



## Managing COVID-19 cases onboard

The World Health Organization has now upgraded the status of the COVID-19 outbreak from epidemic to pandemic. Early detection, prevention and control of COVID-19 cases onboard ships must be a number one priority to protect the health of crews and passengers and to avoid further transmission of the virus.

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Increasing numbers of COVID-19 cases are now reported in countries across all continents except Antarctica, and the rate of new cases outside of China has outpaced the rate in China. All ships undertaking international voyages, and particularly those calling at ports in affected areas, are advised to develop a written plan for disease outbreak management, preferable in close contact with a medical service supplier, covering issues such as:

- how to identify a suspected case of COVID-19;
- an isolation plan describing the location(s) where suspected cases should be temporary individually isolated until disembarkation;
- hygiene rules for the isolation room including use of personal protective equipment (PPE), cleaning and disinfection procedures and waste management;
- options for onboard treatment and medical equipment inventories; and
- management of close contacts.

At the time of writing, a number of government agencies, industry stakeholders and medical experts have published guidelines providing support to operators and crews on how to manage suspect COVID-19 cases onboard ships. Here is a summary of some their key recommendations.

### **What is considered an ‘affected area’?**

According to the World Health Organization’s (WHO) [travel advice](#) of 29 February 2020, ‘affected areas’ are those countries, provinces, territories or cities experiencing ongoing local transmission of COVID-19, in contrast to areas reporting only imported cases.

As the epidemic evolves, it is expected that many areas may detect both imported cases and local transmission of COVID-19. In order to establish the situation in different countries, the WHO is publishing [daily situation reports](#) on the evolution of the outbreak and has also established a [dashboard](#) displaying the cases reported each day.

### **Recognising the symptoms of COVID-19**

When symptoms start to show, the most common symptoms for COVID-19 are fever, tiredness, and a dry cough. Some patients may have aches and pains, nasal congestion, runny nose, sore throat or diarrhea. These symptoms are usually mild and begin gradually. Some people become infected but do not develop any symptoms and do not feel unwell while others become seriously ill and develop difficulty breathing. So far, the majority who have become seriously ill from the disease have been old or have had underlying conditions that make them susceptible to the disease. Examples of factors that increase the risk of severe disease are high blood pressure, heart problems and diabetes.

### **Identifying a ‘suspected case’ of COVID-19 onboard**

Identifying and isolating passengers and crew with possible symptoms of COVID-19 as soon as possible is necessary to minimise transmission of this virus. However, because the signs and symptoms of COVID-19 are non-specific, it is also important to carry out a detailed assessment of the patient's exposure risk, i.e. if he or she has visited an affected area, or been in close contact with someone sick with COVID-19, during the 14 days prior to the onset of the symptoms.

The WHO's guidance on how to define a 'suspected case' of COVID-19 is available in the document [Global Surveillance for human infection with coronavirus disease \(COVID-19\)](#) . Case definitions in this document are based on what is currently known about the clinical and epidemiological profile of cases of COVID-19 presenting to date and may be revised as new information is collected. The 14 day period is based upon what is currently known to be the upper time limit of the incubation period.

### **Managing a suspected case onboard**

If it is determined that there is a suspected case of COVID-19 onboard, isolate the patient immediately, in a predefined isolation ward, cabin, room or quarters, with the door closed and:

- Instruct the patient to wear a medical mask, follow respiratory etiquette and regularly wash hands with soap and water and use alcohol-based hand rub.
- Make sure all persons entering the isolation room wear proper personal protection equipment, such as gloves, impermeable gown, goggles and medical masks, and wash their hands immediately after leaving the patient's room.
- Limit the number of persons entering the isolation room and maintain an entry log.
- Regularly clean and disinfect medical facilities and cabins occupied by the patient and otherwise maintain a high level of cleanliness onboard the ship.
- Handle laundry, food service utensils and waste from the patient and identified close contacts as if infectious.
- Limit the movement and transport of the patient from the isolation room for essential purposes only. If transport is necessary, the patient should wear a medical mask and any surfaces touched by the patient should be cleaned and disinfected.

### **Treatment of an ill person**

There is no specific treatment for this disease, so healthcare providers treat the clinical symptoms of patients. Supportive care can be highly effective for patients with symptoms. While we always recommend contacting a telemedical maritime service supplier or company appointed medical service provider on how to respond to each individual case, the following supportive care should be considered:

- Make sure the patient drinks enough clear fluids (not alcohol).
- If the patient develops a bothersome cough, use cough suppressants available in most ships' medicine chests.
- Use paracetamol in normal dosages (500-1000 mg every 6-8 hours) to control fever and pain.
- Observe the patient regularly and monitor the patient's temperature, heart rate and respiratory frequency (number of breaths per minute).
- Seek telemedical advice if the patient develops a breathing problem or feels very ill. Be alerted if the respiratory frequency is above 20 when the person is resting, or if the person has a moderately to severely reduced general condition.
- If the patient develops a severe breathing problem, urgent treatment in a hospital will be necessary.

## **Medical supplies and equipment**

While the carriage of medical supplies is regulated by Flag States, we encourage ship operators to review the need for any additional equipment onboard their ships and ensure plentiful supplies of all equipment considered essential in order to prevent spread of the virus. This could include handwashing supplies, alcohol-based sanitizers, PPE and other medical supplies to meet day-to-day needs

Annex D of the International Chamber of Shipping's "[Guidance for Ship Operators for the Protection of the Health of Seafarers](#)" contains a useful list of supplies and equipment required in a situation involving COVID-19.

## **Managing 'close contacts' onboard**

It is advised that contact tracing activities begin immediately after a suspected case is identified on board without waiting for any laboratory results. All persons on board should be assessed for their risk of exposure. A close contact having had high risk exposure would typically be a person who has stayed in the same cabin, worked in the same area, provided health care to, or otherwise engaged in common activities with a suspected/confirmed case of COVID-19. All close contacts should be asked, to the extent possible, to stay in their cabins and do passive self-monitoring of any symptoms.

Depending on the type of ship and outbreak onboard, it may be difficult to identify who the close contacts are. In such cases, all persons on board could be considered as close contacts having had high risk exposure

## **When going to port**

In the event of a suspected diagnosis of COVID-19 onboard, the master should report the event as soon as possible to the next port of call, to allow the competent authority at the port to arrange, depending on the situation, medical evacuation or special arrangements for disembarkation and hospitalization of the patient and laboratory diagnosis. The ship may be asked to proceed to another port in close proximity if this capacity is not available, or if warranted by the critical medical status of the suspect case of COVID-19.

Disembarkation of the patient should take place in a controlled way to avoid any contact with other persons on board the ship and the patient should wear a medical mask. Personnel escorting the patient during the medical evacuation should wear suitable PPE. All equipment used for transporting the patient must be cleaned and disinfected after use.

As soon as the patient has been removed from the ship, the cabin or quarters where the suspected case of COVID-19 was isolated and managed should be thoroughly cleaned and disinfected by staff using PPE and who are trained to clean surfaces contaminated with infectious agents.

The port health authority will conduct a risk assessment and all contacts of the suspect case should be identified and follow the instructions of the public health authorities, until the laboratory results of the suspect case are available. If the laboratory examination of the suspect case is positive for COVID-19, then all close contacts are likely to be quarantined for 14 days according to instructions from the competent authorities.

## **Concluding remarks**

These are challenging times, for the maritime industry and the society at large. Early detection, prevention and control of COVID-19 cases onboard ships must therefore continue to be a number one priority, to protect the health of crews and passengers and to avoid further transmission of the virus.

Gard is guided by the views and recommendations issued by the WHO and other expert agencies in respect of this outbreak and advises Members and clients to remain vigilant.

It is important to keep all crew members up to date on the most recent advice on [hygiene and preventive measures](#) as well as travel advice for affected areas. Ships' crews should also be instructed to implement more frequent cleaning of commonly touched surfaces such as handrails, tabletops, doors handles, phones, etc. Onboard cleaning and disinfection strategies should reflect ships' itineraries as well as the number of onboard visitors from shore and their access to ship areas.

As port authorities world-wide continue to be in a heightened state of alert in order to identify crewmembers and passengers displaying symptoms of COVID-19, we reiterate our advice for ship operators and masters to stay in close contact with local port authorities and ships' agents to obtain the most up to date and reliable information about the type of health control measures in force in each port.

Remember, every effort to contain the virus and slow the spread saves lives!

*Please go to our hot topic website: [Covid-19 \(Coronavirus\)](#) to find links to the sources of information used in this article, as well as other recommendations relevant for ships and crew. We are also grateful to Radio Medico Norway for providing advice on how to best look after and treat patients with COVID-19 symptoms while remaining onboard a ship.*

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