



COVID-19: Reducing risk aboard (13.03.2020)

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Introduction

In December 2019 there was a cluster of pneumonia cases in China. Investigations found that it was caused by a previously unknown strain of the Coronavirus family. This strain of the virus has now been named COVID-19.

The World Health Organization has declared the outbreak of COVID-19 to be a Public Health Emergency of International Concern, a categorization reserved for the most serious epidemics.

As concern over COVID 19 has increased, so has the risk posed by misinformation regarding the virus. The South China Morning Post, for example, has reported that a woman who, having read online that raw garlic could help protect her from the virus, was hospitalised with a severely inflamed throat after reportedly consuming 1.5kg of raw garlic. There is no direct medical evidence that garlic will significantly reduce the risk of a COVID-19 infection. Incidents like this highlight the importance of owners ensuring that they, and their crews, follow legitimate medical advice regarding COVID-19.

With this in mind, we have partnered with the medical doctors of our specialist medical repatriation partner Global Voyager Assistance (<https://gvassistance.com/en/>) to write the following article. This article sets out, as of the date of writing, a non-exhaustive list of measures which ship owners and their crews may wish to adopt to reduce the risk posed by COVID-19.

What is COVID-19?

COVID-19 is the name of a new strain of Coronavirus. Coronaviruses are a large group of viruses. They consist of a core of genetic material surrounded by an envelope of protein spikes; this gives the virus the appearance of a crown, when viewed through a microscope. The Latin name for a crown is "corona". This is the origin of the name of this group of viruses.

There are different types of Coronavirus, some cause respiratory symptoms others gastrointestinal symptoms.

In most people the symptoms of the respiratory Coronavirus diseases tend to be mild, like those of the common cold. There are, however, some types of Coronavirus which cause severe/acute symptoms (e.g. Severe Acute Respiratory Syndrome (“SARS”), first identified in China in 2003, and the Middle East Respiratory Syndrome (“MERS”) first identified in Saudi Arabia in 2012.

COVID-19 can cause respiratory symptoms and, in some cases, these can be severe (meaning that it can be difficult for some sufferers to breathe).

What are the symptoms of COVID-19?

From what healthcare professionals currently know:

1. Symptoms can occur between 2 and 14 days from exposure to the virus, however, some medical sources state that incubation periods can be up to 21 days.
2. Symptoms range from:
 - a. Minor ailments like **fever, sore throat, fatigue, dry coughing and a runny nose**, to
 - b. Serious symptoms such as **difficulty in breathing, high fever and painful coughing**.

Many people with the virus **look and feel like they have ‘flu’**.

Elderly people (from 60 years old and above), and those with pre-existing health conditions (e.g. chronic lung problems, oncological or severe autoimmune diseases) are more likely to experience severe symptoms and these may lead to fatal outcomes.

The World Health Organization (“WHO”) currently estimates the COVID-19 fatality rate to be around 3.4%. This figure may decrease as more data becomes available over time.

Can COVID-19 be transmitted from person to person?

Yes. COVID-19 is spread most often by what are known as "respiratory droplets" from an infected person (i.e. the little secretions people generate when they sneeze or cough). For this reason COVID-19 is often transmitted between people who have been in close contact.

GVA’s doctors inform us that COVID-19 can survive away from a host (e.g. a person) for several hours, on smooth surfaces. In relatively warm and humid conditions COVID-19 can, reportedly, survive for several days (e.g. with a humidity of 40% and the temperature of 20 C, the virus can remain infectious for up to five days).

For this reason, it is relatively likely that individuals will contract COVID-19 by touching surfaces which have been contaminated with the virus.

How is COVID-19 diagnosed?

Nose and throat swabs are taken from individuals suspected of being infected with COVID-19. A DNA test is run on the samples, obtained from the swabs, to see if the DNA of the

COVID-19 virus is present. If COVID-19 DNA is found, then the test subject is highly likely to be infected with COVID-19.

What is the treatment for COVID-19?

There is no specific antiviral treatment against COVID-19. In most cases, a COVID-19 infection is treated in the same way as a flu infection (e.g. by treating the symptoms). Supportive care (e.g. oxygen and intravenous hydration) may be provided for those suffering more severe symptoms and life supporting intervention may be required for the most serious cases.

Is a COVID-19 vaccination available?

No vaccine is currently available. The focus of healthcare authorities has been to contain the virus through preventive measures (e.g. mass quarantine) to delay the transmission of the virus and thus avoiding the need to treat large numbers of people simultaneously.

What precautions can owners / crew take to reduce the risk(s) posed by COVID-19?

The below guidance is not intended as an exhaustive list of measures but rather as an aid to assured ship owners in addressing some of the risk posed to their crews and businesses.

General preventative measures

Healthy individuals are thought to have a significantly better prospect of overcoming a COVID-19 infection.

It is, therefore, recommended that measures to generally promote health (and the proper function of the human immune system) are taken.

It is recommended that individuals:

1. Get plenty of sleep
2. Exercise
3. Eat healthy food avoiding any new or suspicious dishes
4. Obtain appropriate vaccinations, reducing the likelihood of crew members having to deal with COVID-19 and an additional illness simultaneously. Crew members should, therefore, consider obtaining vaccinations against:
 - a. Flu, and
 - b. Illnesses which their vessel's intended port of calls may expose crew members to.

Precautionary measures aboard

Assured ship owners may wish to consider adopting the following measures to protect their employees:

- A. 14 days of self-quarantine of employees who have recently visited China, Italy, Iran, South Korea, and other areas where significant numbers of COVID-19 infections have been reported.
- B. Non-essential travel to COVID-19 at risk countries should be avoided.
- C. Educate vessel crews to ensure that they can identify and monitor for COVID-19 symptoms (see details of symptoms above).
- D. Isolate crewmember(s) prior to boarding if their travel or contacts significantly increases the risk of their having been exposed to COVID-19.
- E. Review contingency plans:
 - a. When planning voyages assess the risks associated with the intended port of calls. If visiting a port where disembarking crew may be prohibited or require a 14 day quarantine, plan how owners can ensure that crew members receive the necessary treatment.
 - b. Does the vessel have sufficient supplies aboard for crew in the event of a 14 day quarantine?
 - c. Is it possible to set up respiratory isolation onboard? (i.e. ensure that air from the cabin of a crew member who is suspected to be suffering from COVID-19 is not circulated through the vessel's accommodation).
 - d. Minimise contact with shore personnel.
 - e. Consider sanitization plans for cargo.

New crew members join the vessel

The vessel's master should, in addition to the standard tasks:

1. Verify, prior to new crew member's arrival aboard, that they are not suffering from the following symptoms:
 - A. general weakness
 - B. general chills
 - C. fever over 37,5 C
 - D. cough
 - E. runny nose
 - F. sore throat
 - G. headache
 - H. muscle ache
2. Verify, with the new crew member, if (during the preceding 14 days) they have had contact with anyone suffering from the above listed symptoms.
3. Make a written record of the countries which the crewmember has visited during the previous 14 days.

Only persons cleared by the local port officials and the vessel's master should be allowed on board the vessel.

Reducing risks to crew

It is recommended that crew members:

1. Wash their hands regularly, ideally using soap and hot water. Alcohol based hand sanitisers (at least 65-70% applied to hand for a minimum of 20 seconds) can also be used.
2. Avoid touching their face, mouth, nose and eyes with unwashed hands.
3. Cover their mouth and nose with a disposable tissue when sneezing, coughing, wiping or blowing their nose. Any used tissue should be disposed of as soon as possible. The crew member should wash their hands after handling a used tissue.
4. If a tissue is not available, crewmembers can cover their nose and mouth with a flexed elbow when sneezing or coughing.
Note: hands which have been sneezed or coughed into may contaminate objects, surfaces or people that are touched.
5. Aim, where possible, to keep at least one meter distance from people having fever, cough or other common cold/flu symptoms.
6. Check, and take a note of, their temperature daily and immediately report to the master if they are suffering from a fever or other flue like symptoms.

It is recommended that owners institute the following additional procedures aboard:

7. Crew to regularly disinfect frequently touched surfaces especially when someone is ill (please see recommendations for disinfection below).
8. Meat, milk or animal products should always be handled with care to avoid cross-contamination with undercooked food, consistent with fresh food safety practices.

What about face masks?

Although face masks may provide some limited protection, the primary use of mask should be by a sick person to reduce the likelihood of their contaminating surfaces).

As a rule of thumb, face masks are to be worn by:

1. Those who are suspected of being sick (standard surgical face mask, designed to reduce contamination emanating from the wearer. If a standard surgical mask is worn, then these should be replaced every hour. Used masks should be disposed of in a container with antiseptic solution).
2. Those dealing with individuals suspected of being sick (N95 masks which filter out small particles from the air. NB: these masks are not recommended for use by those who are thought to be unwell as they can make it harder to breathe).

Protective equipment aboard

If a vessel is expected to trade to parts of the world where large numbers of people are reportedly infected with COVID-19 then, according to GVA, owners may wish to consider equipping their vessels with the following:

Personal Protection Equipment (“PPE”) and equipment for decontamination:

1. Disposable gowns/suits. Boiler suits disposable polypropylene, IMPA code 190568.
Note: the number of suits for vessels bounding for Asia is 3 times as for other destinations.
2. Disposable medical masks, Face Mask Disposable, IMPA code 391283 or analogue, counting as 8 masks for one person a day.
3. Disposable gloves, Gloves Disposable Vinyl, IMPA code 190135 or analogue. For a crew of 20 it is proposed that a stock of some 300 pairs of gloves would be appropriate.
4. Antiseptic Gel Bottles, Hand Liquid Disinfectant Antiseptic for hand washing - IMPA code 550263.
5. Alcohol or solutions containing chlorine for surface disinfection.

Medical equipment aboard:

1. Thermometers, IMPA codes 391846/392037/391422.
2. Paracetamol tab 1000 mg, counting as every 6 hours for 14 days.
Note: Paracetamol is used as an antipyretic and analgesic drug only for treatment, not for prophylaxis.
3. Tamiflu tab 75 mg, counting as twice a day for 5 days.
Note: this antiviral drug is used for the treatment of general virus infections.
4. Amoxiclav (amoxicillin + clavulanic acid) tab 1000 mg OR Ciprofloxacin tab 500 mg OR Ceftriaxone injections 1 mg.
Note: these antibiotics are used for the treatment of respiratory tract infections, which are the most common complications of COVID-19. Each medication is prescribed in various dosages, please contact GVA if you need to match a dosage.
5. Ringer's lactate, injection solution, w/o IV set and needle, 1000ml, counting as 3 litters per a day for 25% of all crewmembers.
Note: this is a fluid maintenance solution used for complicated cases. Please contact GVA if you need further information.

How should a suspected case of COVID-19 be handled aboard?

If a crew member is suspected to have contracted COVID-19 we recommend that the vessel’s master immediately consults a specialist maritime telemedicine service. GVA is ready to assist in this regard.

While COVID-19 cannot be diagnosed through a telemedicine consultation, the advice of a qualified medical doctor will assist the Master with deciding how to address a matter (e.g. if the vessel should deviate and, if so, to where).

Outbreak management plan

If a suspected case is identified the ship should implement an outbreak management plan on board, even before lab results confirm an infection.

1. Isolation

A crewmember, suspected of having COVID-19, should be isolated immediately in either an isolation ward, cabin, room or quarters. Precautionary measures should be taken and the room's door kept closed. The isolated person's body temperature should be regularly monitored and recorded. To relieve the symptoms Paracetamol may be used (1000 mg orally every 6 hours, so long as this can be taken by the isolated person).

Any person entering the isolation room should wear disposable gowns, gloves and medical masks. The patient should wear a face mask (which, as stated above, should be changed hourly).

2. Reporting to the next port of call

The vessel's Master should inform the health authorities at the next port of call to determine if the necessary capacity to transport, isolate and care for the individual is available. The ship may need to proceed to another nearby port if the local capabilities are insufficient or if warranted by the critical medical status of the suspected case. Contact tracing among the crew of the vessel or people onshore should begin immediately.

The Master should check the latest port entry requirements for the next port of call and be ready to provide:

- A. Health declaration
- B. Body temperature list
- C. Information list on crewmembers with symptoms
- D. Information list on previous port of calls
- E. Information list on crewmembers' travel history

- 3. The vessel's ventilation system should be turned off to avoid air exchange with the rest of the vessel's accommodation.
- 4. An area outside the isolation room should be allocated, where individual protective gear can be removed and disinfected after visiting the patient.

5. Disposable cups, plates and cutlery should be used by a crew member suspected of having contracted COVID-19. These items should be disposed of as contaminated items/medical waste.
6. The vessel's crew should maintain an intensive cleaning and disinfection regime ongoing on-board.
7. If a crew member's COVID-19 test is positive, owners should take medical advice and consider whether crewmembers, who were in close contact with the infected individual, should be quarantined ashore.

Key tips for cleaning and disinfecting when COVID-19 is suspected on board

If a crew member displays what are thought to be COVID-19 symptoms, all surfaces and items thought to have been in direct contact with the COVID-19 suspect, should be disinfected.

Crew members should:

1. **Clean hard, non-porous surfaces** first with detergent and water, and then by applying a disinfectant in accordance with its product instructions. Care should be taken to ensure the correct concentration of disinfectant is used and that sufficient exposure time is allowed for effective disinfection.
2. **Carefully remove porous materials**, where possible, such as upholstery, rugs, and carpeting that have been in contact with the suspect case. Launder in accordance with the product instructions or dispose of the materials as described below.

Waste disposal containers in the area where a person presenting COVID-19 symptoms has been should be emptied prior to starting surface cleaning and disinfection. Waste disposal containers located in contaminated areas should be emptied by persons wearing PPE.

All used PPE and all soiled items (used tissues, disposable masks, tubing, linen, pillows, blankets, mattresses not covered with an impermeable plastic covering, etc.) in the contaminated areas, should be treated as Biohazardous waste and stored in an impermeable plastic bag labelled "Biohazard". The bag should be tied up, not reopened, and disposed of according to the vessel's protocol for clinical waste. If waste must be delivered ashore, then special precautions are needed, and the port authority should be informed before waste delivery.

Entering ports in countries where there is an increased risk of COVID-19 exposure (e.g. China, Italy etc.)?

It is recommended that crew members take the following precautions:

- A. Wear face masks when interacting with shore personnel.
- B. Keep a distance of at least 1 meter from all arriving on board.
- C. Avoid shaking hands.
- D. Limit the movement of all shore personnel to only those areas of the vessel where their attendance is necessary.



- E. Allocate separate lavatories for visitors, provide them with paper towels only and disinfect these areas regularly.
- F. Make antiseptic gel and face masks available at the top of the vessel's gangway(s) and at other strategic locations aboard.
- G. Avoid taking on provision and other supplies in ports where there is a high COVID-19 risk. Ensure that, if the vessel is to call at a port in a country with a high COVID-19 risk, the vessel has enough supplies for 14-30 days.
- H. Upon leaving a port with a significant COVID-19 risk, the vessel's crewmembers should make a written record of their body temperatures for the following 14 days.

We hope that the above information is of assistance to our assureds. All medical information and procedures have been provided by GVA's doctors.

For assistance with P&I claims matters please contact claims@hydor.no and call our 24/7 emergency telephone number, +47 977 11 100, if urgent P&I assistance is required outside office hours.

GVA can be contacted via +357 24 65 96 52.