

All public spaces (e.g. reception spa, hairdresser, near public toilets) should have hand rub alcohol-based solution for the passengers.

Where possible, the installation of sneeze guards/transparent screens or dividers at the spa's and the hairdressers' reception is recommended. Crew and passengers should wear appropriate PPE as described in Annex 1.

The operator should prevent overcrowding of the shared facilities.

Crew should advise passengers to immediately stop using shared facilities if they start to feel unwell and report this to staff working in these areas.

In the gym/fitness centre the following precautions are recommended:

- a record of any persons using the gym should be maintained,
- hand washing or disinfection using alcohol-based hand rubs should be required when entering and leaving the gym,
- machines should be positioned so as to ensure physical distancing of at least 2 metres,
- all touched surfaces of equipment should be disinfected after each use.

If classes are scheduled, it is advised to use same groups as far as possible and allow time for ventilation of the room (at least 30 minutes between classes).

7.18. Potable water

In case the potable water system of the cruise ship has not been operated as per the European Manual standards, or the cruise ship was in dry dock for more than a month, the steps described in “ESGLI Guidance for managing Legionella in building water systems during the COVID-19 pandemic” should be followed.

7.19. Sewage and grey water

The ship should have standard well-maintained plumbing, such as sealed bathroom drains, and backflow valves on sprayers and faucets to prevent aerosolized faecal matter from entering the plumbing or ventilation system.

Deck drains sanitary devices connected to the black water should always operate correctly and their water seals should not be left to dry out. In case the sanitary devices connected to them are not operated for long periods, water should be added to them in order for the water seal to work correctly. Water should be added regularly and dependent on the climate (e.g. every three weeks). The black water holding tanks should vent to the outside of the ships and ensure vented gases do not enter the ship through any air intakes. The vents of the black water holding tank should be located outside of the ship and away from air intake points of the ventilation system.

7.20. Recreational water facilities

The operation of indoor swimming pools is not recommended. However, the operation of indoor swimming pool venues that can be converted as outdoor after lifting/removing

walls/roofs facilities with natural ventilation could be allowed.

The showers for the outdoor recreational water facilities should be separated, in order to ensure bather's privacy and to facilitate the efficient showering of the bathers before they enter the pool. Bathers should be strongly advised to shower before entering the pools and there should be relevant signs informing them to do so. The cruise ship should provide all necessary items for showering (e.g. soap, shower gel, etc.). Additionally, the entrances of showers should be equipped with hand rub alcohol-based solutions.

Positioning of seats (sunbeds, chairs, poufs, lounge chairs, etc.) should be such that the distance between the edges of the seats of two passengers from different umbrellas or two passengers from different rooms is at least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) in any direction.

It is recommended that the seats, tables, small safes, call buttons for the waiters and menus, are made, or covered with, materials that are suitable for cleaning and disinfection.

After the change of passengers, the seats, tables, small safes, call buttons for the waiters and menus should be disinfected.

It is recommended that the facility provides towels or other washable coverings that can cover the entire surface of the seat and that the seats are disinfected after each use. It is recommended that the textile surfaces of the sunbeds are removed.

It is recommended that bathers are separated by a schedule or if possible, by different facilities for swimming and service for different groups.

The maximum allowable number of bathers at any time in the swimming pools should be one bather per 4 m² of water surface, regardless of the depth of the pool. Small hot tubs (with depth less than 1 m and tub volume less than 6 m³) should be used only by bathers of the same household or by bathers staying in the same cabin at a time. For larger spa/hydrotherapy pools (with depth more than 1 m and tub volume more than 6 m³), the maximum bather load is one person per 20 L per minute of recirculation flow (as per the European Manual); in any case, the total number of co-bathers should not exceed one bather per 4 m² of water surface.

7.21. Decorative fountains

The standards of the European Manual for Hygiene Standards and Communicable Diseases Surveillance on Passenger Ships (<http://www.shipsan.eu/Home/EuropeanManual.aspx>) for decorative fountains should be applied. In case the fountain remained out of operation for more than a month, the steps described in "ESGLI Guidance for managing Legionella in building water systems during the COVID-19 pandemic" should be followed.

7.22. Commercial stores inside the accommodation facility

Physical distancing, electronic payments, cleaning and disinfection should be followed in

commercial stores on board cruise ships. Clothes and other items should not be tried on (unless they can be laundered or disinfected afterwards) and shoppers should be encouraged not to handle items on display.

7.23. Other public spaces (indoor and outdoor)

Passengers should be advised to avoid the use of the elevators. It is recommended that the maximum capacity of elevators should be revised and reduced based on the physical distancing guidance. Moreover, it can be recommended that persons use face masks when using elevators as described in Annex 1. Hand rub alcohol-based solution should be placed at elevator entrances and crew should advise passengers to use upon entering and exiting the area. The elevators should be regularly cleaned and attention should be paid to frequently touched surfaces (buttons, knobs etc.).

To help ensure physical distancing, other precautions such as floor markings, placement of cones etc. may be implemented.

Other public spaces should be supplied with hand rub alcohol-based solution stations.

Furniture should be arranged in such a way to help avoid overcrowding in shared spaces (4 persons/10 m²).

The use of business centres may be suspended or the operation changed to provide services to clients to avoid 'self-service'. Alternatively, access to Wi-Fi, printing services or other business centre services may be completed remotely using mobile phone apps etc.

Public toilet use should be managed to try to avoid any overcrowding. Passengers should be advised to flush the toilets with the lid closed to help prevent possible transmission through aerosolised faeces.

7.24. Interface between ship and shore-based personnel

To protect both crew and shore-based personnel who temporarily board the ship, precautions should be taken to minimize exposure risks to both. Where it is necessary for shore-based personnel to come on board, only the minimum number of personnel required should be allowed to embark. Furthermore, everyone who comes on board should observe hygiene protocols, screening measures and the use of appropriate PPE where necessary (see Annex 1).

7.25. Port visits, shore based activities and excursions

Alcohol-based hand rub solutions should be made available at gangway exits, and all persons who disembark and re-embark the cruise ship should be requested to use them. Upon re-boarding of the cruise ship health screening assessing the presence of COVID-19 symptoms or other relevant illnesses and contactless temperature measurements may be conducted.

Shore excursion/tour staff should be trained in the procedures to be followed if possible cases are identified. Symptomatic passengers should immediately wear a medical face mask and be transferred to an isolation or medical area for evaluation. All close contacts of potential cases should also be identified.

EU MS, cruise lines and terminal operators at destinations should ensure that appropriate measures are implemented to reduce overcrowding and maintain appropriate physical distancing when passengers disembark and re-board the ship.

Cruise lines should check that external excursion and tour providers offer similar precautions as on board, including physical distancing measures, use of PPE, and cleaning and disinfection protocols, while also following any local health regulations. Any external provider who interacts with passengers (such as tour guides) should follow cruise line protocols (e.g. for health screening). If tender boats or other means of transport are used to move passengers, physical distancing measures and protocols for frequent cleaning and disinfection should be implemented in line with on board procedures. Cleaning and disinfection of frequently touched surfaces of transport, including tender boats, should be conducted between each use.

While travelling in groups, it should be ensured that passenger groups maintain physical distance from other tour groups.

Cruise lines may consider making available appropriate PPE (e.g. face masks) to passengers on excursions and should refrain from organising visits to crowded areas during the pandemic.

8. Managing COVID-19 cases on board cruise ships and at terminal stations

8.1. Management of a possible case

Following a preliminary medical examination, if the ship's designated officer determines that there is a possible case of COVID-19 on board⁷, the patient should be isolated in an isolation ward, cabin, room or quarters and infection control measures continued until they are disembarked and transferred to a hospital ashore. Cruise lines should designate single cabins to be used specifically for isolation of cases on board. The designated cabins should be located near the ship's medical facility for ease of accessibility by crew and if possible, have windows to promote appropriate air exchange. Contact with patients in isolation should be restricted to only those necessary, and crew in contact with the isolated patient (e.g. medical personnel) should wear appropriate PPE.

Further advice, including the definition of a possible case, management of possible cases and use of the Passenger/Crew Locator Forms (PLFs) can be found in the EU HEALTHY GATEWAYS Interim advice for ship operators for preparedness and response to the outbreak of COVID-19, available at: <https://www.healthygateways.eu/Novel-coronavirus>

Surveillance for influenza like illness (ILI) should integrate COVID-19 surveillance, as symptoms compatible with COVID-19 include those for ILI (as currently cruise ships will be implementing measures for early detection of COVID-19 possible cases)⁸.

⁷ ECDC, Case definition for coronavirus disease 2019 (COVID-19), as of 29 May 2020 <https://www.ecdc.europa.eu/en/covid-19/surveillance/case-definition>

⁸ <https://www.ecdc.europa.eu/en/publications-data/strategies-surveillance-covid-19>

Depending on the assessment of the COVID-19 event on board, it may be necessary to shorten or terminate the cruise as described in the EU HEALTHY GATEWAYS “Advice for ship operators for preparedness and response to the outbreak of COVID-19” document, which can be downloaded here:

https://www.healthygateways.eu/Portals/0/plcdocs/EU_HEALTHY_GATEWAYS_COVID-19_MARITIME_20_2_2020_FINAL.pdf?ver=2020-02-21-123842-480

When a possible case of COVID-19 is detected, laboratory testing should be performed according to the instructions provided by ECDC (<https://www.ecdc.europa.eu/en/novel-coronavirus/laboratory-support>).

Negative results do not rule out the possibility of a COVID-19 virus infection. A number of factors could lead to a negative result in an infected individual, including:

- Poor quality of the specimen, containing little patient material (as a control, consider determining whether there is adequate human DNA in the sample by including a human target in the PCR testing);
- When the specimen was collected late or very early in the infection;
- If the specimen was not handled or shipped appropriately;
- Technical reasons inherent in the test, e.g. virus mutation or PCR inhibition.

If a negative result is obtained from a patient with a high index of suspicion for COVID-19 virus infection, particularly when only upper respiratory tract specimens were collected, additional specimens, including from the lower respiratory tract if possible (hospitalized in ashore facilities), should be collected and tested.

Each Nucleic-acid Amplification Test (NAAT) run should include both external and internal controls, and laboratories are encouraged to participate in external quality assessment schemes when they become available. It is also recommended to laboratories that order their own primers and probes to perform entry testing/validation on functionality and potential contaminants.

When it has been confirmed that the specimen collection and the testing for COVID-19 has been performed correctly, and as soon as the repeated results are negative for COVID-19 according to the criteria by ECDC, then the case should be tested for influenza virus by means of viral detection through PCR techniques, not relying on rapid diagnostic tests. In the patient is positive for influenza, then the “Guidelines for the prevention and control of influenza-like illness on passenger ship” of the European Manual should be followed for the case management.

8.2. Management of contacts

Cruise lines should designate single cabins to be used specifically for quarantine of close contacts on board. Children should be quarantined in the cabin with one of their parents and similar consideration given to supporting those with special needs. The designated cabins should be located near the ship’s medical facility for ease of accessibility by crew, and if possible have windows to promote appropriate air exchange.

Management of contacts should be in accordance with the national policies of the port of disembarkation and as detailed in the contingency plan/outbreak management plans of the cruise ship and the port. Advice for management of contacts and use of the Passenger/Crew Locator Forms (PLFs) in **Annex 3** can be found in the EU HEALTHY GATEWAYS Interim advice for ship operators for preparedness and response to the outbreak of COVID-19, available at: <https://www.healthygateways.eu/Novel-coronavirus>

8.3. Embarkation/disembarkation

As soon as a possible case is detected on board and for the duration of the journey until arrival at the final destination, a risk assessment of the event should be conducted (in cooperation of the port health authority and the ship officers) in order to decide if new passengers should not be allowed to board at intermediate destinations.

The competent authorities at the next port or destination will provide advice on the management of the possible case and their contacts.

8.4. Reporting

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 possible case of COVID-19²¹.

For ships on international voyage, the MDH must 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 the 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 contact the competent authority at the next port of call regarding the possible case, to determine if the necessary capacity for transportation, isolation, laboratory diagnosis and care of the possible 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 possible 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 possible case/cases on board the ship.

9. Responding to COVID-19 events retrospectively

Contact tracing is one of the most important public health activities in the response to the COVID-19 pandemic, and is extremely important in this adjustment phase.^{9,10} It is

⁹ ECDC, Contact tracing: Public health management of persons, including healthcare workers, having had contact with COVID-19 cases in the European Union - second update at: <https://www.ecdc.europa.eu/en/covid-19-contact-tracing-public-health-management>

¹⁰ ECDC, Mobile applications in support of contact tracing for COVID-19 - A guidance for EU EEA Member States at: <https://www.ecdc.europa.eu/en/publications-data/covid-19-mobile-applications-support-contact-tracing>

recommended to use Passenger/Crew Locator Forms to ensure that contact information of passengers and crew is available, in order to facilitate contact tracing if a case of COVID-19 is detected. Contact tracing will be conducted as instructed by the competent public health authority.

Passenger/Crew Locator Forms could be disseminated before boarding or during boarding and collected by cruise ship crew prior to disembarkation. Electronic completion of Passenger/Crew Locator Forms before boarding could be used in the future. If the company collects and keeps all information exactly as it is described in **Annex 3** “Passenger/Crew Locator Forms (PLFs)”, then it will not be necessary to complete the PLF, provided that this information can be extracted and sent to the competent health authority in accordance with local rules.

Annex 3 provides details of the Passenger/Crew Locator Forms for cruise ships, which are also available from the EU HEALTHY GATEWAYS joint action website here: <https://www.healthygateways.eu/Translated-Passenger-Locator-Forms>.

It is suggested that the Passenger/Crew Locator Forms for ships also be completed by all crew members who disembark and are on rotation.

Other means of contact tracing to identify and inform passengers of possible exposure may be employed by cruise lines, such as investigations by response teams, analysis of ship’s CCTV, use of mobile contact tracing applications and analysis of passenger key card usage.

10. Considerations for cruise terminals

10.1. Physical distancing

Physical distancing of at least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) should be maintained in combination with the use of face masks in all internal and external areas of the terminal.

Competent authorities in EUMS and/or terminal operators may consider only allowing passengers, crew and other shore-based/terminal personnel, workers and contractors to enter indoor cruise facilities, in order to avoid overcrowding and maintain the physical distancing measures.

The use of floor markers to ensure spacing, arrows to indicate directional flow, signage and audio announcements for travellers and optimizing layouts so as to restrict number of indoor cruise terminal users should be considered.

Dedicated lanes or separation of different user flows and dividing of terminals into designated zones (e.g. arrival, screening, post-screening) through which travellers must pass through for arrival, any screening/testing and document processing (before being cleared for boarding and embarkation) may be considered.

Check-in, disembarkation, luggage handling, passenger queuing (inside and outside the terminal), and provision handling should be adjusted to reduce overcrowding and maintain

physical distancing. Work and break schedules of crew who work in the terminal should be reviewed and adjusted to avoid overlap of crew.

For the protection of cruise terminal staff and ship crew, the use of protective glass or plastic panels and provisions of appropriate PPE should be considered at locations where physical distancing cannot be maintained.

Cruise terminal operators should consider removing facilities at the terminal that encourage crowding e.g. tables, benches etc. Where there are permanent, non-moving seats either indoors or outdoors, there should be a special marking on where a passenger is and is not allowed to sit in order to maintain physical distance. When conditions allow, terminal users should be encouraged to use outdoor spaces. Health promotion information material should be prominently displayed and provided to incoming and outgoing passengers.

In public toilets, the minimum number of users should be managed to maintain physical distancing of 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) between users (or otherwise in accordance with national policy).

Digital methods should be used for as many processes as possible at the terminal, such as on-line purchasing, issuing of boarding passes, automatic passport and ID scanners, in order to help reduce the time that passengers spend in the terminal and to avoid congestion.

Terminal operators may consider limiting the number of taxis, coaches, buses present on the terminal to control/limit overcrowding in waiting areas.

Where physical distancing is more challenging to maintain, additional safeguards and measures to ensure equivalent levels of protection should be used.

Designated terminal personnel should oversee the process and compliance with the physical distancing measures.

10.2. Preventing droplet transmission by the use of face masks

Competent authorities should consider advising passengers and other users of the cruise terminal, who are not ill or showing symptoms compatible with COVID-19 to wear a face mask, taking into consideration their national epidemiological aspects and the international spread of disease. In countries that have chosen to implement face mask or PPE policies, this should be communicated at the time of the ticket booking. Adequate PPE should be provided and distributed to all terminal staff, along with instructions for their proper use.

10.3. Respiratory etiquette

Good respiratory etiquette should be encouraged in terminals: the nose and mouth should be covered with disposable paper tissue when sneezing or coughing and then the tissue should be disposed of immediately in a no touch bin, and meticulous hand hygiene should be performed by using water and soap or an alcohol-based hand rub solution. It is important

to have relevant supplies available in different areas around the terminal (e.g. disposable tissues or paper towels and disposable gloves, no touch bins etc.). If disposable paper tissues are not available, coughing or sneezing into the elbow is recommended. Information about good respiratory etiquette should be provided to users of the terminal via announcements, TV, screens, leaflets, infographics, electronic posters etc.

10.4. Hand hygiene

Good hand hygiene should be encouraged by all terminal users. This may be achieved by hand washing using soap and water, or where hands are not visibly soiled, an alternative alcohol-based hand rub solution may be used. The use of gloves does not replace hand hygiene. Stations with alcohol-based hand-rub solutions (containing at least 60% ethanol or 70% isopropanol) should be available at all entrances of the terminal and other areas such as toilets, counters, terminal zones and at embarkation etc. Designated terminal personnel may oversee the process and help encourage compliance with hand hygiene requirements.

10.5. Cleaning and disinfection

Cleaning and disinfection should take place in accordance with routine procedures and with an increased frequency for surfaces that are frequently touched by terminal staff and users.. Cleaning of and disinfection of the terminal should be conducted before and after each embarkation. Cleaning and disinfection should follow the same protocols to those used on board cruise ships as described in paragraph 7.9. Special protocols for cleaning and disinfection should be available and implemented after a possible or confirmed case has been identified, either at the terminal or on board a ship, if they used the terminal facilities.

10.6. Ventilation

Indoor areas at cruise terminals should be adequately ventilated. Natural ventilation is preferable where possible. In case of mechanical ventilation, the number of air exchanges per hour should be maximised together with the fresh air supply as much as possible. However, draughts should be avoided since these could create a risk of spreading any aerosolized droplets further.

10.7. Health monitoring of terminal staff

Terminal staff should practice frequent hand hygiene and wear appropriate PPE based on their specific work duties. It is recommended that terminal staff follow the same screening protocols as travellers for entry to the terminal. Laboratory testing for COVID-19 of terminal workers could be conducted on a regular basis.

10.8. Management of possible cases and their contacts at the cruise terminal

Once a possible case is detected a contingency plan/outbreak management plan should be activated.

The possible case should be asked to wear a medical face mask as soon as they are identified.

An appropriate isolation space/room should be designated for isolating possible cases of COVID-19. The isolation room should be equipped with appropriate supplies (medical face mask, tissues and appropriate waste disposal bins etc.). The door should be kept closed at all times and entrance should be restricted only to personnel trained for responding to possible cases of COVID-19.

As soon as a possible case is detected, the public health competent authorities should be informed immediately in order to conduct any preliminary interviews and to manage the possible case and close contacts in accordance with the national protocols.

10.9. Baggage handling

Baggage handlers should perform frequent hand hygiene. Gloves are not required unless used for protection against mechanical hazards. Disinfection of luggage and especially the hand contact parts may be considered before loading luggage on board.

Annexes

Annex 1: Overview of suggested personal protective equipment (PPE) on cruise ships

This annex provides an overview of recommended PPE to be used on board cruise ships in the context of lifting restrictive measures in response to the COVID-19 pandemic. The following tables list recommended PPE for crew members and passengers based on specific settings, situations and levels of interaction with others on board.

Cruise ships are workplace settings for crew members employed on board. Specific measures can be implemented in these settings in the context of COVID-19 as operations gradually restart, to prevent and minimize the risk of virus transmission and protect the health of both crew members and passengers. Personal protective measures and environmental measures should be implemented together in workplaces, in this case on board cruise ships (60).

Examples of measures that can be applied in all workplace settings include (61, 62):

- Encouragement of frequent and proper hand hygiene by all crew members and passengers
- Promotion of proper respiratory etiquette and ensuring medical face masks are available in case a crew member or passenger develops symptoms compatible with COVID-19
- For use of face masks to prevent droplet transmission, providing information on proper face mask use (e.g. how to wear, remove and dispose of)
- Encouragement of physical distancing of at least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call). If physical distancing cannot be maintained, additional mitigation measures can be implemented to limit contact/interaction between crew members and between crew members and passengers (e.g. sneeze guards/transparent dividers or staggering of workspaces to provide separation)
- Ensuring cleaning and disinfection of surfaces and objects according to routine procedures and with increased frequency in the areas and on surfaces that are touched frequently by crew members and passengers
- Education, training and risk communication on personal protective measures and environmental measures
- Ensuring appropriate ventilation of closed environments

General considerations for use of face masks (including non-medical “community” masks)

- It is important that face masks fit against the face snugly but comfortably, entirely covering an individual’s face from their nose to their chin.
- Non-medical cloth coverings should include several layers of fabric while allowing the wearer to breathe comfortably without restriction.
- Proper wearing (donning) and removing (doffing) procedures/best practices for face masks should be followed. Face masks (including cloth coverings) should be secured with ties or ear loops. Face masks should be removed from behind and the wearer should be careful to avoid touching the mask (front side) or their mouth/nose/eyes.
- Perform frequent hand hygiene with an alcohol-based rub or soap and water, including before wearing and after removing a face mask. Hand hygiene must be performed immediately after removing the mask and disposing of it.

- A face mask should be changed whenever it gets moist.
- Ensure safe disposal of disposable face masks (e.g. in a closed bin or in a closed bag) and perform hand hygiene immediately after disposal.
- Reusable face masks should be laundered after each use, as soon as possible, using common detergent at 60°C. It is important that laundering face masks does not change the fit or damage the face mask.
- Maintain a distance of at least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) from others at all times as far as practicable.
- Face masks should not be worn by children under the age of 2 years, individuals with breathing difficulties or those who are unconscious or unable to remove a mask on their own.

Advice for the use of face masks by passengers and crew

In situations where no interaction between crew members will occur, there is no need for the use of a face mask. Specific situations as outlined in **Table 1** include when crew members are working on their own or at times when they are alone in their cabin. In these situations, crew members should still observe proper and frequent hand hygiene (e.g. washing hands with soap and water or with an alcohol-based hand rub solution).

Table 1: Crew - no interaction

WHO	WHEN	WHAT
Crew members	<ul style="list-style-type: none"> • Working independently (no contact with other crew members) • Located in their own individual cabin on board 	No PPE recommended
		Perform frequent hand hygiene

When there is interaction among crew members (settings or situations where crew members work together), there is no need for the use of a face mask as long as physical distancing of at least 1.5 metres (or otherwise as per national/local health authority requirements of the home port or the port of call) between crew members can be maintained at all times.

In the event that physical distancing measures between crew members cannot be maintained, crew are recommended to use a face mask (please see **Table 2** below).

Crew members should also observe proper and frequent hand hygiene (e.g. washing hands with soap and water or with an alcohol-based hand rub solution).

Table 2: Crew - interaction with other crew¹¹

WHO	WHEN	WHAT
Crew members	<ul style="list-style-type: none"> • Working with other crew members AND • Physical distance of 1.5 meters¹² maintained AND • Working in areas in which appropriate ventilation can be maintained (See section 7.8) 	No PPE recommended
		Perform frequent hand hygiene

¹¹ This table does not refer to crew working in the galley. Any person entering/working in the galley should wash hands and wear a face mask.

¹² or otherwise as per national/local health authority requirements of the home port or the port of call

	<ul style="list-style-type: none"> Working with other crew members BUT Physical distance of 1.5 metres cannot be maintained 	<p>Medical face mask¹³ If not available, a non-medical “community” face mask¹⁴</p>	 ©ECDC OR 
		Perform frequent hand hygiene	

Where passengers may interact with one another but appropriate physical distancing can be maintained (at least 1.5 metres), there is no need for the use of PPE. However, as seen in **Table 3** proper and frequent hand hygiene should be performed.

**For passengers who are travelling together such as a family unit or travelling unit (e.g. cohabitants, friends etc.), no PPE are required when they are interacting, and physical distancing between them is not required.

When passengers are interacting with others outside of their family unit or travelling unit and a physical distance of 1.5 metres cannot be maintained, it is suggested that passengers use a face mask.

At all times frequent and proper hand hygiene should be observed.

Table 3: Passengers – interaction with other passengers

WHO	WHEN	WHAT	
Passengers	<ul style="list-style-type: none"> Interacting with other passengers AND Physical distance of 1.5 metres maintained 	No PPE recommended	
		Perform frequent hand hygiene	
	<ul style="list-style-type: none"> Interacting with other passengers BUT Physical distance of 1.5 metres cannot be maintained** 	<p>Medical face mask If not available, a non-medical “community” face mask</p>	 ©ECDC OR 
		Perform frequent hand hygiene	

¹³ **Medical face mask (also known as surgical or procedure mask):** medical device covering the mouth, nose and chin ensuring a barrier that limits the transition of an infective agent between the hospital staff and the patient. They are used by healthcare workers to prevent large respiratory droplets and splashes from reaching the mouth and the nose of the wearer and help reduce and/or control at the source the spread of large respiratory droplets from the person wearing the face mask. Medical face mask comply with requirements defined in European Standard EN 14683:2014.

¹⁴ **Non-medical face masks (or “community” masks):** include various forms of self-made or commercial masks or face covers made of cloth, other textiles or other materials such as paper. They are not standardized and are not intended for use in healthcare settings or by healthcare professionals (European Centre for Disease Prevention and Control. Using face masks in the community. Stockholm: ECDC; 2020.) <https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-use-face-masks-community.pdf>

In settings where crew members are in contact with passengers on board, a face mask should be used by crew members. As listed in **Table 4** below, examples of contact between crew members and passengers include food handlers and crew members cleaning cabins on board.

Table 4: Crew members - interaction with passengers

WHO	WHEN	WHAT	
Crew members	<ul style="list-style-type: none"> Crew members are in contact/interacting with passengers including when: <ul style="list-style-type: none"> Handling food Cleaning cabins 	Medical face mask If not available, a non-medical “community” face mask	 ©ECDC OR 
		Perform frequent hand hygiene	

There are certain settings outlined in **Table 5** where the use of face masks is strongly recommended for both crew members and passengers.

Face masks should be used in any situation where contact or interaction with others will occur and maintaining a physical distance of 1.5 metres is challenging or not possible. On board cruise ships, such settings include walking through or passing others in narrow corridors, taking an elevator etc. Furthermore, a face mask should be used when visiting a medical facility on board for any purpose. In the event that a possible COVID-19 case is being cared for in the medical facility on board, entering the isolation area requires the use of a medical face mask and other appropriate PPE (e.g. gloves, goggles or face shield and long-sleeved impermeable gown) (63). Only crew providing care should be admitted to the isolation area.

Face masks should also be used in areas outside the cruise ship where a high density of people may congregate and physical distancing is challenging, including during embarkation at the terminal, during transfers on buses (46), on board lifeboats and when walking in the corridors in the various decks.

As in all cases passengers and crew members should observe frequent and proper hand hygiene in these settings.

Table 5: Settings where face mask use is strongly recommended

WHO	WHEN	WHAT	
Crew members and Passengers	<ul style="list-style-type: none"> Any area where interaction with others occurs and maintaining physical distancing measures (1.5 metres) cannot be guaranteed <p>AND</p> <ul style="list-style-type: none"> Specific settings including: <ul style="list-style-type: none"> During embarkation at the terminal On buses during transport Walking/passing in narrow corridors on board In elevators on board Visiting the medical facility on board On board lifeboats 	Medical face mask	 ©ECDC
		Perform frequent hand hygiene	

Annex 2: Pre-boarding health declaration questionnaire

(The questionnaire is to be completed by all adults before embarkation)

NAME OF VESSEL	CRUISE LINE	DATE AND TIME OF ITINERARY	PORT OF DISEMBARKATION
Contact telephone number for the next 14 days after disembarkation:			
First Name as shown in the Identification Card/Passport:	Surname as shown in the Identification Card/Passport:	Father's name:	CABIN NUMBER:
First Name of all children travelling with you who are under 18 years old:	Surname of all children travelling with you who are under 18 years old:	Father's name:	CABIN NUMBER:

Questions

Within the past 14 days	YES	NO
1. Have you or has any person listed above, presented sudden onset of symptoms of fever or cough or difficulty in breathing?		
2. Have you, or has any person listed above, had close contact with anyone diagnosed as having coronavirus COVID-19?		
3. Have you, or has any person listed above, provided care for someone with COVID-19 or worked with a health care worker infected with COVID-19?		
4. Have you, or has any person listed above, visited or stayed in close proximity to anyone with COVID-19?		
5. Have you, or has any person listed above, worked in close proximity to or shared the same classroom environment with someone with COVID-19?		
6. Have you, or has any person listed above, travelled with a patient with COVID-19 in any kind of conveyance?		
7. Have you, or has any person listed above, lived in the same household as a patient with COVID-19?		

Annex 3: Passenger/Crew Locator Form (PLF) for cruise ships

The form is available in Word format from the following link:

<https://www.healthygateways.eu/Translated-Passenger-Locator-Forms>

Considerations on passenger locator data can be found here:

<https://www.ecdc.europa.eu/en/publications-data/passenger-locator-data-entry-exit-screening-health-declaration>

<p>Public Health Passenger/Crew Locator Form: To protect your health, public health officers need you to complete this form whenever they suspect a communicable disease onboard a cruise ship. Your information will help public health officers to contact you if you were exposed to a communicable disease. It is important to fill out this form completely and accurately. Your information is intended to be held in accordance with applicable laws and used only for public health purposes. <i>~Thank you for helping us to protect your health.</i></p>	
<p><i>One form should be completed by an adult member of each family/crew member. Print in capital (UPPERCASE) letters. Leave blank boxes for spaces.</i></p>	
<p>CRUISE INFORMATION: 1. Cruise line name 2. Cruise ship name 3. Cabin Number 4. Date of disembarkation (yyyy/mm/dd)</p>	
<p>PERSONAL INFORMATION:</p>	
<p>5. Last (Family) Name 6. First (Given) Name 7. Middle Initial 8. Your sex 9. Age (years)</p>	
<p>PHONE NUMBER(S) where you can be reached if needed. Include country code and city code.</p>	
<p>10. Mobile 11. Business 12. Home 13. Other</p>	
<p>14. Email address</p>	
<p>PERMANENT ADDRESS*:</p>	
<p>15. Country 16. State/Province</p>	
<p>17. City 18. ZIP/Postal code</p>	
<p>19. Number and street (Separate number and street with blank box) 20. Apartment number</p>	
<p>* 21. if in the <u>previous 14 days</u> you have stayed in a country (not transit) other than your permanent address, declare below the name of country/countries:</p>	
<p>TEMPORARY ADDRESS: If at any time during the next <u>14 days</u> you will not be staying at the permanent address listed above, write the places where you will be staying.</p>	
<p>22. Country1 23. State/Province 1</p>	
<p>24. City 1 25. ZIP/Postal code 1</p>	
<p>26. Hotel name 1 (if any) 27. Number and street 1 (Separate number and street with blank box) 28. Apartment number 1</p>	
<p>29. Country2 30. State/Province 2</p>	
<p>31. City 2 32. ZIP/Postal code 2</p>	
<p>33. Hotel name 2 (if any) 34. Number and street 2 (Separate number and street with blank box) 35. Apartment number 2</p>	

Working group members

Barbara Mouchtouri¹, Martin Dirksen-Fischer², Mauro Dionisio³, Miguel Dávila-Cornejo⁴, Brigita Kairiene⁵, Peter Otorepec⁶, Boris Kopilovic⁶, Finán Ó Gallchobhair⁷, LEMONIA Anagnostopoulou¹, Elina Kostara¹, Leonidas Kourentis¹, Jan Heidrich⁸, Agoritsa Baka⁹, Eeva Broberg⁹, Orlando Cenciarelli⁹, Massimo Ciotti⁹, Margot Einoder-Moreno⁹, Pete Kinross⁹, Katrin Leitmeyer⁹, Angeliki Melidou⁹, Daniel Palm⁹, Diamantis Plachouras⁹, Paul Riley⁹, Marc Struelens⁹, Carl Suetens⁹, Svetla Tsoleva⁹, Klaus Weist⁹, Emma Wiltshire⁹ and Christos Hadjichristodoulou¹

1. Laboratory of Hygiene and Epidemiology, Faculty of Medicine, University of Thessaly, Larissa, Greece
2. Institute for Hygiene and Environment of the Hamburg State Department for Health and Consumer Protection, Hamburg, Germany
3. Italian Ministry of Health, Rome, Italy
4. Ministry of Health, Social Services and Equality, Madrid, Spain
5. National Public Health Centre under The Ministry of Health, Klaipeda, Lithuania
6. National Institute of Public Health, Ljubljana, Slovenia
7. Environmental Health Service, Ireland
8. Institute for Occupational and Maritime Medicine, Hamburg, Germany
9. European Centre for Disease Prevention and Control

EU HEALTHY GATEWAYS is grateful to the Directorate-General for Mobility and Transport (DG MOVE) for their contribution.

Moreover, EU HEALTHY GATEWAYS would like to thank the following persons for their input on this document:

Brian Abel, Royal Caribbean Cruises Ltd.
 Kyriakos Anastassiadis, MSC Cruises
 Patrik Dahlgren, Royal Caribbean Cruises Ltd.
 Gareth Davies, Carnival UK
 Salvador Dipp Bueno, Royal Caribbean Cruises Ltd.
 Christopher Doval, Royal Caribbean Cruises Ltd.
 Paul Fortin, Royal Caribbean Cruises Ltd.
 Curt Frey, Royal Caribbean Cruises Ltd.
 Vassilios Gazikas, Optimum Ship Management Services S.A.
 Matt Grimes, Viking Cruises
 Theodore Herrmann, Royal Caribbean Cruises Ltd.
 Mario Hrsak, Carnival Cruise Line
 Anne-Marie Hunter, Royal Caribbean Cruises Ltd.
 Johanita Jacobs, Royal Caribbean Cruises Ltd.
 Eunha Kim, Royal Caribbean Cruises Ltd.
 James Leonard, Holland America Group
 Maggie Levay, Royal Caribbean Cruises Ltd.
 Victoria Maloy, Royal Caribbean Cruises Ltd.
 Luca Matola, MSC Cruises
 Michael McCarthy, Royal Caribbean Cruises Ltd.
 Nikos Mertzanidis, Cruise Lines International Association (CLIA) Europe
 Members of Cruise Lines International Association (CLIA) Europe
 Ukko Metsola, Royal Caribbean Cruises Ltd.
 Adrijana Pesic, Royal Caribbean Cruises Ltd.
 Julien Prodhomme, Carnival Corporation
 Kathryn Ramsdale, Carnival Corporation



Co-funded by
the Health Programme
of the European Union

Ernie Rubi, Royal Caribbean Cruises Ltd.
Eddie Segev, Royal Caribbean Cruises Ltd.
Adrianna Siniscalchi, Royal Caribbean Cruises Ltd.
Mel Skipp, Carnival Corporation & plc
Grant Tarling, Carnival Corporation
Frank Tuscano, Royal Caribbean Cruises Ltd.
Bernard Vanheule, Costa Crociere S.p.A
Clayton Van Welter, Royal Caribbean Cruises Ltd.
Jenny Weaver, Royal Caribbean Cruises Ltd.
Dumitru Zamfir, The Apollo Group
Hernan Zini, Royal Caribbean Cruises Ltd.

For any questions or support related to the points of entry including ports, airports, ground crossings, please email info@healthygateways.eu

References

1. European Commission. COMMUNICATION FROM THE COMMISSIONENEN Joint European Roadmap towards lifting COVID-19 containment measures [updated 15.04.2020. Available from: https://ec.europa.eu/info/sites/info/files/communication_-_a_european_roadmap_to_lifting_coronavirus_containment_measures_0.pdf.
2. European Commission. COMMUNICATION FROM THE COMMISSION. COVID-19 Towards a phased and coordinated approach for restoring freedom of movement and lifting internal border controls 2020 [updated 13 May 2020]. Available from: https://ec.europa.eu/info/files/covid-19-towards-phased-and-coordinated-approach-lifting-internal-border-controls-and-restoring-freedom-movement_en.
3. European Commission. COMMUNICATION FROM THE COMMISSION. COVID-19: EU Guidance for the progressive resumption of tourism services and for health protocols in hospitality establishments 2020 [updated 13 May 2020]. Available from: https://ec.europa.eu/info/files/covid-19-eu-guidance-progressive-resuming-tourism-services-and-health-protocols-hospitality-establishments_en.
4. European Commission. COMMUNICATION FROM THE COMMISSION. COVID-19: Guidelines on the progressive restoration of transport services and connectivity 2020 [updated 13 May 2020]. Available from: https://ec.europa.eu/info/files/covid-19-guidelines-progressive-restoration-transport-services-and-connectivity_en.
5. European Commission. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS. Tourism and transport in 2020 and beyond 2020 [updated 13 May 2020]. Available from: https://ec.europa.eu/info/files/communication-commission-tourism-and-transport-2020-and-beyond_en.
6. World Health Organization. Laboratory testing for 2019 novel coronavirus (2019-nCoV) in suspected human cases. 2020.
7. World Health Organization. Surveillance case definitions for human infection with novel coronavirus (nCoV) 2020 [updated 22 January 2020. Available from: [https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-\(2019-ncov\)](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov)).
8. World Health Organization. Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected Interim guidance 2020 [updated 12 January 2020. Available from: https://www.who.int/docs/default-source/coronaviruse/clinical-management-of-novel-cov.pdf?sfvrsn=bc7da517_2.
9. World Health Organization. Updated WHO advice for international traffic in relation to the outbreak of the novel coronavirus 2019-nCoV. 27 January 2020 2020 [Available from: <https://www.who.int/ith/2020-27-01-outbreak-of-Pneumonia-caused-by-new-coronavirus/en/>.
10. World Health Organization. Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV) 2020 [Available from: [https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)).
11. World Health Organization. Key considerations for repatriation and quarantine of travellers in relation to the outbreak of novel coronavirus 2019-nCoV 2020 [updated 11 February 2020. Available from: https://www.who.int/ith/Repatriation_Quarantine_nCoV-key-considerations_HQ-final11Feb.pdf?ua=1.
12. World Health Organization. Interim Guidance for Management of ill travellers at Points of Entry – international airports, seaports and ground crossings – in the context of COVID -19 2020 19 March 2020. Report No.: WHO/2019-nCoV/POEmgmt/2020.1.
13. World Health Organization. Interim guidance for Home care for patients with COVID-19 presenting with mild symptoms and management of their contacts. 2020 17 March 2020.

14. World Health Organization. Interim Guidance for risk communication and community engagement (RCCE) readiness and response to the 2019 novel coronavirus (2019-nCoV) Version 2. 2020 26 January 2020.
15. World Health Organization. Disease commodity package - Novel Coronavirus (nCoV) 2020 [updated 6 March. Available from: [https://www.who.int/publications-detail/disease-commodity-package---novel-coronavirus-\(ncov\)](https://www.who.int/publications-detail/disease-commodity-package---novel-coronavirus-(ncov))).
16. World Health Organization. Interim guidance for Infection prevention and control during health care when COVID-19 is suspected. 2020 19 March 2020.
17. World Health Organization. Interim Guidance for advice on the use of masks in the context of COVID-19.; 2020 06 April 2020.
18. World Health Organization. Interim Guidance for considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19) 2020 [updated 19 March 2020. Available from: [https://www.who.int/publications-detail/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-\(covid-19\)](https://www.who.int/publications-detail/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-(covid-19))).
19. World Health Organization. Interim Guidance for rational use of personal protective equipment for coronavirus disease (COVID-19) and considerations during severe shortages 2020 [updated 06 April 2020. Available from: [https://www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-\(covid-19\)-and-considerations-during-severe-shortages](https://www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages)
20. World Health Organization. Interim Guidance - Water, sanitation, hygiene and waste management for COVID-19 2020 [updated 23 April 2020. Available from: <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>.
21. World Health Organization. Q&A on infection prevention and control for health care workers caring for patients with suspected or confirmed 2019-nCoV 2020 [updated 31 March 2020. Available from: <https://www.who.int/news-room/q-a-detail/q-a-on-infection-prevention-and-control-for-health-care-workers-caring-for-patients-with-suspected-or-confirmed-2019-ncov>.
22. World Health Organization. Interim Guidance for operational considerations for managing COVID-19 cases/outbreak on board ships 2020 [updated 24 February 2020. Available from: <https://www.who.int/publications-detail/operational-considerations-for-managing-covid-19-cases-outbreak-on-board-ships>.
23. World Health Organization. Interim guidance for considerations in the investigation of cases and clusters of COVID-19 2020 13 March 2020.
24. World Health Organization. Interim Guidance for COVID-19 and Food Safety: Guidance for Food Businesses: interim guidance. 2020 [updated 7 April 2020. Available from: <https://www.who.int/publications-detail/covid-19-and-food-safety-guidance-for-food-businesses>.
25. World Health Organization. Interim recommendations on obligatory hand hygiene against transmission of COVID-19 2020 [updated 01 April 2020. Available from: <https://www.who.int/who-documents-detail/interim-recommendations-on-obligatory-hand-hygiene-against-transmission-of-covid-19>
26. World Health Organization Regional Office for Europe. Operational Readiness Checklist for COVID-19 Copenhagen2020 [updated 12 February 2020. Available from: http://www.euro.who.int/_data/assets/pdf_file/0004/428863/Operational-Readiness-Checklist_final-version_Feb-13.pdf?ua=1.
27. World Health Organization. Interim Guidance for operational considerations for managing COVID-19 cases or outbreak in aviation 2020 [updated 18 March 2020. Available from: <https://apps.who.int/iris/bitstream/handle/10665/331488/WHO-2019-nCoV-Aviation-2020.1-eng.pdf>.
28. World Health Organization. Statement on the third meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of coronavirus disease (COVID-19) 2020 [updated 01 May 2020. Available from: <https://www.who.int/news-room/detail/01-05-2020->

[statement-on-the-third-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-coronavirus-disease-\(covid-19\).](#)

29. European Centre for Disease Prevention and Control. RAPID RISK ASSESSMENT - Outbreak of acute respiratory syndrome associated with a novel coronavirus, China; First cases imported in the EU/EEA; second update. 26 January 2020. 2020 26 January 2020.
30. European Centre for Disease Prevention and Control. Health emergency preparedness for imported cases of high-consequence infectious diseases - Operational checklist for country preparedness planning in the EU/EEA countries. Stockholm; 2020.
31. European Centre for Disease Prevention and Control. Algorithm for management of contacts of probable or confirmed 2019-nCoV cases Stockholm: ECDC; 2020 [Available from: <https://www.ecdc.europa.eu/en/publications-data/algorithm-management-contacts-probable-or-confirmed-2019-ncov-cases>].
32. European Centre for Disease Prevention and Control. Case definition and European surveillance for human infection with novel coronavirus (2019-nCoV) 2020 [cited 2020 2 February]. Available from: <https://www.ecdc.europa.eu/en/case-definition-and-european-surveillance-human-infection-novel-coronavirus-2019-ncov>.
33. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT. Infection prevention and control and preparedness for COVID-19 in healthcare settings – third update. Stockholm ECDC; 2020 31 March 2020.
34. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT - Personal protective equipment (PPE) needs in healthcare settings for the care of patients with suspected or confirmed novel coronavirus (2019-nCoV) Stockholm; 2020.
35. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT - Resource estimation for contact tracing, quarantine and monitoring activities for COVID-19 cases in the EU/EEA. 2 March 2020 Stockholm: ECDC; 2020 2 March 2020.
36. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT - Contact tracing: Public health management of persons, including healthcare workers, having had contact with COVID-19 cases in the European Union - second update Stockholm: ECDC; 2020 08 April 2020.
37. European Centre for Disease Prevention and Control. Interim guidance for environmental cleaning in non-healthcare facilities exposed to SARS-CoV-2 Stockholm; 2020 18 February 2020.
38. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT - Guidelines for the use of non-pharmaceutical measures to delay and mitigate the impact of 2019-nCoV Stockholm; 2020 February 2020.
39. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT - Guidance for wearing and removing personal protective equipment in healthcare settings for the care of patients with suspected or confirmed COVID-19. Stockholm: ECDC; 2020 28 Feb 2020
40. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT - Guidance for discharge and ending isolation in the context of widespread community transmission of COVID-19 – first update Stockholm: ECDC; 2020 08 April 2020
41. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT - Considerations relating to social distancing measures in response to the COVID-19 - second update. Stockholm: ECDC; 2020 23 March 2020.
42. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT. Disinfection of environments in healthcare and nonhealthcare settings potentially contaminated with SARS-CoV-2. Stockholm ECDC; 2020 March 2020.
43. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT. Cloth masks and mask sterilisation as options in case of shortage of surgical masks and respirators Stockholm ECDC; 2020 26 March 2020.
44. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT. Using face masks in the community Reducing COVID-19 transmission from potentially asymptomatic or pre-symptomatic people through the use of face masks. Stockholm: ECDC; 2020 08 April 2020

45. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT - Contact tracing for COVID-19: current evidence, options for scale-up and an assessment of resources needed Stockholm: ECDC; 2020 05 May 2020.
46. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT. Considerations for infection, prevention and control measures on public transport in the context of COVID-19. Stockholm: ECDC; 2020 29 April 2020
47. World Health Organization. Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations Scientific brief. WHO; 2020 29 March 2020.
48. COMMUNICATION FROM THE COMMISSION. COVID-19: EU Guidance for the progressive resumption of tourism services and for health protocols in hospitality establishments, (2020).
49. European Centre for Disease Prevention and Control. Technical Report. Guidance for discharge and ending isolation in the context of widespread community transmission of COVID-19 – first update [updated 8 April 2020]. Available from: <https://www.ecdc.europa.eu/sites/default/files/documents/covid-19-guidance-discharge-and-ending-isolation-first%20update.pdf>.
50. European Centre for Disease Prevention and Control. Laboratory support for COVID-19 in the EU/EEA 2020 [updated 15 April 2020]. Available from: <https://www.ecdc.europa.eu/en/novel-coronavirus/laboratory-support>.
51. Lohse S, Pfuhl T, Berkó-Göttel B, Rissland J, Geißler T, Gärtner B, et al. Pooling of samples for testing for SARS-CoV-2 in asymptomatic people. *The Lancet Infectious Diseases*.
52. Nishiura H, Kamiya K. Fever screening during the influenza (H1N1-2009) pandemic at Narita International Airport, Japan. *BMC Infect Dis*. 2011;11:111.
53. Samaan G, Patel M, Spencer J, Roberts L. Border screening for SARS in Australia: what has been learnt? *Med J Aust*. 2004;180(5):220-3.
54. St John RK, King A, de Jong D, Bodie-Collins M, Squires SG, Tam TW. Border screening for SARS. *Emerg Infect Dis*. 2005;11(1):6-10.
55. Wilder-Smith A, Paton NI, Goh KT. Experience of severe acute respiratory syndrome in singapore: importation of cases, and defense strategies at the airport. *J Travel Med*. 2003;10(5):259-62.
56. Mouchtouri VA, Christoforidou EP, An der Heiden M, Menel Lemos C, Fanos M, Rexroth U, et al. Exit and Entry Screening Practices for Infectious Diseases among Travelers at Points of Entry: Looking for Evidence on Public Health Impact. *Int J Environ Res Public Health*. 2019;16(23):4638.
57. World Health Organization. Technical note for Ebola virus disease preparedness planning for entry screening at airports, ports and land crossings. 2014.
58. World Health Organization. Handbook for management of public health events on board ships. 2016.
59. World Health Organization. WHO advice for international travel and trade in relation to the outbreak of pneumonia caused by a new coronavirus in China 2020 [updated 10 January 2020. Available from: https://www.who.int/ith/2020-0901_outbreak_of_Pneumonia_caused_by_a_new_coronavirus_in_C/en/.
60. European Centre for Disease Prevention and Control. ECDC TECHNICAL REPORT - Guidelines for the use of non-pharmaceutical measures to delay and mitigate the impact of 2019-nCoV Stockholm2020 [updated February 2020. Available from: <https://www.ecdc.europa.eu/en/publications-data/guidelines-use-non-pharmaceutical-measures-delay-and-mitigate-impact-2019-ncov>.
61. World Health Organization. Considerations for public health and social measures in the workplace in the context of COVID-19. Annex to Considerations in adjusting public health and social measures in the context of COVID-19 [updated 10 May 2020. Available from: <https://www.who.int/publications-detail/considerations-for-public-health-and-social-measures-in-the-workplace-in-the-context-of-covid-19>.

62. World Health Organization. Getting your workplace ready for COVID-19 [updated 3 March 2020]. Available from: <https://www.who.int/docs/default-source/coronaviruse/getting-workplace-ready-for-covid-19.pdf>.
63. EU HEALTHY GATEWAYS Joint Action Preparedness and action at points of entry (ports a, ground crossings),. OVERVIEW OF PERSONAL PROTECTIVE EQUIPMENT (PPE) RECOMMENDED FOR CREW AT POINTS OF ENTRY AND CREW ON BOARD CONVEYANCES IN THE CONTEXT OF COVID-19. Version 2. 2020.