

## **Risk Assessment for Ships**

The following information note has been prepared by the WPRO COVID-19 IMST to facilitate decision making for ships with crew or passengers aboard during the COVID-19 Pandemic. The goal of this decision-making is to place those aboard in the most appropriate environment to ensure their safety and well-being while also protecting the health of those ashore.

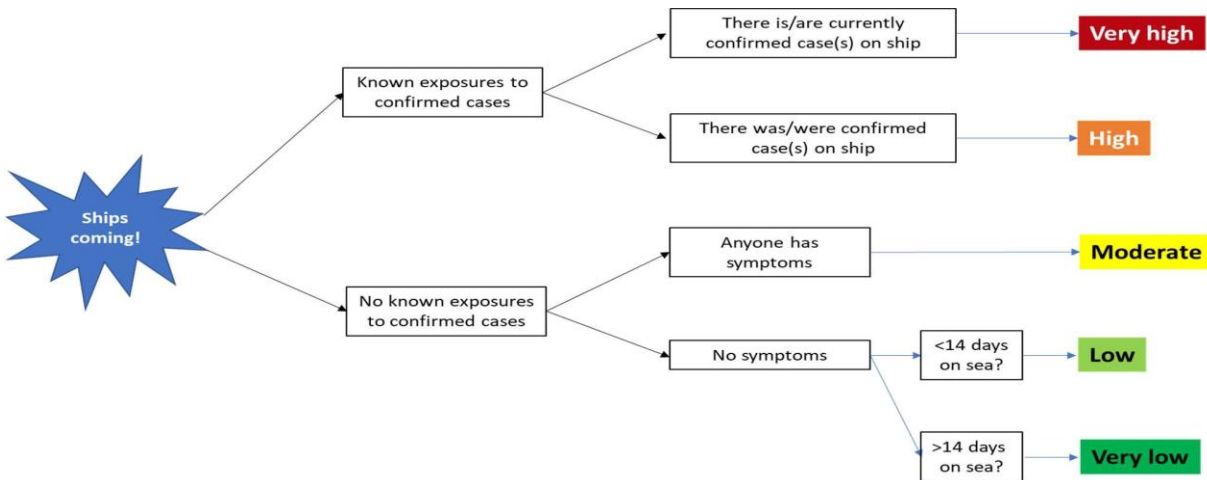
The suggested steps are designed for the local public health authority and bureau of quarantine to rapidly assess potential risk that may be posed and identify necessary immediate actions to be taken, thus enabling to prevent subsequent transmission COVID-19 on board as well as onshore. After risk assessment conducted using algorithm, relevant authorities at the port of call will be able to manage confirmed/suspected cases as well as other possible exposed passengers as appropriate.

### **Risk question**

1. Have there been known exposure to confirmed cases on board?
2. Are the confirmed and/or suspected cases currently on board?
3. Do people present COVID-19 compatible symptoms?
4. Does the ship have capacity to individually quarantine all persons aboard and observe infection-prevention-and-control within the ship?
5. Does the country at the port of call have adequate capacity for quarantine of all people on board?

The following simplified flow chart provide quick guides to actions.

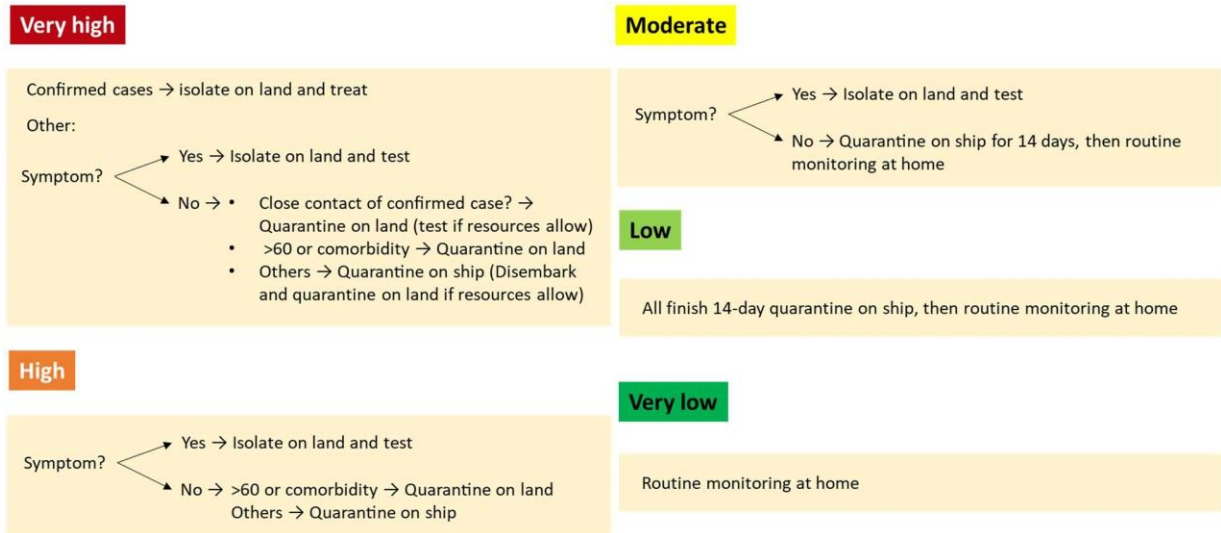
Risk assessment algorithm<sup>12</sup>



Maritime declaration of health

Before arrival of ship at the port, the ship master must provide report on the status of health of crews and passengers on board (Please refer to Article 37, IHR 2005 for more details).

Management of people on board according to risk level<sup>34</sup>



<sup>1</sup> Date the ship was last at port will be considered Day 0 for the quarantine period, regardless of whether or not persons disembarked or embarked.

<sup>2</sup> Ship operator should follow national case definition where the ship is located. WHO case definition is also available here: [Global Surveillance for human infection with coronavirus disease \(COVID-19\)](#).

<sup>3</sup> 14-day quarantine on land and testing for all exposed person is the best approach. However, given variable capacity in countries to accommodate all people on land, decision on disembarkation shall be made according to a level of risk.

<sup>4</sup> Ethical consideration is needed regarding keeping unexposed persons on ship for 14 days

**Risk level: very high**

When there is a confirmed case identified on board, the first steps should be separation of the case from other passengers and crew and environment disinfection to prevent additional transmission. Also, the case should be notified to the competent authority for the port of call following IHR notification procedure (see Article 28 – Ships and aircraft at points of entry, IHR 2005). While waiting to be taken off from ship, the confirmed case should be isolated in a separate room, where there will be no direct human contacts with other people, and ship operator will inform responsible health authorities ashore to arrange transportation and health facility. Ship operator must strictly follow guidelines for infection prevention and control<sup>5</sup>, including waste management and laundry. Specific arrangements for food & supplies delivery to isolated persons must be put in place to avoid direct human contact. Upon disembarkation, the case should be directly transferred to an isolation ward in designated health facility for treatment, same as usual patients' referral process.

Due the peculiar environment onboard of ship, all others on board should be treated as contacts of positive cases and screened according to symptom presentation. If contacts have COVID-19 compatible symptoms, they will be immediately classified as suspected cases and be isolated on land for testing and treatment. During the disembarkation of suspected cases, every effort should be made to minimize the exposure of other persons and environmental contamination. Suspect cases should be provided with a surgical mask to minimize the risk of transmission. Among contacts who do not show symptoms, close contact\*<sup>6</sup> may need to be isolated on land and tested, if resources allow, as he/she may likely become suspected/confirmed cases due to high-risk exposure. As elderly people (60-year old or above) & those with co-morbidities are high risk group in terms of severity, they also need to be quarantined on land to allow for quick transfer to health facilities in case they develop symptoms. The others will be quarantined on ship, but ship operator with relevant health authorities ashore may decide to disembark all passengers for quarantine on land if there is capacity. Disembarkation will follow this guidance (<https://www.who.int/publications-detail/operationalconsiderations-for-managing-covid-19-cases-or-outbreaks-on-board-ships-interim-guidance>).

**Risk level: high**

When it is known there were confirmed cases onboard but currently are not, passengers and crew will be screened according to symptom presentation. Those who have symptoms will be classified as suspected cases and isolated on land for testing and treatment same as above. Also, elderly people over 60 years old & those with co-morbidities will need to be quarantined on land same as above. But other will not need

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<sup>5</sup> Please refer to WHO [interim guidance on Operational considerations for managing COVID-19 cases or outbreaks on board ships](https://www.who.int/publications-detail/operationalconsiderations-for-managing-covid-19-cases-or-outbreaks-on-board-ships)

<sup>6</sup> Those who shared room with confirmed cases for any amount of time or those who had physical contact (face to face contact within 1 metre for more than 15 min) or were in a closed environment with a suspected or confirmed COVID-19 case

disembarkation and be quarantined on ship for 14 days. While quarantined, they should monitor their health status twice a day and report if symptoms appear. The rooms, where suspected cases stayed, should be cleaned and disinfected daily. Cleaning and disinfection should also be carried out after suspected case disembarked. Waste from the room should be managed same as confirmed cases. Detailed information about cleaning and disinfecting cabins can be found in WHO's interim guidance about home care for patients with suspected COVID-19<sup>7</sup>.

**Risk level: moderate**

Although there was no known exposure to confirmed cases on board, if there are persons who have COVID-19 compatible symptoms, they will need to be isolated on land and tested for COVID-19. This is because there is possibility of unperceived contacts with confirmed cases. The other will only need to be quarantined on ship to finish 14-day quarantine period and monitor their health status as mentioned above. The rooms, where suspected cases stayed, should be cleaned and disinfected daily. Cleaning and disinfection should also be carried out after suspected case disembarked, and waste from the room should be managed same as confirmed cases. If the case returns positive, the risk level will be upgraded to very high, and people on ship will be managed as contacts of confirmed cases.

**Risk level: low**

If there was no known exposure to confirmed cases and no one shows symptoms on board, ship operator will check how long the ship was on sea. If it was less than 14 days, all passengers will finish 14-day quarantine on ship and will be advised to practice standard precautionary measures, such as physical distancing and hand hygiene.

**Risk level: very low**

If there was no known exposure to confirmed cases and no one with symptoms, and the ship was on sea more than 14 days, the level of risk is very low so that all passenger will disembark and monitor their symptoms at home for 14 days from the day of disembarkation.

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<sup>7</sup> [https://www.who.int/publications-detail/homecare-for-patients-with-suspected-novelcoronavirus-\(ncov\)-infectionpresenting-with-mildsymptoms-and-management-of-contacts](https://www.who.int/publications-detail/homecare-for-patients-with-suspected-novelcoronavirus-(ncov)-infectionpresenting-with-mildsymptoms-and-management-of-contacts)