

Guidance for Protection against COVID-19
[English Version]

Version 6.0
1 November, 2021

The Japanese Shipowners' Association

Introduction

Importance of preventing the spread of infection in the oceangoing cargo shipping business

International cargo ship operators are positioned as businesses that provide essential services to maintain corporate activities during the period of a state of emergency from the perspective of maintaining the stability of society in the Japanese government's Basic Policies for Novel Coronavirus Disease Control (decided by the Novel Coronavirus Response Headquarters on March 28, 2020; "Basic Policies"), and are required to continue operating.

Meanwhile, sustained measures are expected to be required for COVID-19 in the future. Under such circumstances, oceangoing cargo shipping businesses must take appropriate steps to prevent the spread of infection necessary to ensure business continuity in order to fulfill their responsibilities continuously.

About this Guidance

This Guidance outlines recommendations, primarily for oceangoing shipping operators, that operators are recommended to implement for the time being until the global COVID-19 pandemic ends.

From now on, shipping operators should take all possible measures to prevent the spread of infection by promptly and appropriately taking feasible and effective steps in line with the actual situation at each workplace or work site and the risk of infection, using this Guidance as a reference.

This Guidance has been revised based on the latest information available as of September 1, 2021. However, various details relating to COVID-19 are becoming clearer by the day, and this Guidance will be revised as necessary based on infection trends, the findings of experts, and revisions to the Basic Policies on which this Guidance is based.

Furthermore, it is important that each shipping operator implements measures in line with actual infection risks, including initiatives not described in this Guidance, while actively incorporating good practices within and outside the industry and using ingenuity in the workplace.

This English version is translated from the original Japanese version to disseminate the preventive measures against COVID-19 and variants on board the ship. Due to made initially for the Domestic member companies, you may not retrieve, onboard, some of the references shown in this guidance.

COVID-19 Characteristics and Infection Mechanism

COVID-19, a new coronavirus strain, broke out in Wuhan in Hubei Province in China around December 2019. COVID-19 has the following characteristics.

Subsequently, in around December 2020, a mutant strain (Alpha variant) was found in the United Kingdom, and since then, variants have been discovered in various regions around the world. The Delta variant in particular, which was first detected in India, is said to be highly infectious, and vaccines are not thought to be effective against the Delta variant. We, therefore, need to exercise caution, and it is essential that each individual correctly understands the infection mechanism and takes appropriate preventive measures, as the infection mechanism is the same for each of the variants.

Information on COVID-19 can be found on the following websites (described in Japanese only):
Ministry of Health, Labour and Welfare Website (11 things to you need to know NOW about COVID-19)

[Symptoms]

Either a fever, cough, or shortness of breath (70%), fever (43%), cough (50%), shortness of breath (29%), muscle pain (36%), sore throat (20%), headache (34%), nausea/vomiting (12%), and diarrhea (19%) have been reported as the main symptoms.

Other reported early signs before the onset of COVID-19 include:

Taste abnormalities (loss of taste of coffee or wine)

Sore toes

Tongue discoloration (browning)

An estimated 80% of those infected have relatively mild symptoms. Some people do not show any signs (Silent Positive).

Meanwhile, the following people are thought likely to become severe conditions:

People with COPD (chronic obstructive pulmonary disease), chronic kidney disease, diabetes, heart disease, hypertension, cancer, people who are obese, smokers, and people aged 60 or older (however, there are also cases of infants and young people becoming severe).

[Incubation Period]

In conventional cases, symptoms appear on average five to six days after infection. However, observation for about two weeks is necessary. Furthermore, it takes nine days (median) after

confirmation of infection for an infected person without symptoms to test negative. In some cases, it takes more than 14 days to test negative.

Cases have been reported in which antibodies do not fully form or disappear even after infection, meaning that there is an undeniable risk of re-infection.

[Infection Mechanism]

Transmission routes are the same as for influenza. There are three main routes:

- Contact (direct and indirect)
- Droplets
- Aerosol (airborne)

Measures to prevent infection include:

- **Avoiding the three C's: Crowded places, Close-contact settings, and Closed spaces**
(ingenuity is required to avoid each element)
- Prevent contact infection (direct infection such as droplets, and indirect infection such as contact with doorknobs, etc.)

[Preventative Measures]

Proper consideration should be given to the above-stated infection mechanism when taking preventive measures on ships, and the measures described in the following sections should be thoroughly implemented. The mutant strains are becoming more contagious meaning that preventative measures need to be even more thorough than before.

Contact Infection

In addition to direct person-to-person contact, such as shaking hands, there is also a risk of infection by touching areas that have been touched by an infected person (a person who has tested positive).

- Virus on cardboard boxes: the infectious virus can be detected for up to 24 hours
- Virus on plastic surfaces: the infectious virus can be detected for up to 2-3 days
- Virus on stainless steel surfaces: the infectious virus can be detected for up to 2-3 days
- Spraying in the air with a medical spray: the infectious virus can be detected for up to 3 hours

Some studies show the virus can remain on human skin for about nine (9) hours

- Note that the above-stated estimates are for conventional strains. There is no data for variant strains.

Washing hands properly and using alcohol disinfectants, etc., are effective means of preventing contact infection.

While not covered in the media, etc., there is a possibility that the virus may be able to live on items we frequently touch, such as smartphones. Be sure to disinfect your hands before and after using such items.

Droplet Infection

There have been cases in which people have been infected when droplets of saliva, etc., are passed on to others when a person coughs, sneezes, or speaks within close range.

It is absolutely essential to avoid close contact. It is not considered to be close contact if masks or other face coverings are worn correctly (by both parties) and a distance of one meter or more is maintained.

Wearing masks adequately is an effective means of avoiding infection through droplets. Cough etiquette should always be practiced when sneezing or coughing. At the same time, a social distance (physical distance) should be maintained when talking, etc., to others.

Care should be taken to avoid close contact when holding cargo meetings at ports of entry and receiving guidance from a pilot.

Do not talk in a loud voice

Aerosol Infection

When people talk loudly, sneeze, or cough, etc., in poorly ventilated places such as indoors, not only direct droplets but also saliva is dispersed into the air in the form of minute particles which hang in the air.

In such cases, merely wearing a mask is not enough to prevent inhalation of the virus.

Consequently, natural ventilation in a room (if the condition is permitted) is effective in preventing infection.

* The virus will be dispersed outdoors by winds. Cough etiquette should be practiced at all times.

* Constantly or frequently ventilate rooms (at least twice an hour for at least five minutes, or constant ventilation. In cold conditions, keep cabin scuttles open enough to prevent the room temperature from dropping and the like) using air conditioning equipment that complies with laws and regulations. In dry (arid) conditions, rooms should be humidified to at least 40% humidity.

Mask types: while media, etc., reports indicate that non-woven masks are effective, be aware

that effectiveness may vary between products.

Note that although effective against droplet infection, masks do not provide adequate protection against aerosol infection (especially inhalation) and that minimizing the gap between the mask and the face is effective in reducing the risk of infection.

Ventilation Guidelines

The risk of aerosol infection is likely to increase when some crew members gather together in a room.

Rooms should ideally be ventilated at all times. Using a commercially available a carbon dioxide monitor is an option when ventilation opportunities are limited. Previous studies have shown that carbon dioxide levels increase when ventilation is poor, and therefore carbon dioxide monitors indicate the risk of aerosol infection.

The concentration of carbon dioxide in the air is said to be about 400 ppm. Ideally, the following standards should be used as a guide for ventilating rooms.

Less than 800ppm:	no need for ventilation
800ppm to 1,000ppm:	no need for ventilation but risk starts to increase
1,000ppm or more:	ventilation required

(There are slight differences between the manuals)

Close Contact

Close contact is a person who has been in close proximity or prolonged contact with a person who has tested positive for COVID-19 and who is therefore highly likely to have been infected. As mentioned above, the key factors in determining close contact are (1) proximity and (2) length of contact. A person is considered to be a close contact if they have touched an infected person with their hands without taking necessary infection prevention measures or been in face-to-face contact at a distance at which they can reach out and touch the other person (about one meter) for more than 15 minutes.

Public health centers investigate the relationship and degree of contact between people who have been in close proximity with an infected person during the period in which there is a possibility of the virus being transmitted (from two days before the onset of symptoms until the day of hospitalization, etc.) (active epidemiological investigation), and determine whether individuals should be classified as close contacts. Contact confirmation app users are notified if there is a possibility that they have spent more than 15 minutes within one meter of a person that has tested positive. Such notifications lead to rapid testing and treatment. See here for more details.

Even if a person has been in close proximity to an infected person for 15 minutes, the possibility

of their being infected varies greatly depending on the “3 C’s”, such as whether they were wearing a mask, the kind of contact that occurred, such as whether they were speaking or singing, and whether they were in face-to-face contact. For this reason, whether a person is considered a close contact is ultimately decided by asking specific details about the situation in which the individual came into contact with the infected person.

Measures at Shore Offices

Refer to the Guidelines for Preventing the Spread of Novel Coronavirus Disease (COVID-19) in Offices published by the Japan Business Federation for basic information on the implementation of measures to prevent the spread of COVID-19 at the land-based offices of operators (offices here means workplaces under the Industrial Safety and Health Act, and refers to workplaces where employees perform clerical work and are hereinafter referred to as “offices”).

Preventive Measures Before Boarding

It is best to take a PCR test just before boarding the ship, and to board after the test has been proven to be negative.

The following measures should be taken to reduce the risk of infection based on the information in the COVID-19 Characteristics and Infection Mechanism section.

Self-Quarantine

Quarantine and check body temperature for at least 14 days. If quarantined at home, extra care should be taken to avoid being infected by family members (**variants such as the Delta variant, in particular, are more infectious**).

Self-Quarantine Period

People who may potentially be infected (infected but asymptomatic) tend to test negative after about nine days (after confirmation of infection), but some people test positive again in subsequent tests. There is a risk of being infected from two days before the onset of symptoms. When preparing a quarantine checklist, include not only temperature but also abnormalities in taste. The health of any cohabitants must also be considered.

A physician should be consulted with, and instructions regarding isolation from a public health center designated by the local government, etc., should be followed if any symptoms appear during self-quarantine.

If possible, it is advisable to take a PCR test and confirm that it is negative before starting to quarantine.

PCR Tests, etc. (Proof Not Infected)

Proof of a negative test may be required when boarding a ship in an overseas port. In Japan, the Japanese Shipowners' Association members may take PCR tests at hospitals affiliated to the Japan Seafarers Relief Association (refer to member notifications for information on hospitals that conduct PCR tests, testing methods, and fees). PCR tests are also available at travel clinics and other locations in cities. While sending tests through the post is becoming more common, companies should adequately manage the situation to ensure that samples are collected from the person concerned, as it is impossible to verify the identity of the sample provider.

Vaccinations

If vaccines are available, it is advisable to be vaccinated against COVID-19 when boarding.

The following should be taken into consideration regarding vaccinations:

General Matters

1. Decisions (intention) on whether to be vaccinated should be left to the sole discretion of the individual.
2. Companies shall not force individuals to be vaccinated.
3. Companies shall not treat unvaccinated crew members at a disadvantage when assigning work, etc.
4. Be aware of the possibility of side reactions when vaccinated. Seafarers should take guidance about the risks of the vaccine that will be administered to individuals who plan to be vaccinated before being vaccinated.
5. Seafarers who may have concerns about being vaccinated should consult with a physician, etc., before the vaccine is administered.
6. Seafarers should get doses of the same vaccine if getting a vaccine that requires several doses.
7. Seafarers should consult with a physician immediately if experiencing an adverse side reaction after being vaccinated.
8. Close attention should be paid to health changes after being vaccinated, and individuals should take measures such as not working or reducing their workload if they feel unwell.
9. Companies should prepare for cases in which employees die or suffer complications (aftereffects) as a result of vaccination.

In Case that Crew Members Are Vaccinated in Their Home Country

1. Receive vaccinations in accordance with instructions (guidance) from the relevant country's government.
2. In the case of two-dose vaccines, give consideration to providing leave or the like so that the vaccine can be administered within an appropriate period.

In Case Vaccinated in a Third Country

1. Be aware of the following if vaccinated in the US or any other third country:
 - In the case of the two-dose vaccines, consider the fact that it may not be possible to get the second dose in the third country due to time constraints. A single-dose vaccine (Johnson & Johnson: Though it is pending regulatory approval in Japan) is also available.
 - When getting vaccinated after arriving in a country to replace crew members, etc., ensure crew members have enough time in the country to recover from side reactions before boarding.
 - When getting vaccinated at the time of entry into port while on board, consider adverse reactions, etc., and give more than enough consideration to the impact on work after being vaccinated.
 - When allowing the crew to go ashore to get vaccinated, consider side reactions, etc., and give adequate consideration to the period until boarding.
 - Be aware that if vaccinated in a third country, crew members may not be eligible for compensation from their home country's government if any problems arise as a result of the vaccine. Be sure to obtain consent from the individual planning to be vaccinated. (Note that the Japanese government will not pay compensation in such cases. Companies should take compensation into consideration for the time being when the crew is vaccinated in a third country.)
2. Be aware that if vaccinated in a third country, crew members may not be eligible for compensation from their home country government if any problems arise as a result of the vaccine. Be sure to obtain consent from the individual planning to be vaccinated. (Note that the Japanese government will not pay compensation in such cases. Companies should take compensation into consideration for the time being when crew are vaccinated in a third country.)

There is a risk of infection (breakthrough infection) even after being vaccinated. However, in such cases, symptoms may not appear or may be difficult to recognize. Therefore, the above-stated infection prevention measures (wearing masks, use of disinfection, etc.) should be continued in order to reduce the risk of infecting others.

Traveling to Ships

There is always a risk of being infected before arriving at a ship.

As much care as possible should be taken to prevent infection when traveling from home to a ship. In Japan, the quarantine authority requires the use of MySOS, an app for checking health and location, COCOA, a contact confirmation app, and smartphone location settings (and

adhering to quarantine instructions). (For a manner purpose when you may not talk in a smartphone, we recommend that users keep the power and Bluetooth setting turned on and set the phone to silent mode in order to allow COCOA (contact confirmation app) to function.)

While we understand that there are costs and other issues involved, care not to use public transportation unless required quarantine period (generally 14 days in Japan) is cleared (avoid using the subway at all times when it is crowded in order to travel by bullet train or airplane). Be aware that close contact risks increase when traveling by airplane.

Furthermore, **ensure that quarantine is effective during the quarantine period after entering Japan. (There have been reports of problems such as people going out during their quarantine period. In some cases, this may have a significant impact on crew changes, such as preventing crew changes in Japan, and we, therefore, request thorough management of crews during the quarantine period and when traveling within Japan. Thorough guidance should also be provided to crew agents.)**

Preventing Infection on Board

Preventing Infection on Ships

- Wear masks at all times (within reason, the crew should be instructed on how to wear masks properly) and practice cough etiquette.
- Wash hands (including disinfecting with alcohol) in the recommended manner.
- Create an environment in which hand hygiene can be performed as necessary.
- Check body temperature (disinfect thermometers with alcohol after each use).
- Inform the management company if a crew member has a higher than normal temperature or has early symptoms such as abnormal taste and take appropriate measures such as isolating in a cabin.

Version two of this Guidance (not released in English) stated, “Inform the management company if a crew member has a higher than normal body temperature (37.5°C according to the Ministry of Health, Labor and Welfare, but at the discretion of each company) for several days and there are suspicious symptoms”. However, waiting this long is risky, and so we recommend informing the management company if a crew member has any initial symptoms before the fever mentioned above or a higher than normal body temperature (we cannot specify how high, but if it is close to 37°C, you may need to treat it as being suspicious) just to be on the safe side.

If necessary, use a saliva test kit (antigen test kit) (Such test kits should be proper management and usage guidance should be provided).

- Regularly disinfect the inside of the ship. Regularly disinfect doorknobs, PC keyboards, onboard telephones (push buttons and handset), cabinets, handrails, touch panels, and other areas that are frequently touched by people (the Ministry of Health, Labor and Welfare, the

Ministry of Economy, Trade, and Industry, and from manufacturers have indicated that sodium hypochlorite solution can be made using commercially available bleach if there is not enough alcohol disinfectant available. However, such disinfectant solution should not be used to disinfect hands)

- Toilets, showers, and other facilities used by multiple people have confined spaces in which it is easy to become distracted. Since this can increase the risk of infection, such spaces should be thoroughly disinfected, and measures should be taken to prevent people from staying there too long. Hands should be washed, and facilities should be disinfected frequently after use (be aware that the virus may accumulate on shower room floors). Often wash the ship crew's uniforms and clothes.
- In common toilets on-board, seafarers must wash hands well and prohibit sharing cotton towels (it is highly recommended to use paper towels instead).
 - Regularly ventilate rooms on board. Ventilation is also an effective means of preventing infection.
 - Possible ideas: stagger meal times for the deck and engine departments (although this will increase the galley's workload), refrain from talking during meals, review seating arrangements, and install acrylic panels. We recommend eating in silence during mealtimes whenever possible.
 - Use disinfectant sprays to disinfect handrails and fixtures, etc. (do not use disinfectant sprays intended for spraying on clothes to disinfect hands).
 - Karaoke is an effective way to relieve crew members' stress. However, it may result in a 3C situation and so should be avoided in principle. Refer to the Guidelines for Karaoke Studios (if available), etc. if karaoke is unavoidable. Ventilate rooms wherever possible at appropriate times (we also strongly recommend using carbon dioxide monitors).

The above is a list of points to prevent infection on board ships. There is, however, no need to be more nervous than necessary. Suspicion on board a ship affects the safe operation of the ship, and sufficient care should be taken to avoid such situations (however, thorough preventive measures should be maintained as variant strains are becoming prevalent). The above is a list of points to prevent infection on board ships. There is however no need to be more nervous than necessary. Suspicion on board a ship affects the safe operation of the ship, and sufficient care should be taken to avoid such situations (however, thorough preventive measures should be maintained as variant strains are becoming prevalent).

External experts have pointed out that, although gargling is not prohibited, it is not a measure that should be encouraged, as there is no established view on gargling as a measure to prevent the spread of infectious diseases. Consequently, encouraging gargling has been removed from

the third and subsequent editions of this Guidance.

Preventing Infection during Loading and Unloading

Refer to the JSA Member Notification No. 126/Shipowner Company No. 24, dated May 1, 2020, Recommendations for Preventing the Spread of COVID-19 During On-Board Cargo Handling on Oceangoing Ships and JSA Member Notification No. 136/Shipowners No. 48, dated May 12, 2020, IMO Protocols on Safe Contact Between Ship Crews and Shore-Based Workers, regarding contact with shore-based workers during loading and unloading (Those circulars are available in Japanese only.)

There have been a number of reports of ship crew members testing positive on board, in which the positive test was not confirmed until more than three weeks after boarding the ship. Therefore, the crew should not be reassured by the fact that they tested negative when boarding the ship and should be aware that there is a risk of infection while at a port of call.

Measures When a Crew Member Develops COVID-19

Notify the Port State

The Master shall not report falsely.

A quarantine notification should be made to the port State and instructions sought from the authorities of that country, in accordance with the requirements in quarantine laws of that country.

Envisaged response:

- Quarantine at a quarantine anchorage (or follow the instructions by a quarantine authority);
- Take the crew member to a shore medical facility if seriously ill; and
- Continue to anchor at the anchorage for at least 14 days (no land or sea transportation permitted as a rule); Need to replenish food, drinking water, medicine, etc.

Reference

A member company has confirmed with a lawyer that (in the case of Japan) there are no grounds for refusing entry under the Quarantine Act of Japan and the Immigration Control and Refugee Recognition Act of Japan.

"IMO Circular Letter No. 4204/Add.1" states that the flag State, the port State authorities and control regimes, and the shipmasters should cooperate to ensure that passengers can be embarked and disembarked, cargo operations can occur, ships can enter and depart shipyards, stores, and supplies (of food and equipment) can be loaded, certificates can be issued, and

crews can be changed (if the circumstance allows).

A member company's investigation has revealed that flag States are unable to provide assistance in relation to port entry, and we, therefore, recommend consulting with the P&I Club as necessary if it is necessary to take measures such as the emergency disembarkation of infected persons.

* The infected person (or suspected infected person) should be isolated in a cabin, and the captain and other crew members should remain calm. The management company should provide guidance to crew members to prevent them from panicking.

Landing in Infected Regions

In principle, care should be taken to avoid landing unnecessarily in infected countries (regions). Please refer to the list of infected countries and infected people provided by the Association regarding countries.

Please also refer to the Ministry of Foreign Affairs' Travel Advice and Warning on Infectious Diseases.

- Level 4: Evacuate and avoid all travel

Japanese nationals are urged to evacuate immediately from the country/area to a safe country/area and should avoid all subsequent travel to the country/area regardless of the purpose.

- Level 3: Avoid all travel

Japanese nationals are urged to avoid all travel to the country/area regardless of the purpose.

- Level 2: Avoid non-essential travel

Japanese nationals are advised to avoid non-essential travel to the country/area and to stay alert to the situation, and take appropriate safety measures should they decide to travel.

- Level 1: Exercise caution

Japanese nationals traveling to and residing in the country/area are advised to stay alert to the situation.

When changing crews overseas, take the risk of infection into account in areas at risk of infection, even in those countries and regions in which crew changes are possible.

end