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FACILITATING SAFE CREW CHANGES AND SUPPORTING SEAFARER WELLBEING DURING THE COVID-19 PANDEMIC

Version 1

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An illustrative leaflet for seafarers with advice for staying safe when travelling to and from the ship and while on board can be found here:
https://www.healthygateways.eu/Portals/0/plcdocs/EUHG_leaflet_seafarers.pdf

Abbreviations

CDC	Centers for Disease Control and Prevention
COVID-19	Coronavirus disease
DG MOVE	Directorate-General for Mobility and Transport
ECDC	European Centre for Disease Prevention and Control
EMA	European Medicines Agency
EMSA	European Maritime Safety Agency
EU	European Union
EU MS	European Union Member States
ICAO	International Civil Aviation Organization
ICS	International Chamber of Shipping
IHR	International Health Regulations
ILO	International Labour Organization
IMO	International Maritime Organization
ISWAN	International Seafarers Welfare and Assistance Network
IVD	In Vitro Diagnostic
JRC	Joint Research Centre
MDH	Maritime Declaration of Health
MLC	Maritime Labour Convention
NAAT	Nucleic Acid Amplification Test
RT-PCR	Reverse transcription - Polymerase chain reaction
POE	Point of entry
PPE	Personal protective equipment
RADT	Rapid antigen detection test
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
VOC	Variants of concern
WHO	World Health Organization

Definitions

Cycle threshold (Ct) value: Real-time reverse transcription (RT)-PCR tests are the gold standard for the detection of COVID-19 and provide both a qualitative result (detected/not detected) and a quantitative result in the form of a cycle threshold (Ct) value (number of amplification cycles required for the detection signal to cross the background level - i.e. to generate a positive result). As Ct values are determined by the amount of viral RNA in the sample, they are often used as a proxy for the viral load (defined as the quantity of virus particles or viral genome copies in a given volume of the specimen) and can relate to the amount of virus present in the specimen (source: Infection, updated 17 March 2022. <https://www.ecdc.europa.eu/en/covid-19/latest-evidence/infection>).

Confirmed COVID-19 case: Any person that SARS-CoV-2 nucleic acid or antigen is detected in a clinical specimen. Rapid antigen test should be performed within 5 days from symptom onset or within 7 days from time of exposure. If the exposure time is unknown, the rapid antigen test should be performed as soon as possible (source: Case definition for COVID-19, as of 3 December 2020. <https://www.ecdc.europa.eu/en/covid-19/surveillance/case-definition>).

Face mask: Overarching term used for any device (i.e. a community face covering, medical face mask or a respirator) that is worn over the mouth and nose to prevent the inhalation of harmful substances such as infectious respiratory droplets or the release of infectious respiratory droplets produced by breathing, speaking, coughing or sneezing in the environment (source: Considerations for the use of face masks in the community in the context of the SARS-CoV-2 Omicron variant of concern. 7 February 2022. <https://www.ecdc.europa.eu/en/publications-data/using-face-masks-community-reducing-covid-19-transmission>).

Incubation period: Time between exposure to a virus and the development of symptoms (incubation period of COVID-19 is five to six days on average - range: two to 14 days) (source: Infection, <https://www.ecdc.europa.eu/en/covid-19/latest-evidence/infection>).

Isolation: separation of ill persons from others in such a manner as to prevent the spread of infection or contamination (source: International Health Regulations 2005, 3rd Edition. <https://www.who.int/publications/i/item/9789241580496>).

Medical face mask (also known as surgical or procedure mask): Disposable medical device used by healthcare workers to prevent large respiratory droplets and splashes reaching the mouth and nose of the wearer, and as a means of source control to stop the spread of large respiratory droplets by the person wearing them. Requirements for medical face masks, including the duration of use, are defined in the European Committee for Standardization's published standards. Medical face masks are not defined as personal protective equipment in Regulation (EU) 2016/425 of 9 March 2016 or Directive 89/656/EEC on personal protective equipment. However, for the purpose of this document and in accordance with guidance on infection prevention and control in the context of COVID-19 by the World Health Organization (WHO) and on transmission-based precautions, medical face masks are considered to provide protection against infections transmitted by droplets (source: Considerations for the use of face masks in the community in the context of the SARS-CoV-2 Omicron variant of concern. 7 February 2022. <https://www.ecdc.europa.eu/en/publications-data/using-face-masks-community-reducing-covid-19-transmission>).

Nucleic Acid Amplification Test (NAAT): RT-PCR or other NAAT, which should have the CE certification marking and should be in the list of the Joint Research Centre (JRC) In Vitro Diagnostic (IVD) database (<https://covid-19-diagnostics.jrc.ec.europa.eu/>) or in the list of US Food and Drug Administration with the In Vitro Diagnostics Emergency Use Authorization – Molecular Diagnostic Tests for SARS-CoV-2 and authorised for screening (testing asymptomatic individuals without known exposure) and can be used as specified in the authorization list for certified laboratories or health care settings: <https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use-authorizations-medical-devices/in-vitro-diagnostics-euas-molecular-diagnostic-tests-sars-cov-2#individual-molecular>. Further information on diagnostics can be found on "FIND", the global alliance for diagnostics: <https://www.finddx.org/>

Possible case of COVID-19: Any person with at least one of the following symptoms: runny nose, sore throat, headache, cough, fever, shortness of breath, sudden onset of anosmia, ageusia or dysgeusia, vomiting or diarrhoea. Additional less specific symptoms may include chills, muscle pain, fatigue (Source: <https://www.ecdc.europa.eu/en/covid-19/latest-evidence/clinical>).

Public health observation: Monitoring of the health status of a traveller over time for the purpose of determining the risk of disease transmission (source: International Health Regulations 2005, 3rd Edition. <https://www.who.int/publications/i/item/9789241580496>).

Quarantine: restriction of activities and/or separation from others of suspect persons who are not ill in such a manner as to prevent the possible spread of infection or contamination (source: International Health Regulations 2005, 3rd Edition. <https://www.who.int/publications/i/item/9789241580496>).

Rapid antigen detection test (RADT): Any type of RADT listed in the document “Common list of COVID-19 rapid antigen tests, including those of which their test results are mutually recognised, and a common standardised set of data to be included in COVID-19 test result certificates” (source: European Commission Directorate-General for Health and Food Safety. Public health, country knowledge, crisis management Health Security. Agreed by Health Security Committee on 17 February 2021. An updated to Annex II agreed by HSC on 19 March 2021. https://ec.europa.eu/health/sites/health/files/preparedness_response/docs/covid-19_rat_common-list_en.pdf).

Respirator (also known as a filtering face piece (FFP) mask or filtering half mask): device designed to protect the wearer from exposure to airborne contaminants (e.g. from inhaling dust or infectious particles). Requirements for FFPs, including the intended duration of use, are specified in the European Committee for Standardization’s published standards, and respirators are classified as personal protective equipment. An N95/N99 respirator is the United States’ equivalent of FFP2/FFP3 respirators as defined by US standard NIOSH 42 CFR, part 84. The KN95/KP95 standards (China) has similar performance requirements (source: Considerations for the use of face masks in the community in the context of the SARS-CoV-2 Omicron variant of concern. 7 February 2022. <https://www.ecdc.europa.eu/en/publications-data/using-face-masks-community-reducing-covid-19-transmission>).

Vaccinated individuals: a seafarer who carries a proof of vaccination, and at least 14 days and no more than 270 days have passed since the last dose of the primary vaccination series or if the person has received a booster (i.e. 3rd dose) dose (exceptions apply for persons under the age of 18)[†]. The above definition of vaccinated individual is based on the current European Commission definition. Should the European Commission definition change, the definition of vaccinated individual in this document will change accordingly. Heterologous vaccination is acceptable as indicated in the EMA and WHO recommendations^{1,2‡}.

Acceptable vaccines are considered those listed in the European Medicines Agency (EMA) or WHO lists.

Listed vaccine (as of 18 March 2022)*	EMA list	WHO list	Doses in Series	Type
1 Comirnaty (BioNTech and Pfizer)	Yes	Yes	2	mRNA
2 Spikevax (Moderna)	Yes	Yes	2	mRNA
3 Janssen (Johnson & Johnson)	Yes	Yes	1	Vectored
4 Vaxzevria (AstraZeneca, Covishield)	Yes	Yes	2	Vectored
5 Nuvaxovid (Novavax)	Yes	Yes	2	Protein subunit
6 Sinopharm	No	Yes	2	Inactivated
7 Sinovac-CoronaVac	No	Yes	2	Inactivated
8 Covaxin	No	Yes	2	Inactivated
9 Covovax	No	Yes	2	Protein subunit

*Updates can be found in: <https://www.ema.europa.eu/en/human-regulatory/overview/public-health-threats/coronavirus-disease-covid-19/treatments-vaccines/covid-19-vaccines> and <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines>

[†] Certificates held by persons aged 18 and above indicating the completion of the primary vaccination series shall be accepted only if not more than 270 days have passed since the date of the latest dose in that series

[‡] Depending on product availability, countries implementing WHO EUL inactivated vaccines for initial doses may consider using WHO Emergency Use Listing (EUL) vectored or mRNA vaccines for subsequent doses.

- Depending on product availability, countries implementing WHO EUL vectored vaccines for initial doses may consider using WHO EUL mRNA vaccines for subsequent doses.

- Depending on product availability, countries implementing WHO EUL mRNA vaccines for initial doses may consider using WHO EUL vectored vaccines for subsequent doses.

1. Introduction

The EU HEALTHY GATEWAYS Joint Action (Grant Agreement No 801493) in collaboration with the European Commission's Directorate General for Mobility and Transport (DG MOVE) have jointly developed this document.

As indicated by the International Maritime Organization (IMO), more than 80% of the trade volume globally is transported by ships. Seafarers' work is essential to maintain supply chains of food, medical products, energy and other goods globally. During the COVID-19 pandemic seafarers were dramatically affected due to travel restrictions and were unable to perform crew changes, with thousands stranded on board ships for several months. Efforts of the shipping industry and governmental authorities are essential to protect seafarers' health and wellbeing, while at the same time allowing for safe movements and crew changes.

This document was produced considering Communications and Recommendations issued by the European Commission on travel and transport during the coronavirus disease (COVID-19) pandemic³. Current evidence on COVID-19, recommendations and guidance from the World Health Organization (WHO)⁴, technical reports from the European Centre for Disease Prevention and Control (ECDC)⁵ and relevant Circular Letters of the IMO⁶ as of March 2022 were also taken into account.

Commercial vessels are semi-closed workplaces with common facilities that promote close contact, enabling COVID-19 transmission. It is important that ship owners, crew managers and other ship operators (or their representatives) ensure public health measures are in place to prevent introduction, as well as on board transmission among seafarers, from seafarers to ship visitors (e.g. persons involved in ship/shore interface, maritime/shore-based/port personnel) or conversely from ship visitors to seafarers. Risks for COVID-19 transmission also exist during seafarers' entire journey travelling from their place of residence to the ship and returning. With on-going COVID-19 transmission continuing to be reported worldwide, variants of concern (VOCs) present in many countries, and uneven COVID-19 vaccination coverage of seafarers, this group is at risk during any point of their journey. Measures should also be in place to prevent COVID-19 infectious seafarers from beginning their journey or boarding the vessel, and at the same time while on board facilitating seafarers' opportunities for shore-side visits and supporting their access to healthcare and mental health services.

While this document focuses on providing practical guidance related to COVID-19, the guidance and procedures included within (e.g. preventive measures to be in place at all times on board, responding to an event, supporting seafarers' welfare and safeguarding mental/physical health) are more widely applicable. Measures for commercial vessels included in this document can be applied to other similar respiratory illnesses that are easily transmitted on board such as Influenza, as well as to new emerging pathogens and during future public health emergencies.

Provision of medical care and support without delay on board is essential as commercial vessels undertake extended journeys and may be away from land-based health facilities for long periods. This is essential especially during the pandemic since due to the nature of their work, unavoidable close contact in the shipboard accommodation and with limited access to land-based care,

seafarers are at greater risk if they contract COVID-19 and cannot receive prompt and appropriate care.

2. Purpose and scope

The purpose of this document is to provide practical guidance for ship owners, crew managers and ship operators (or their representatives) for measures on commercial vessels that should be implemented to protect the health of seafarers and safe seafarer travel in the European Union (EU) context. This document does not contain legally binding guidance, but is based on existing published recommendations and guidelines from the European Commission and EU agencies. This document has not been developed to provide guidance to governmental authorities or port administrations, since European Commission Recommendations as well as other guideline documents have been published by EU agencies – including ECDC and the European Maritime Safety Agency (EMSA) – addressing recommendations for actions by governmental authorities (**Annex 1**). The document should also be read in conjunction with other documentation provided by WHO and the International Chamber of Shipping (ICS) in relation to ships sailing on international voyages.

For the purpose of this document, a commercial vessel does not include passenger cruise or passenger ferry vessels. EU HEALTHY GATEWAYS has developed specific guidance for passenger cruise and passenger ferry ships in the context of COVID-19[§]. This current guidance describes measures for public health observation and for preventing the introduction of COVID-19 on board vessels, screening and diagnostic testing for COVID-19 and reducing risks for transmission among seafarers covering their entire journey, beginning from their home to the ship and back. Considerations are further provided to facilitate seafarers' shore-based visits when at a port of call and to safeguard seafarers' health and welfare. Any national or local guidelines, policies and regulations relevant to the scope of the current document, enacted by European Union Member States (EU MS) which are stricter than the current document guidelines and addressed to ship owners or their representatives, should be implemented in addition to the current guidelines.

3. Preventive measures in place at all times on board

3.1. Written contingency plan/outbreak management plan

A written contingency plan/outbreak management plan for the commercial vessel should be in place for detecting and responding to a COVID-19 event on board. The plan should be tested through exercises.

The plan should outline the following procedures related to⁷:

- Detection of COVID-19 cases (e.g. protocols for surveillance and monitoring, including testing frequency)
- Reporting and notification of an incident on board

[§] EU HEALTHY GATEWAYS guidance in the context of COVID-19 for passenger cruise ships and passenger ferries (<https://www.healthygateways.eu/Novel-coronavirus#Interim>)

- Management of possible/confirmed COVID-19 cases and their contacts (including protocols for isolation and quarantine)
- Disembarkation of cases and their contacts, including transport to a land-based medical facility if required
- Personal protective measures (e.g. protocols for face mask use, physical distancing, hand hygiene etc.) and environmental measures (e.g. protocols for routine and enhanced cleaning and disinfection measures if an event takes place on board, protocols for ventilation of ship areas)
- Plan for communication (internal communication procedures and for communication with competent authorities at the port)

Box 1: Essential information and instructions for raising seafarer awareness to detect COVID-19 cases

Raising seafarer awareness for detecting and managing a COVID-19 event on board

Ship owners, crew managers and ship operators (or their representatives) should provide seafarers with information and instructions in English and if possible in their national language, related to their role in the implementation of the ship's contingency plan/outbreak management plan, the detection and management of possible/confirmed COVID-19 cases and contacts on board, as well as other necessary information.

All seafarers on board should receive instructions about the following:

- *Ship's written contingency plan and their specific role in plan implementation*
- *COVID-19 compatible signs and symptoms*
- *On board procedures in the event that a seafarer displays relevant COVID-19 symptoms*
- *Special considerations for high-risk groups on board*
- *Personal protective and hygiene measures implemented on board the vessel (e.g. protocols for face mask use, physical distancing, hand hygiene etc.)*
- *Environmental measures implemented on board the vessel (e.g. protocols for routine and enhanced cleaning and disinfection measures if an event takes place on board, protocols for ventilation of ship areas)*

In accordance with the Maritime Labour Convention (MLC) 2006, as amended (MLC, 2006)⁸ "ships which do not carry a medical doctor shall be required to have either at least one seafarer on board who is in charge of medical care and administering medicine as part of their regular duties or at least one seafarer on board competent to provide medical first aid; persons in charge of medical care on board who are not medical doctors shall have satisfactorily completed training in medical care that meets the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended ("STCW")...."

Seafarer on board in charge of medical care/competent to provide medical first aid should receive instructions (in addition to above) about the following:

- *Care of possible/confirmed COVID-19 cases*
- *Procedures if event detected on board (e.g. protocols for isolation and quarantine)*

Guidance related to COVID-19 case management on board are available from WHO⁷ and ICS⁹.

3.2. Routine screening tests

The following section describes the suggested frequency of screening during routine operations (excluding the period of public health observation conducted on board). It further provides guidance on the recommended supplies and equipment to be carried on board for both routine screening and to respond to a COVID-19 case or outbreak on board.

3.2.1. Frequency of routine screening/diagnostic testing

As COVID-19 cases may be introduced on board during the ship's voyage, a protocol of routine screening is recommended. The frequency can be determined following a risk-based approach. Rapid Antigen Detection Tests (RADTs) should be conducted on all seafarers on board, but giving priority to unvaccinated seafarers in any situation that could pose a risk of infection.

3.2.2. Acceptable diagnostic tests

As described in the definition section of this document, any type of RADT listed in the European Commission document "Common list of COVID-19 rapid antigen tests, including those of which their test results are mutually recognised, and a common standardised set of data to be included in COVID-19 test result certificates"^{**} and/or the WHO "Emergency Use Listing for In vitro diagnostics (IVDs) Detecting SARS-CoV-2-RADTs lists"^{††} is suggested for use of routine screening on board.

3.2.3. Recommended supplies and equipment for screening and general measures

Ship owners, crew managers and other ship operators (or their representatives) should ensure in accordance with the MLC 2006⁸, that if a medical doctor is not on board, at least one seafarer on board will be in charge of medical care and administering medicine as part of their regular duties, or at least one seafarer on board is competent to provide medical first aid and medical care to possible/confirmed COVID-19 cases on board and their contacts. This designated seafarer should be trained to perform clinical specimen collection and testing with RADTs, particularly if on extended voyages where access to land-based facilities will be very limited. It should also be ensured that adequate medical supplies and equipment are available for symptomatic treatment of COVID-19 (e.g. antipyretics) and other health conditions, as described in the WHO (2007) recommended medicines and equipment by the *International Medical Guide for Ships* 3rd edition¹⁰, or as per country medical guidance published by national authorities. Thermometers accurately measuring body temperature should be available on board. An adequate supply of personal protective equipment (PPE) should be available on board with ship owners, crew managers and other ship operators (or their representatives) considering the number of seafarers on board, the embarkation of ship visitors, the duration of the voyage and the possibility of shore-side visits by seafarers.

Box 2: Essential supplies and equipment to be available at all times

Essential supplies and equipment

An adequate supply of the following should be available **at all times** on board for routine preventive measures and if needed to respond to a COVID-19 case or outbreak:

RAPID ANTIGEN DETECTION TESTS:

- The number needed should be calculated based on the vessel capacity and frequency of routine screening described in **Section 3.2.1**. For example, ship owners, crew managers and ship operators (or their representatives) could plan to carry on board a stockpile as follows:
 - 2 RADTs per seafarer per week (for the duration of the planned voyage)
 - 1 additional RADT per seafarer per two weeks

Ship owners should ensure continuous monitoring and replenishment of RADT stockpiles on board.

^{**} https://ec.europa.eu/health/sites/default/files/preparedness_response/docs/covid-19_rat_common-list_en.pdf

^{††} <https://extranet.who.int/pgweb/vitro-diagnostics/coronavirus-disease-covid-19-pandemic-%E2%80%94-emergency-use-listing-procedure-eul-open> (list updated periodically)

PERSONAL PROTECTIVE EQUIPMENT:

- Respirators (e.g. FFP2 or equivalent standard) if available and medical face masks
- Eye protection (goggles or face shields)
- Disinfectants and hand hygiene supplies, tissues and no-touch bins for waste disposal
- Disposable gloves
- Long-sleeved impermeable gowns (aprons could also be included)

Seafarers should be instructed routinely by ship owners, crew managers and other ship operators (or their representatives) in their national language about appropriate wearing, use, removal, disposal or cleaning/storage of PPE.

Ship owners should take into consideration PPE supplies that may also be required if a possible case or outbreak of COVID-19 occurs on board, for interaction of seafarers with any ship visitors and in the event that shore-side visits take place¹¹. Guidance regarding suggested PPE supplies are available from EU HEALTHY GATEWAYS¹² and ICS⁹.

4. Options for measures to prevent introduction of COVID-19 on board

To ensure continuous operation of the maritime sector for the maintenance of supply chains, essential services and economies, crew changes should be allowed in ports of EU MS, minimizing as far as possible the impact from restrictions on seafarers. European Commission Recommendations, Communications and Guidelines related to facilitating crew changes during the COVID-19 pandemic can be found in **Annex 1**.

For the purposes of crew changes, the first part of a seafarers' journey is the period of time to reach the ship, including time spent in their country of origin before leaving home, travelling to the country of destination where they will embark the ship, and any time spent in the destination country before embarking. Since seafarers may be exposed to COVID-19 at any point during this period, when implementing measures in accordance with the countries' and companies' policies, ship owners, crew managers and other ship operators (or their representatives) should ensure seafarers are supported and public health measures are in place to mitigate the risks of transmission during any point in this journey. It is also important that when on board, measures are in place to prevent and limit as much as possible transmission of COVID-19.

Seafarers who appear fit to begin work duties may be incubating the disease in the pre-symptomatic period, or be asymptomatic (not presenting with COVID-19 compatible symptoms) and infectious. It is therefore suggested to implement a risk-based approach when deciding on establishing public health observation measures and/or testing, irrespective of potential exposure to COVID-19, as a pre-embarkation measure for new crew. As indicated by WHO the benefits of public health observation in reducing COVID-19 transmission *"must be balanced against the related risks of infringement of human rights, psychosocial and economic harm, disruption to travel and trade, reductions in the movement of essential goods and workforce mobility"*⁷.

It is suggested to consider different factors including COVID-19 incidence rates in the country of seafarers' origin and the country of embarkation, as well as the vaccination and health status of seafarers, and then decide if necessary to define a period of public health observation for new

crew before starting regular work duties to prevent potentially COVID-19 infectious seafarers from embarking the vessel, or if already on board to prevent and limit transmission on the vessel.

Depending on the COVID-19 incidence rates in the country of seafarers' origin and the country of embarkation, public health observation measures of seafarers prior to beginning their regular work duties could take place in a designated accommodation facility ashore (e.g. hotel) **or** after embarking the vessel, in addition to enhanced screening and diagnostic testing. **Table 1** presents the timeframe of work restrictions depending on the immunity status of the seafarer.

Table 1: Suggested duration of isolation, quarantine, public health observation and possible work restrictions considering seafarers' health and vaccination status¹³⁻¹⁵ (Table 1 does not address the isolation of patients that require hospitalisation ashore)

Vaccination status of seafarers	Timeframe of work restrictions
Work restrictions for seafarers infected with COVID-19	
Not vaccinated or not fully vaccinated, mild or moderate COVID-19 case	Resolution of fever for 24 hours and clinical improvement of symptoms ^[a] AND Five days isolation ^[b] after the onset of symptoms AND Five additional days wearing a high efficiency (FFP2) mask ^[c] AND If possible, test by RADT or RT-PCR (if RT-PCR available on board) on day five after onset of symptoms ^[e] . If the ship is close to land, then alternatively RT-PCR ^[d] could be conducted in a shore-side laboratory
Vaccinated ^f mild or moderate COVID-19 case	Resolution of fever for 24 hours and clinical improvement of symptoms ^[a] AND Three days isolation ^[b] after onset of symptoms AND Three additional days wearing a high efficiency (FFP2) ^[c] mask AND If possible, test by RADT or RT-PCR (if RT-PCR available on board) on day three after onset of symptoms. If the ship is close to land, then alternatively RT-PCR ^[d] , could be conducted in a shore-side laboratory
Work restrictions for asymptomatic seafarers with exposure	
Unvaccinated individuals	Five days quarantine ^[g] AND RADT or RT-PCR (if RT-PCR available on board) on day 5 ^[h] . If the ship is close to land, then alternatively RT-PCR could be conducted in a shore-side laboratory AND Five additional days wearing a high-efficiency (FFP2) mask ^[i]
Vaccinated ^[f] individuals	10 days wearing a high-efficiency (FFP2) mask ^[i] AND RADT or RT-PCR (if RT-PCR available on board) on day 5 ^[g] . If the ship is close to land, then alternatively RT-PCR could be conducted in a shore-side laboratory AND

	Self-monitoring for symptoms, wearing a mask, keeping distance from others and avoiding contact with vulnerable populations, if possible
Work restrictions for <u>new</u> seafarers without infection or exposure	
Vaccinated ^[d]	No work restrictions with negative RADT on days 2, 5 and 7
Unvaccinated, even if within 90 days of prior infection	Public health observation for 10 days OR 7 days with negative test

[a] Asymptomatic COVID-19 cases should follow the same guidance as symptomatic cases. Days should be counted from the date of the sample collection for their diagnostic test.

[b] When recommending a shorter duration of isolation, the residual risk of onward transmission of COVID-19 increases. Therefore, in addition to wearing a mask, COVID-19 cases should be advised to avoid non-essential contact with other people and especially vulnerable individuals. The end of isolation should be differentiated from the potential need for sick leave.

[c] Where a high-efficiency mask is recommended, an FFP2 (or equivalent) without a valve should be used. To be effective, these need to be fitted properly at all times and seal testing should be performed each time the mask is put on. Fit testing is recommended, especially for those working in the healthcare sector, where re-using FFP2 masks should be avoided due to heavy contamination.

[d] Testing by either RADT or RT-PCR should preferably be performed. Self-testing by RADTs is not considered adequate for ending isolation.

[e] Isolation should continue if the RADT (including self-performed) or RT-PCR test is positive on day six. If RT-PCR is performed, then high Ct values (≥ 30) can be used, with caution, as a proxy of low likelihood of transmissibility. RADT can be repeated daily until negative or until 10 days of isolation are completed.

[f] In this table, the term 'vaccinated' refers to people who:

- have received a full primary COVID-19 vaccination course within the last six months.
 - o The duration of protection is subject to evolving evidence and this may need to be considered.
 - o In areas/countries where the Omicron VOC is dominant, this period may be restricted further to three months.
 - o This does not apply to one-dose vaccines.
- have received a booster dose of COVID-19 vaccine.

[g] When recommending a shorter duration of quarantine, the residual risk of onward transmission of COVID-19 increases. Therefore, in addition to mask use, individuals identified as close contacts should be advised to avoid non-essential contact with other people and especially vulnerable individuals.

[h] Testing by either RADT or RT-PCR should preferably be performed by a qualified professional. Self-testing by RADTs is not considered adequate for releasing from quarantine.

[i] Where a high-efficiency mask is recommended, an FFP2 (or equivalent) without a valve should be used. To be effective, these need to be worn properly at all times. Fit testing is recommended.

When deciding to place seafarers under public health observation (monitoring their health status over time for the purpose of determining risk of disease transmission) for a specific duration of time, in accordance with the duration of time described in **Table 1**, ship owners, crew managers and ship operators (or their representatives) should make arrangements to ensure that the following are implemented for the duration:

- Self-monitoring for symptoms suggestive of COVID-19 (e.g. self-monitoring for fever by checking temperature twice daily, recording and reporting results)
- Avoiding as much as possible non-essential contact with others and use of common/shared areas on board (mess halls, laundry rooms etc.)
- Limiting interaction with other seafarers during work activities (e.g. ship owners could assign new crew to duties where they work individually for the period of observation, if feasible) or ensure strict measures (physical distancing of 1.5 meters and use of face mask when working with others)
- Wearing a face mask at all times when outside of individual cabins
- Practicing frequent/thorough hand hygiene and respiratory etiquette
- Remaining in individual cabins when not working, as much as possible
- Eating meals in their cabin (if possible)
- Not entering galley or pantry areas of the vessel
- Transiting the vessel through outer walkways when possible
-

Box 3: Essential information and guidance for seafarers when undergoing public health observation

Information for seafarers

Seafarers should receive written guidance, information, instructions and material in English and if possible in their national language from ship owners, crew managers and other ship operators (or their representatives) to support compliance with public health measures on board.

Prior to or at embarkation:

- *Duration of the public health observation period.*
- *General guidance and advice on personal protective and hygiene measures that should be observed by seafarers (proper use and management of PPE, frequent and thorough hand hygiene, proper respiratory etiquette). If such national/local regulations do not exist, informing seafarers about adherence to a minimum standard of hygiene and protective measures (e.g. in accordance with ECDC guidance^{16,17}). Resources and advice for the public about protective measures against COVID-19 are also available from the WHO¹⁸.*
- *Procedures to follow if COVID-19 compatible symptoms develop (e.g. reporting symptoms to the ship owner and seeking medical assessment).*
- *Protocols that should be followed to ensure compliance with public health observation measures.*
- *Any other screening measures that may be required (e.g. visual observation, temperature measurement, testing etc.).*
- *Provide seafarers with appropriate and sufficient amounts of PPE, hygiene supplies and other equipment required for the public health observation period (e.g. no-touch thermometers for monitoring of symptoms) with specific instructions for use.*

5. Response to a COVID-19 event on board

5.1. Management of possible/confirmed case

Once a possible or confirmed COVID-19 case is detected on board, ship owners, crew managers and ship operators (or their representatives) should ensure that the below procedures are followed:

- Activation of the written ship contingency plan/outbreak management plan as needed.
- Providing the possible/confirmed COVID-19 case with a medical face mask and informing them to practice strict respiratory etiquette and hand hygiene, especially if a medical face mask cannot be tolerated.
- Immediate isolation of the possible/confirmed COVID-19 case in the pre-designated area with adequate ventilation and a specific toilet facility for their use.
- Ensuring that contact with the possible/confirmed COVID-19 case in isolation is restricted to only those necessary (e.g. the seafarer on board in charge of medical care /competent to provide medical first aid) and any person entering the isolation area wears a respirator.
- Inform the next port of call about the event (see Section 5.1.1).
- Test possible cases via RADT and their contacts and share the test results.

If seafarers are identified as confirmed COVID-19 cases, it is advised that they are disembarked and isolated ashore as soon as possible following medical advice. Port States are required to support these efforts in line with the requirements for onshore provision of medical care and repatriation of deceased seafarers under the MLC 2006.

- If disembarkation and isolation ashore is not feasible (e.g. due to lack of isolation facilities ashore or visa issues), isolation could be carried out on board in the ship's isolation facilities in accordance with medical advice provided:
 - i. Cases are isolated separately and individually in cabins for the required period of time, where possible. If individual isolation of cases is not possible due to space limitations (outbreak involving many cases), accommodating confirmed cases in the same room could be considered.
 - ii. Strict control measures are implemented and isolation cabins have access to natural light (window), where possible.
 - iii. Seafarers have access to the required services, including any necessary health care and psychological support.
- For the seafarers' protection of health, ships should not depart when COVID-19 cases have been identified among seafarers who stay on board, unless if cases have disembarked in isolation facilities or hospitals ashore and quarantine measures are applied for close contacts, as well as other measures in accordance with the written ship contingency plan/outbreak management plan.

5.1.1. Reporting to the next port of call

Ship owners, crew managers and other ship operators (or their representatives) should ensure that the International Health Regulations (IHR, 2005) are followed and that officers in command of ships or their agents inform the competent authority of the next port of call (through the completion of the Maritime Declaration of Health (MDH) or by other means as applicable) if a possible or confirmed COVID-19 case is detected.

5.1.2. Disembarkation

Disembarkation will be done in accordance with the instructions of the competent authority. The following legal documents describe the obligations of governmental authorities and ship operators about providing medical examination and treatment ashore and on board:

- *International Labour Organization (ILO) 2006 Maritime Labour Convention (MLC 2006)*: Member States must ensure seafarers on board ships in their territory are given access to medical facilities ashore, should they require immediate medical care, including dental care.
- *IMO conventions*: the International Convention for the Safety of Life at Sea (SOLAS); the International Convention on Maritime Search and Rescue (SAR); and the Convention on the Facilitation of International Maritime Traffic (FAL): MS must render assistance to seafarers in distress, including medical assistance.
- *IHR*: Each State Party must designate a port or ports with the capacities: (a) to provide access to (i) an appropriate medical service including diagnostic facilities located so as to allow the prompt assessment and care of ill travellers, and (ii) adequate staff, equipment and premises; (b) to provide access to equipment and personnel for the transport of ill travellers to an appropriate medical facility; (c) to provide assessment of and care for affected travellers by establishing arrangements with local medical facilities for their isolation, treatment and other support services that may be required; (d) to provide appropriate space, separate from other travellers, to interview suspect or affected persons; (e) to provide for the assessment and, if required, quarantine of suspect travellers, preferably in facilities away from the point of entry.

5.1.3. Cleaning, disinfection and waste management

Ship owners, crew managers and other ship operators (or their representatives) should ensure that the following measures are strictly followed as soon as a confirmed COVID-19 case has been disembarked from the vessel, with the cabin or quarter facilities where they were isolated/managed to be thoroughly cleaned and disinfected.

Box 4: Essential instructions for cleaning, disinfection and waste management

Information and instructions for cleaning, disinfection and waste management

If a COVID-19 event takes place on board the vessel, protocols for cleaning and disinfection should be carried out by personnel trained to clean surfaces contaminated with infectious agents.

Seafarers should further be routinely informed and instructed in handling laundry, food service utensils and waste from cabins of possible cases and contacts as infectious, in accordance with procedures for handling infectious materials available on board.

Further resources on cleaning and disinfection of ships can be found from ECDC¹⁹ and EU HEALTHY GATEWAYS²⁰ and WHO⁷.

5.1.4. Management of contacts

Ship owners, crew managers and other ship operators (or their representatives) should ensure that following a confirmed COVID-19 case, the below procedures are implemented:

- Testing all contacts of a confirmed case by NAAT (e.g. RT-PCR if available on board) or by RADT.
- If contacts test positive, they should be immediately isolated as described in **Section 5.1**.
- Place contacts in quarantine in accordance with **Table 1**.

The suggested measures for work restrictions, isolation and quarantine must always be considered in accordance with any national/local regulations that apply.

Box 5: Essential information regarding COVID-19 contact management

Information regarding management of COVID-19 contacts

In all situations ship owners, crew managers and other ship operators (or their representatives) should inform:

- *Seafarers that when undergoing work restrictions, they should follow strict measures as described in **Table 2**.*
- *Local public health authorities in the event that any form of quarantine is taking place in their local region/district in accordance with national/local regulations.*

A flow chart illustrating the response to a COVID-19 event on board a commercial vessel can be found in **Annex 3**.

5.2 Overview of general measures to mitigate COVID-19 transmission and considerations for the seafarer's journey

Seafarers can observe personal protective measures to mitigate transmission, both on board and during their journey to and from the vessel. Furthermore, ship owners, crew managers and other ship operators (or their representatives) can also facilitate measures during each stage of the seafarers' journey.

Table 2 outlines general measures for avoiding transmission that ship owners should inform and support seafarers to comply with, regardless of where public health observation takes place (ashore prior to embarkation or on board at the start of work duties) and seafarers' vaccination status.

Table 3 presents considerations for ship owners, crew managers and other ship operators (or their representatives) during specific stages of the seafarers' journey to reach the commercial vessel and repatriate (including their time on board).

An illustrative leaflet for seafarers with advice for staying safe when travelling to and from the ship and while on board can be found here:
https://www.healthygateways.eu/Portals/0/plcdocs/EUHG_leaflet_seafarers.pdf

Table 2: Overview of general personal protective measures to limit COVID-19 transmission

General measures to minimize transmission risk	Examples for ship owners to facilitate measures
Minimizing interaction between seafarers	<ul style="list-style-type: none"> • Ensure any documentation required by seafarers for the purpose of crew changes is provided to them through electronic means to avoid non-essential contact with other individuals (if possible). • When feasible, arrange for seafarers to travel (joining the ship or returning home) individually or in cohorts (e.g. up to five seafarers per cohort). Ensure when arranging transport or designated accommodation for public health observation, that cohorts do not change throughout the journey and that there is no interaction between cohorts (as far as practicable).
Use of face masks to prevent droplet transmission	<ul style="list-style-type: none"> • Ensure availability of face masks for the seafarers' journey to/from the commercial vessel and while on board. <ul style="list-style-type: none"> - Respirators (e.g. FFP2 standard or equivalent) as a first priority when available for use by the public and if sufficient supplies are available after prioritization for use in healthcare settings. - Medical face masks when respirators are not available (where strategies to improve fit** could be considered) • Provide guidance and periodic/regular instruction to seafarers related to use of face masks (and other PPE where needed) including: <ul style="list-style-type: none"> - Settings and situations when face mask use and PPE is required. - Information on procedures and best practices for wearing (donning), removal (doffing), management and safe disposal or storage of face masks and other PPE. - Reminding seafarers that any face mask use is complementary to other personal protective measures such as physical distancing, hand hygiene, respiratory etiquette and avoiding touching one's eyes/nose/mouth. <p>More detailed resources can be found from WHO^{21,22}, ECDC²³ and EU HEALTHY GATEWAYS¹².</p>
Hand hygiene	<ul style="list-style-type: none"> • Ensure availability of hand hygiene materials for the seafarers' journey to/from the commercial vessel (where applicable) and while on board: <ul style="list-style-type: none"> - Soap and water - Alcohol-based hand rub solution (containing at least 60% ethanol or 70% isopropanol) • Provide guidance and periodic/regular instruction to seafarers related proper hand hygiene including: <ul style="list-style-type: none"> - Hand washing techniques - When hand rubbing with an alcohol-based solution can be used, instead of hand washing and how this can be performed <p>More detailed resources can be found from WHO¹⁸ and ECDC²³.</p>
Respiratory etiquette	<ul style="list-style-type: none"> • Ensure availability of respiratory etiquette supplies for the seafarers' journey to/from the commercial vessel (where applicable) and while on board: <ul style="list-style-type: none"> - Disposable tissues, no-touch waste bins • Provide guidance and periodic/regular instruction to seafarers related to proper respiratory etiquette.

^o If there is limited availability of respirators, their use should be prioritized considering:

- Setting and job position: prioritized for health care workers, medical personnel or those providing direct care to a possible or confirmed COVID-19 case, especially if aerosol-generating procedures are performed
- Vulnerability of wearer: use of respirators if could be prioritized for seafarers belonging to high-risk groups for severe COVID-19 complications or those that have not been vaccinated

** Strategies to improve mask fit include using masks with nose wires, using mask fitters/braces, using a knotting/tucking technique or double masking. Further details about strategies that can be used to improve face mask fit can be found from ECDC (<https://www.ecdc.europa.eu/en/publications-data/using-face-masks-community-reducing-covid-19-transmission>) and the Centers for Disease Control and Prevention (<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/types-of-masks.html>)

Table 3: Measures for consideration during seafarer journey

Phase of seafarer journey	Situation	Options for consideration by ship owners, crew managers and other ship operators (or their representatives)
Travelling to join the commercial vessel or return to place of origin	When transiting in means of transport⁵⁶ <ul style="list-style-type: none"> • Travel to/from designated public health observation facility (e.g. hotel) • Travel to and from airport in country of origin or destination country • Travel to and from the seaport in destination country • Travel on an aircraft 	Ensure transit of seafarers conducted in controlled way by: <ul style="list-style-type: none"> • Arranging private transport for seafarers and informing seafarers to avoid use of public transport as far as practicable • Ensuring the private transport vehicle arrives early to meet the seafarer, to limit the seafarer’s interaction with others that may occur if they wait for their transport to arrive • Ensuring proper cleaning and disinfection protocols are carried out between each use of a private transport vehicle in accordance with WHO²⁴ and ECDC technical guidance for cleaning and disinfection of non-health care settings¹⁹ • Ensuring that alcohol-based hand rub and face masks are available to the seafarer in the private transport vehicle (and means to dispose of face masks, e.g. secured plastic bag). • Informing seafarers to wear face masks for the entire duration of the transit • Informing seafarers that any personal baggage should be carried by seafarers themselves as much as possible at all times while within the transfer vehicle) • Ensuring measures to limit interaction between seafarers and maintain physical distancing as far as practicable within means of transport: <ul style="list-style-type: none"> - Arranging so seafarers travel individually in private transport vehicle (if feasible) or arranging seafarers’ transit in cohorts • Informing seafarers travelling by aircraft to comply with the airline and aircraft protocols related to personal protective and hygiene measures implemented on board. If such protocols are not in place, ship owners could inform seafarers to adhere to a minimum standard of personal protective and hygiene measures when in airports and on aircrafts (e.g. in accordance with guidance from IMO²⁵, ICAO²⁶ and ECDC/EASA²⁷)
At transport hubs	When at transport hub <ul style="list-style-type: none"> • Airports/seaports waiting to embark an aircraft/commercial vessel 	Inform seafarers to: <ul style="list-style-type: none"> • Keep physical distancing at all times while in transport hubs, minimizing close contact with others and avoiding the use of public areas in the hub, such as eating establishments

⁵⁶ As seen in Annex 2 several points of transit occur in means of transport throughout the seafarers’ journey (In accordance with the *Industry recommended framework of protocols for ensuring safe ship crew changes and travel during the coronavirus (COVID-19) pandemic* presented in IMO MSC.1/Circ.1636/Rev.1. 22 April 2021 (<https://wwwcdn.imo.org/localresources/en/MediaCentre/HotTopics/Documents/MS%201636%20protocols/MS%201636%20-%20Industry%20Recommended%20Framework%20Of%20Protocols%20For%20Ensuring%20Safe%20Ship%20Crew%20Changes%20And%20Travel.pdf>))

		<ul style="list-style-type: none"> Practice thorough and frequent hand hygiene, respiratory etiquette, and use of a face mask (in accordance with national/local regulations)
At seaport	During screening /embarkation/ disembarkation	<p>Inform seafarers to:</p> <ul style="list-style-type: none"> Keep physical distancing Use face masks Practice hand hygiene and respiratory etiquette Ensure safe disposal of disposable PPE used during travel, handling their own luggage²⁵
On board commercial vessel	<p>When no interaction between seafarers or others</p> <ul style="list-style-type: none"> While in individual cabins 	<p>Inform seafarers that:</p> <ul style="list-style-type: none"> Face masks are not needed Frequent and thorough hand hygiene and respiratory etiquette should be practiced
	<p>When exiting/outside of individual cabins and interaction among seafarers occurs</p> <ul style="list-style-type: none"> During work activities Gathering in mess halls, laundry and recreational areas^{***} 	<p>Ensure general measures to avoid transmission on board are taken:</p> <ul style="list-style-type: none"> Consider increasing frequency of meal service to limit crowding Consider staggering seafarers' work shifts to limit crowding during work activities
	<p>When external visitors (shore-side personnel, inspectors etc.) board the vessel^{†††}</p>	<p>Inform seafarers that in these situations strict personal protective and hygiene measures should be followed:</p> <ul style="list-style-type: none"> Maintaining as far as practicable 1.5 metre physical distance Use of a face mask at all times Practice frequent/thorough hand hygiene and respiratory etiquette
	<p>When seafarers undergo public health observation period</p>	<p>Inform seafarers that in these situations strict personal protective and hygiene measures should be followed for the duration of quarantine:</p> <ul style="list-style-type: none"> Avoiding as much as possible non-essential contact with others and use of shared areas on board the ship (mess halls, laundry rooms etc.) Limiting interaction with other seafarers during work activities (assign to positions where work alone) or ensure strict measures (physical distancing of 1.5 metres and use of face mask when working with others) Wearing a face mask at all times when outside of individual cabin Practicing frequent/thorough hand hygiene and respiratory etiquette

^{***} If during quarantine the conditions on board are not suitable to mitigate the risk of transmission, it could be considered to close common areas such as laundry rooms/mess halls/recreational areas.

^{†††} Only the minimum number of personnel required should be allowed to board in order to limit interactions between seafarers and shore-based personnel.

		<ul style="list-style-type: none"> • Remaining in individual cabins when not working as much as possible • Eating meals in their cabin (if possible) • Not entering galley areas of the vessels • Transiting the vessel through outer walkways when possible
	<p>Areas possibly contaminated on board commercial vessel</p> <ul style="list-style-type: none"> • While providing care in medical facility where possible COVID-19 case isolated on board 	<p>Ensure that:</p> <ul style="list-style-type: none"> • Only those individuals necessary enter the isolation area (ideally the same person) • Appropriate PPE is available to those entering isolation area and they are trained in its use (wearing, removing, safe disposal): <ul style="list-style-type: none"> • Properly fitting respirator (FFP2) or if unavailable medical face masks • Eye protection (goggles or face shield) • Disposable gloves • Long-sleeved impermeable gown • Individuals practice frequent and thorough hand hygiene • Isolation areas on board are cleaned and disinfected in accordance with WHO²⁴, ECDC¹⁹ and EU HEALTHY GATEWAYS²⁰ technical guidance • Items such as laundry, food service utensils and waste from the medical facility where possible cases are in isolation should be handled as infectious

6. Public health measures during shore-side visit

Like for every other citizen, seafarers can enjoy their right to shore leave subject to strict respect of any public health measures applicable to the local population and following all precautionary measures to minimise the risk of infection coming on board. Shore leave and shore-side visits at a port of call should only be possible under specific circumstances. A risk assessment could be conducted to ensure shore leave is safe and appropriate. Issues to consider include the need to minimise the risk of infection coming on board, balanced against the benefits to a seafarer's physical and mental wellbeing of being allowed ashore.

When seafarers are able to safely take shore-side visits at a port of call, ship owners, crew managers and ship operators (or their representatives) should support seafarers to comply with strict public health measures while shore-side. It could be considered to advise seafarers to visit an ICMA run seafarers' centre in the port which is observing and applying COVID-19 prevention measures protocols, to avoid the seafarers being exposed with local populations.

Box 6: Essential information for seafarers regarding shore-side visits

Information for seafarers

Seafarers should receive written guidance, instructions and material in English and if possible in their national language from ship owners, crew managers and ship operators (or their representatives) for the purposes of shore-side visits with information about:

- *Any national/local public health requirements or measures in place for the local population at the port of call.*
- *General personal protective and hygiene measures (as outlined in **Table 2**) to protect themselves and the local population against COVID-19.*

Furthermore, they should:

- *Facilitate seafarer's compliance with requirements during shore-side visits by providing any necessary supplies (e.g. face masks, alcohol-based hand rub) for seafarers' shore-side visit.*

7. Journey from the ship to home

Ship owners, crew managers and ship operators (or their representatives) should facilitate the disembarkation process to allow seafarers to follow all personal protective and hygiene measures while disembarking, including maintaining physical distancing from other persons while disembarking, providing the appropriate PPE, ensuring safe disposal of disposable PPE used during travel, and handling their own luggage²⁵.

Seafarers that will disembark the ships and will be travelling to their country of origin could be subject to undergo a quarantine period and testing and or vaccination requirements as per national/local requirements in their destination country/origin country.

8. Considerations for crew vaccinations

WHO reported that seafarers gaining access to vaccination continues to be challenging for this group⁷. Furthermore, WHO recommends to Member States to allow entry/exit from the country

without requiring proof of COVID-19 vaccination. Prevention and control strategies on board ships should not rely exclusively on vaccination. As indicated by WHO, *“fully vaccinated people have some level of protection against COVID-19, and are less likely to infect someone else. However, vaccines do not confer 100% immunity, nor they prevent transmitting the virus to others, and breakthrough infections may occur”*.

It is recommended that all seafarers have access to vaccination against COVID-19. Currently, seafarers may be vaccinated in accordance with their national vaccination programme, and some countries are developing vaccination programmes specifically targeting seafarers. As transportation workers, seafarers are recommended to be considered a priority group by EU/EEA MS for vaccination against COVID-19 in accordance with the European Commission Communication²⁸.

Vaccination of crew should be legally acquired from official sources. Moreover, all vaccinated crew members should hold valid proof of vaccination if applicable based on national requirements, and inform their employer about their vaccination status (**Annex 4** provides a list of information to be included in the valid proof of vaccination particularly for the purposes of validating the vaccination). The vaccine delivered should be included in the list of approved vaccines by an internationally recognized authority (EMA and/or WHO) as described in the definitions section of this document.

ECDC indicates in its options for response to the EU MS: *“National Immunisation Technical Advisory Groups (NITAGs) in EU/EEA countries should consider a booster dose for those 40 years and over, targeting the most vulnerable and the elderly. Countries could also consider a booster dose for all adults 18 years and older at least six months after completion of the primary series to increase protection against infection due to waning immunity, which could potentially reduce transmission in the population and prevent additional hospitalisations and death”*.

The European Commission press release of 21 December indicates: *“Vaccination certificates will be accepted by Member States for a period of nine months since the administration of the last dose of the primary vaccination. For a single-dose vaccine, this means 270 days from the first and only shot. For a two-dose vaccine it means 270 days from the second shot, or, in line with the vaccination strategy of the Member State of vaccination, the first and only shot after having recovered from the virus. Under these new EU rules for intra-EU travel, Member States must accept any vaccination certificate that has been issued less than nine months since the administration of the last dose of the primary vaccination. Member States are not able to provide for a shorter nor for a longer acceptance period”*. Exceptions apply for persons under the age of 18^{***}.

Records of crew members who have received vaccination, including names and dates, should be kept in order to support decision making regarding public health measures during a potential outbreak situation. Proof of vaccination/vaccination documentation should be kept by seafarers’ themselves so it can be shown when required. Any data kept by the ship owners, crew managers

*** Certificates held by persons aged 18 and above indicating the completion of the primary vaccination series shall be accepted only if not more than 270 days have passed since the date of the latest dose in that series

and ship operators (or their representatives) should be handled in accordance with the relevant legislation for personal data protection.

Box 7: Essential information for seafarers regarding vaccination

Information for seafarers

Seafarers should receive existing written guidance, instructions and material in English and if possible in their national language from ship owners, crew managers and other ship operators (or their representatives) regarding COVID-19 vaccination to promote its use. This can include information regarding:

- *Benefits of vaccination to protect seafarers' health*
- *Types of vaccines available*
- *Vaccine safety and possible side-effects*
- *Locations where seafarers could be vaccinated, if known and/or facilitated by ship owners, crew managers or ship operators (or their representatives). A list of countries that have implemented seafarer vaccination programs, or have signalled their intent to do so, in designated ports within there is provided at the following link: <https://icma.as/vaccines/>*

Information about COVID-19 vaccines and vaccine safety can be found from:

- **EMA:** *COVID-19 vaccines*²⁹
- **ECDC:** *Questions and answers on COVID-19: Vaccines*³⁰
- **WHO:** *Coronavirus disease (COVID-19): Vaccines*³¹ and *Vaccines safety*³²
- **International Chamber of Shipping (ICS)**
 - *Coronavirus (COVID-19): Roadmap for Vaccination of International Seafarers*³³, *Vaccination for Seafarers and Shipping Companies: A Practical Guide*³⁴, *Legal, Liability and Insurance Issues arising from Vaccination of Seafarers*³⁵
 - *Additional guidance from ICS can be found at the following link: <https://www.ics-shipping.org/supporting-shipping/covid/>*

9. Supporting seafarer welfare and safeguarding mental and physical health

9.1. Seafarer access to health care

In the context of the COVID-19 pandemic and measures implemented by Member States to limit the spread of the virus, seafarers have faced difficulties accessing medical care (for both COVID-19 and other conditions) on shore³⁶.

Ship owners, crew managers and other ship operators (or their representatives) should ensure that the commercial vessel's written contingency plan/outbreak management plan includes:

- Communication plans and routes in place to facilitate rapid communication between the vessel and the maritime telemedicine assistance service (TMAS) and/or alternative shore-based healthcare services which should be pre-defined in the contingency plan/outbreak management plan.
- Criteria to decide if a possible COVID-19 case can be managed on board or immediate medical care is required⁷.
- Plan for seafarers responsible to provide medical care on board the vessel, to ensure they are adequately instructed in procedures for deciding if a seafarer requires immediate assistance for COVID-19 or other non-related health condition, or if medical care can be provided when the ship reaches the next port of call (radio medical advice could be considered).

9.2 Seafarer access to psychological assistance and mental health services

Stressors linked to the COVID-19 pandemic can include challenges related to disembarkation and repatriation, restricted access to medical care on shore, lack of information about COVID-19 prevention and control measures on board, among other issues. These factors further contribute to the adverse psychosocial health of seafarers leading to stress, fatigue, feelings of social isolation and other conditions such as anxiety and depression^{7,37}.

Risk communication messaging should take into consideration language and cultural differences of seafarers. In addition to English and where possible, messaging should be available in national languages.

To support seafarers' mental wellbeing during the COVID-19 pandemic, ship owners, crew managers and other ship operators (or their representatives) should ensure:

- Seafarers have access to confidential mental health/psychosocial services at all times in English and where possible in national languages. If in person services are not feasible, remotely offered services should be available through online/video tools or telephone services (e.g. telemedicine). Several helplines exist to support seafarers and provide mental health assistance; a list of available helplines is available from ICS^{§§§}.
- Orientation and courses on mental health awareness and healthy ways of coping with stress. Resources and guidance for seafarers to support mental wellbeing and manage stress are available from the International Seafarers' Welfare and Assistance Network^{****} (ISWAN) and ICS^{††††}.
- Seafarer communication with family/friends and access to entertainment on board is facilitated (e.g. via offering internet for seafarers' personal use free of charge).
- Plans and procedures are in place to manage and mitigate seafarer fatigue (particularly during COVID-19) in line with IMO guidelines on fatigue³⁸.

Box 8: Essential information to seafarers related to mental health services

Information to seafarers

Ship owners, crew managers and ship operators (or their representatives) should inform and provide continuous up-to-date information to seafarers (through guidance, instructions and material in English and if possible in their national language) about:

- *Resources available to them for mental health/psychosocial support (prior to embarkation or at embarkation).*
- *Crew change processes and repatriation, national/local regulations and public health measures implemented at ports of call, the epidemiological situation at the ports of call, information related to COVID-19 prevention and control.*

WHO provides information on resources available to support seafarer mental health⁷ and guidance on mental health/psychosocial considerations during COVID-19³⁹.

^{§§§} <https://www.ics-shipping.org/wp-content/uploads/2021/06/Access-to-company-or-other-support-helplines-for-seafarers.pdf>

^{****} <https://www.seafarerswelfare.org/seafarer-health-information-programme/good-mental-health>

^{††††} <https://www.ics-shipping.org/publication/handling-a-mental-health-crisis-or-emergency-and-spotting-suicidal-behaviour-in-seafarers/>

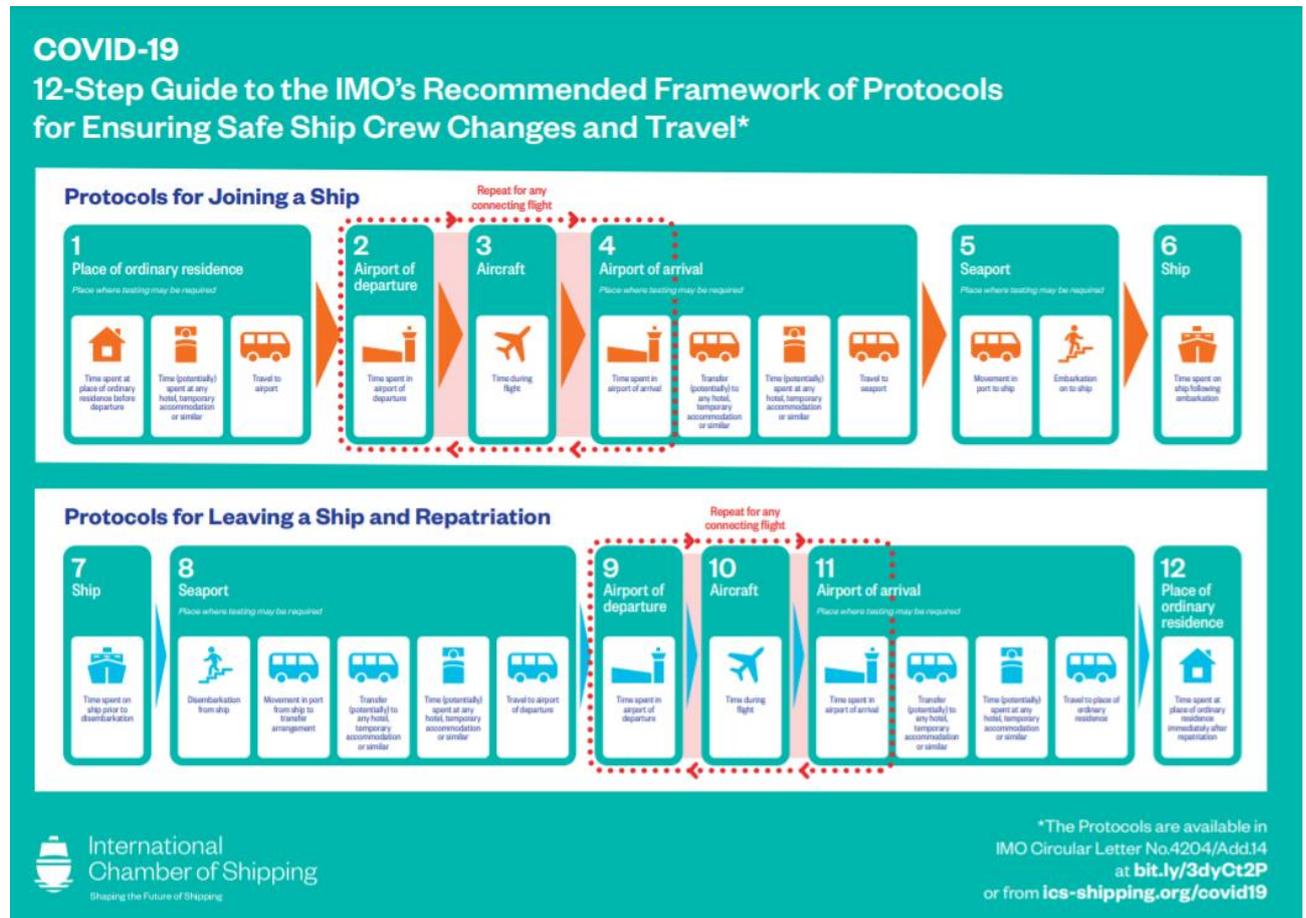
10. Annexes

Annex 1: Relevant European Commission Communications, Recommendations and Guidelines

- Commission Delegated Regulation (EU) 2022/503 of 29 March 2022 amending Regulation (EU) 2021/953 of the European Parliament and of the Council as regards exempting minors from the acceptance period of vaccination certificates issued in the EU Digital COVID Certificate format (Text with EEA relevance) C/2022/2050. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022R0503>
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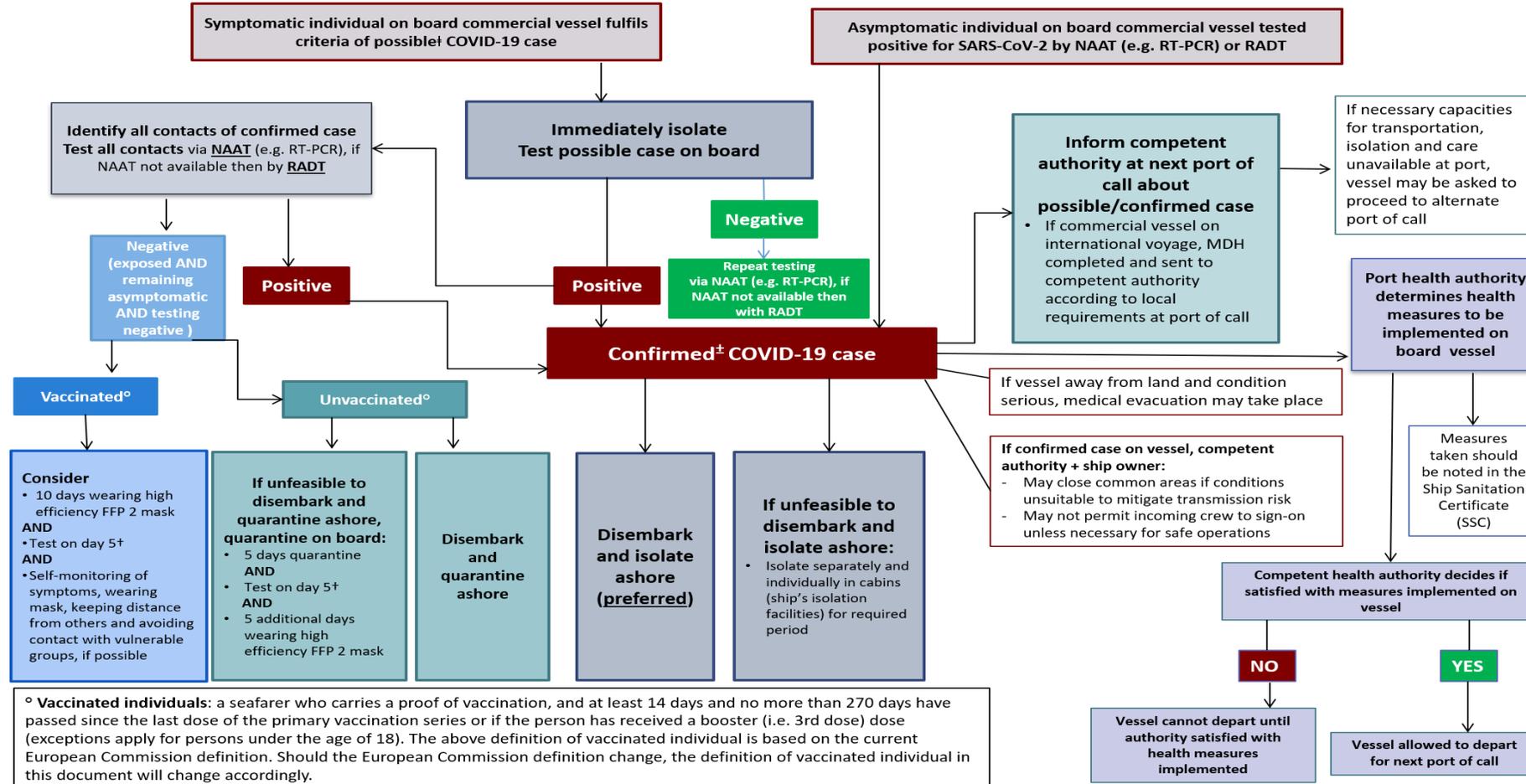
Annex 2: Representation of IMO Recommended Framework of Protocols for ensuring safe ship crew changes and travel



Source: <https://www.ics-shipping.org/publication/covid-19-12-step-guide-to-the-imos-recommended-framework-of-protocols-for-ensuring-safe-ship-crew-changes-and-travel/>

Annex 3: Response to a COVID-19 event on board

Management of possible†/confirmed ± COVID-19 cases and their contacts on board commercial vessel



° **Vaccinated individuals:** a seafarer who carries a proof of vaccination, and at least 14 days and no more than 270 days have passed since the last dose of the primary vaccination series or if the person has received a booster (i.e. 3rd dose) dose (exceptions apply for persons under the age of 18). The above definition of vaccinated individual is based on the current European Commission definition. Should the European Commission definition change, the definition of vaccinated individual in this document will change accordingly.

†**Possible case:** Any person with at least one of the following symptoms: runny nose, sore throat, headache, cough, fever, shortness of breath, sudden onset of anosmia, ageusia or dysgeusia, vomiting or diarrhoea. Additional less specific symptoms may include chills, muscle pain, fatigue

± **Confirmed case:** any person who has been tested positive by RADT or RT-PCR or other NAAT (Case definition for coronavirus disease 2019 (COVID-19), as of 3 December 2020. <https://www.ecdc.europa.eu/en/covid-19/surveillance/case-definition>).

† Test via RADT or RT-PCR (if RT-PCR available on board). If the ship is close to land, then alternatively RT-PCR could be conducted in a shore-side laboratory.

Annex 4: Information to be included in seafarers' valid proof of vaccination

A valid Digital COVID-19 Certificate (DCC)^{****} or other certificate/document could include the following information:

- (a) name: surname(s) and forename(s);
- (b) date of birth;
- (c) disease or agent targeted (SARS-CoV-2 or one of its variants);
- (d) vaccine/prophylaxis;
- (e) vaccine product name;
- (f) vaccine marketing authorization holder or manufacturer;
- (g) number in a series of vaccinations/doses and overall number of doses in the series;
- (h) date of vaccination, indicating the date of the latest dose received^{§§§§};
- (i) country of vaccination;
- (j) certificate issuer;
- (k) a unique certificate identifier or other means to validate the vaccination such as contact information in order to communicate with the healthcare provider or clinic site that issued the certificate, or the vaccination registry site.

^{****} https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans/eu-digital-covid-certificate_en

^{§§§§} certificates held by persons aged 18 and above indicating the completion of the primary vaccination series shall be accepted only if not more than 270 days have passed since the date of the latest dose in that series

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