



Getting healthy seafarers to a ship: Mitigating the risk with quarantine and testing.

An IMHA interim statement

Introduction

In the current pandemic situation, it has proved incredibly difficult to facilitate crew changes on ships. This has led to many seafarers remaining on board ship long after their end of contract date and in many cases for more than the maximum period of 11 months stated in the Maritime Labour Convention 2006¹. Despite the collaboration of parties across the industry, this problem is still unresolved with up to 200 000 seafarers estimated to be trapped on board. One of the issues is getting replacement crew to the ship and this may be due to:

- The availability or not of travel from the seafarer's home to the port. This may involve travel by road, sea and air and may involve crossing country borders. Transportation links remain limited in many areas and airlines may have their own individual requirements for testing prior to boarding an aircraft.
- Entry restrictions and quarantine requirements in the country where the seafarer should join the ship. Some of these will not apply if countries identify seafarers as key workers.
- The risk of new crew introducing Covid-19 onto the ship with subsequent cases on board that may affect the health and safety of the crew and impact ship operations.

Cases continue to rise across the globe², notably in many of the so called 'crewing countries'. Therefore, it is imperative that Governments, ship owners, seafarers and the international agencies agree on a standard protocol to mitigate the risk of seafarers introducing Covid-19 onto a ship when crew is changed and to reassure countries where crew change is to take place that seafarers are a low risk group for the transmission of Covid-19.

Evidence to date suggests that following exposure to Covid-19, people become ill within 14 days. 97.5 % become ill within 11.5 days after exposure, approximately 75% within 7 days. The median incubation period is 5 days³.

IMHA has reviewed the current evidence and we are in the process of obtaining additional information on practice around the world, in collaboration with the International Chamber of Shipping (ICS). However, exact science in this field is currently lacking and this interim paper has been produced to offer a common sense, best practice approach to mitigate the risk of transmission of Covid-19 in seafarers joining the ship.

¹ https://www.ilo.org/global/standards/maritime-labour-convention/text/WCMS_554767/lang--en/index.htm

² https://www.worldometers.info/coronavirus/?utm_campaign=homeAdvegas1?

³ <https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19-clinical-features#H2222473005>



Recommended quarantine and testing requirements for seafarers joining a ship

As a gold standard, IMHA recommends that all seafarers leaving their home country to join a ship should be tested before they travel to the port of joining. Upon arrival in the port where they are to join a ship, seafarers should quarantine for 2 weeks in suitable accommodation, preferably ashore, arranged and paid for by the shipping company. Seafarers should be tested at Day 3 to 5 after arrival in country and at the end of this period of quarantine.

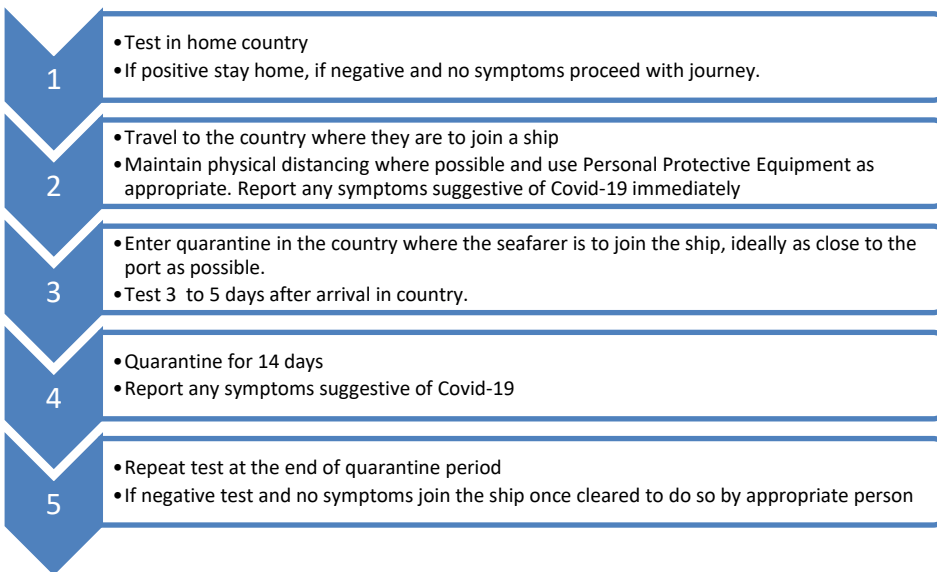


Figure 1 Recommended quarantine and testing requirements before joining a ship

If quarantine in the port or country of joining a ship is not possible, seafarers may quarantine for 2 weeks in their home country, prior to travel. This can either be at home, if appropriate, or in accommodation arranged and paid for by the shipping company. Again testing should be done at the beginning and end of this quarantine period prior to travel. Once the seafarers have arrived in the country where they will join their ship, they should be tested again if they are not going to join the ship for 3 to 5 days. If they are to board within 3 days of arriving in a country this test is probably not worthwhile. If no further test is possible (or the result is not available), the seafarer should follow shipboard self-distancing (SSD) for the first 14 days on board or until a negative test result is available. More information on this is available in the ICS publication, 'Coronavirus. Guidance for Ship Operators for the Protection of the Health of Seafarers'⁴.

When seafarers are travelling at any time, they should avoid others as much as possible. Handwashing, physical distancing and good respiratory etiquette must be observed and a medical facemask may be advised. The use of Personal Protective Equipment (PPE) is outlined in the EU Healthy Gateway Document, 'Who, Where, How'⁵. The World Health Organisation (WHO) will also publish a document covering this subject shortly.

Whilst 14 days of quarantine is advised, it may be very difficult to facilitate particularly in crewing patterns with a leave period of just a couple of weeks. A quarantine period of 10 or even 7 days is accepted in some countries

⁴ <https://www.ics-shipping.org/docs/default-source/resources/covid-19-guidance-for-ship-operators-for-the-protection-of-the-health-of-seafarers-v2.pdf?sfvrsn=4> Accessed July 1st 2020

⁵ https://www.healthygateways.eu/Portals/0/plcdocs/EUHG_PPE_Overview_24_04_2020_F.pdf?ver=2020-05-20-201841-010



when combined with two separate tests and self-reporting of symptoms. A reduction of the quarantine time must be part of a full risk assessment of the crew change policy and an approval by a competent authority or person.

Irrespective of which policy is followed, if any of the tests are positive or the seafarer develops any symptoms suggestive of Covid-19, the seafarer should receive treatment as appropriate and must not join the ship until they are considered free of the virus and non-infective to others. Unpublished data from one clinic has found that 1% of tests done in seafarers planning to join a ship were positive and these seafarers were successfully prevented from travelling to, and joining, the ship.

Facilities for quarantine

Any facility used for the quarantine of seafarers, if not the seafarer's home, should provide them with at least three meals a day and access to additional food and drink. The seafarer must have access to laundry facilities during the quarantine period and there should be a TV and free Wi-Fi available. Periods of planned outdoor exercise are essential and must be facilitated.

The seafarer must have access to medical advice by phone or in person at all times and to healthcare if this is required for any medical condition. If a seafarer experiences any symptoms suggestive of Covid-19, for example, fever, dry cough and tiredness⁶, they must contact a designated person immediately.

Testing

Testing should be by Polymerase Chain Reaction (PCR) test and from a nasal pharyngeal swab. The use of saliva in testing is currently in the trial stage although initial reports are promising⁷. A nasal pharyngeal swab can be taken by a health care professional or the seafarer can do it themselves, after instruction in person or from a video. Self-swabbing has been shown to be almost as reliable as swabs taken by a health care professional⁸ but it is not an easy procedure to perform. However, access to health care professionals to perform the swab may be a limiting factor and self-swabbing should be considered.

Whilst a PCR test is considered the gold standard test, there is still a false negative rate of up to 30% reported in practice. The tests themselves are reported to be up to 95% sensitive but some tests are more accurate than others. Ideally, no test should be used that is not approved by the World Health Organisation (WHO)⁹ or a regulatory agency such as the Federal Drug Administration in the United States¹⁰ or the Medicines and Healthcare products Regulatory Agency in the United Kingdom¹¹ although this may be beyond the control of the shipping company.

However, errors can occur in testing due to a number of reasons that include but are not limited to:

- Poor swab taking
- Taking the swab too early in the illness

⁶ <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-coronaviruses>. Accessed July 1st 2020

⁷ <https://www.fhi.no/en/publ/2020/saliva-sample-for-testing-sars-cov-2-infection/> Accessed July 1st 2020

⁸ <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2767065?resultClick=1> Accessed July 1st 2020

⁹ https://www.who.int/diagnostics_laboratory/200625_eul_sars_cov2_product_list.pdf

¹⁰ <https://www.fda.gov/> Accessed July 1st 2020

¹¹ <https://www.gov.uk/government/organisations/medicines-and-healthcare-products-regulatory-agency> Accessed July 1st 2020

-
- Issues in transportation and transport media
 - Delay in transport or analysis
 - Human error in interpretation and poor equipment in the laboratory. This may be a particular issue with the level of health infrastructure is poor and the numbers of skilled personnel are limited.

Further advice on testing can be found in an interim guidance document produced by the WHO¹². Whilst every effort should be taken to ensure that all of these steps are optimised as far as possible it must be noted that any test result cannot be 100% reliable and the result must be interpreted by an appropriately trained person and in the context of any clinical findings and other information. Equally, the test only gives a snapshot of the health of the seafarer at the moment it was taken and cannot predict future illness.

Rapid diagnostic tests to detect the virus antigen are not yet accurate enough for use outside of a research or health care setting¹³. The presence of antibodies cannot be used in this scenario as they cannot be detected until 7 to 14 days after infection and even then, questions remain about their reliability and what it means for future immunity¹⁴.

Conclusion

An internationally agreed and implemented policy for the quarantine and testing requirements of seafarers joining a ship is essential in facilitating crew change. Ideally, the aviation industry will also accept the policy and thus ensure that no additional tests or periods of quarantine are required in order for the seafarer to travel. In addition, seafarers must be considered as key workers to allow them ease of transportation and safe passage to and from their ships¹⁵. The maritime industry is responsible for the transport of about 90% of the world's trade¹⁶ and throughout the current pandemic, it has striven to maintain supply chains and the delivery of essential cargoes, including food and medical supplies, whilst ensuring the continued health and welfare of the 1.6 million seafarers serving on board ship. It cannot continue to do this without changing crew as necessary and ensuring that appropriate steps are taken to reduce the risk of seafarers carrying Covid-19 on board. This interim paper outline what we believe is a common sense, best practice approach to achieve this aim.

Disclaimer

IMHA understands the information contained in this interim paper to be accurate and the most up to date that is available at the time of writing. However knowledge about the virus, the illness, treatment and testing is developing rapidly and this paper will be updated when necessary.

¹² <https://www.who.int/publications/i/item/10665-331501> Accessed July 3 2020

¹³ <https://www.who.int/news-room/commentaries/detail/advice-on-the-use-of-point-of-care-immunodiagnostic-tests-for-covid-19> Accessed June 22nd 2020

¹⁴ <https://www.bmj.com/content/370/bmj.m2516>

¹⁵ <http://www.imo.org/en/MediaCentre/PressBriefings/Pages/20-DOTS-2020.aspx>

¹⁶ <https://www.ics-shipping.org/shipping-facts/shipping-facts> Accessed July 1st 2020