

# COVID Mitigation Protocols Established for Safe JR Operations (COPE)

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## Preface

This document defines the current protocols for operating the Research Vessel *JOIDES Resolution* (JR) as safely as possible for International Ocean Discovery Program (IODP) expeditions during a time when the novel Coronavirus Disease 2019 (COVID-19) is present globally and is still categorized as a pandemic. The approach we have taken throughout the pandemic, similar to other research vessels, has been to mitigate pathways for COVID to get on the JR and, if it does get onboard, to prevent or limit the spread while caring for those who have become ill. The advent of vaccines and booster programs, naturally acquired immunity, the emergence of Omicron and its subvariants, along with the development of effective antiviral medication (available onboard) have all combined to significantly reduce the risk of severe disease. However, Omicron and its subvariants are more infectious than previous variants. At the same time, society has relaxed and then dropped required mitigation measures that were common earlier in the pandemic. Although hotel quarantines were an important mitigation measure earlier in the pandemic, the highly infectious subvariants and the lack of public mitigation measures have made practicable quarantines ineffective at minimizing the risk of an infected individual getting onboard. In addition, quarantines have become a significant burden over the almost 3 years of the pandemic, particularly for personnel who have 2-month on/2-month off rotations.

Consequently, this revision drops the hotel quarantine while maintaining the mitigation measures to reduce risk of infection onboard and mitigate its spread if it does get onboard.

The protocols outlined in *COVID Mitigation Protocols Established for Safe JR Operations* (COPE) have been and will continue to be updated as developments and guidance (CDC and/or WHO guidance) about COVID-19 are updated. A fully vaccinated and boosted ship greatly reduces risks to participants and the expedition. Thus, we strongly recommend that all participants be vaccinated and stay up to date with boosters (see [CDC](#) for latest guidance). Until COVID-19 becomes endemic, the protocol will be adjusted accordingly. There are no perfect solutions and there is no way to ensure that illnesses, COVID-19 or otherwise, never occur on the JR. We therefore seek effective mitigation protocols for protecting the health of those who embark on the JR. The protocols outlined here will be followed to the extent that is practicable and may have to be modified due to constraints imposed by local authorities or logistical issues.

## Acronyms and Definitions

CDC: Centers for Disease Control and Prevention (US)

COPE: COVID Mitigation Protocols Established for Safe JR Operations

COVID-19: Coronavirus Disease 2019

CSS: *JOIDES Resolution* Crew, JRSO Staff, and Scientists

EPM: Expedition Project Manager

IODP: International Ocean Discovery Program

JR: Research Vessel *JOIDES Resolution*

JRFB: *JOIDES Resolution* Facility Board

JRSO: *JOIDES Resolution* Science Operator

LO: JR Lab Officer

MLC: Marine Logistics Coordinator

PMO: Program Member Office

PPE: Personal Protective Equipment

SBSC: Shipboard Science Complement (scientists and JRSO staff)

## Introduction

COPE is a plan for how to conduct IODP expeditions on the *JOIDES Resolution* as safely as possible until we can fully return to normal operations. The health and safety of all those who participate on IODP expeditions—the ship’s crew, the JRSO staff, and the scientists—is paramount. To conduct operations that reduce the risks to crew, staff, and scientists, protocols for COVID-19 mitigation are described in this document for the following eight implementation stages.

1. Expedition planning and risk assessment
2. Recommended procedures to follow prior to departure from port
3. Protocols in port prior to moving onboard the JR
4. Protocols for port call activities
5. Shipboard mitigation measures
6. Dealing with a suspected COVID-19 case onboard
7. Protocols for medivacs or returning to port, in the event of a diagnosed case or development of serious symptoms onboard the JR
8. Ensuring safe return home

## 1 Expedition Planning and Risk Assessment

Well before the start of an expedition, the following steps will be taken to ensure the ship is prepared for dealing with COVID-19 and for assessing level of risk, which will then be used to determine what actions will be taken to cope with the risks prudently.

- 1.1. Port call determination: When the JRFB determines the expedition schedule, the JRSO selects ports to maximize logistical efficiencies and operational days on site, which is accomplished by minimizing transit time during expeditions. Moving forward, ports (both scheduled and to be scheduled) will also be evaluated in the light of several COVID-19 factors, including the following:
  - 1.1.1 State of the pandemic in departing and arrival ports
  - 1.1.2 Travel restrictions
  - 1.1.3 Availability of COVID-19 testing in port
- 1.2. Supplies: The ship will be stocked with sufficient supplies for infection mitigation and treatment, following guidance consistent with [CDC latest information](#).
- 1.3. A possibly reduced shipboard science complement (SBSC):
  - 1.3.1 While COVID remains in the pandemic phase, sufficient berths will remain open to create a minimum of 4 isolation rooms on each expedition.
    - 1.3.1.1 This number of open berths is possible for most expeditions based on standard staffing levels but may need to be adjusted on a case-by-case basis.
- 1.4. Risk assessment: The level of risk will be assessed as high risk or low-to-moderate risk.
  - 1.4.1 The criteria for risk assessment will be based on:
    - 1.4.1.1 Infection rates in departing and arrival ports.
    - 1.4.1.2 Travel restrictions to and from ports.
    - 1.4.1.3 Port call logistical considerations.
    - 1.4.1.4 Distance the ship will be from shore-based medical facilities.

- 1.4.1.5 COVID-19 test availability in port and on the ship.
- 1.4.1.6 Number and percent of fully vaccinated/boosted on board.
- 1.4.1.7 Number of high-risk and unvaccinated participants.
- 1.4.1.8 Number of isolation berths.
- 1.4.2 The lowest risk situation for the JR occurs when the ship is tied up in a port for a maintenance period with ready access to nearby medical facilities, with low infection rates, fully or nearly fully vaccinated CSS, abundant COVID-19 tests, and abundantly available isolation rooms on the ship or in hotels.
- 1.4.3 An example of a low-to-moderate risk expedition is one with a departure port with low-to-moderate infection rates, operations only a few days from ports with hospitals, fully or nearly fully vaccinated CSS, sufficient COVID-19 antigen tests for regular testing, and at least 4 isolation rooms on the ship.
- 1.4.4 An example of a high-risk expedition is one departing from a port with high infection rates that also has operations many days away from ports with hospitals, some high-risk or unvaccinated CSS, and no antiviral medications onboard.
- 1.4.5 The immediate ship schedule as of January 2023 has only low-to-moderate risk upcoming expeditions, including Expeditions 398P (tie up), 399, and 395. Thus, actions to be taken as outlined in this version of COPE pertain only to low-to-moderate risk expeditions. Maintenance/tie up periods will be very similar and are described in the Appendix.

## 2 Recommended Procedures to Follow Prior to Departure for Port

- 2.1 Shipboard participants must undergo the JRSO medical exam, which includes a COVID-19 risk assessment for severe illness.
  - 2.1.1 The COVID-19 assessment asks the participant's, or when needed, the ship's physician to determine if the combined known health conditions put the person being examined at a potentially high risk of developing a severe illness from COVID-19, including impact of the participant's vaccination status.
  - 2.1.2 The ship's doctor will evaluate the physicians' assessments to determine if the shipboard medical facilities/capabilities can support care for those individuals deemed to be in a higher risk category.
- 2.2 All participants are strongly encouraged to get fully vaccinated and to get booster shot(s), as recommended by the [CDC](#). Currently, the CDC recommends all adults receive the updated (bivalent) booster if it has been at least 2 months since their last booster. The bivalent booster provides protection against both the original virus and Omicron. Additional guidance is available for those who are [immunocompromised](#).
  - 2.2.1 The CDC notes that COVID-19 vaccinations are safe and are effective at reducing the chance of becoming infected and, in case of infection, from getting seriously ill, being hospitalized, and dying. The best protection from COVID-19 is to stay up to date with recommended boosters.

- 2.3 Shipboard participants should minimize interactions with others from outside their home for 4 days prior to departure to port to reduce the risk of testing positive.
- 2.4 A COVID-19 PCR or antigen test is required prior to departure for port. This will help identify infected individuals before they expose others during travel and help avoid that person learning only after they arrive in port that they will not be allowed to sail. The antigen test can be self-administered.
  - 2.4.1 Unless otherwise instructed due to testing requirements of the starting port country, participants should complete the test during the 4-day period of minimizing interactions with others.
  - 2.4.2 If a participant suspects a false positive, then two additional negative tests are required to verify that they are not infected.
  - 2.4.3 JRSO staff will be tested with costs covered by the JRSO.
  - 2.4.4 Costs for scientists are dependent on their respective Program Member Office (PMO) policy.
  - 2.4.5 Anyone who has a confirmed positive test or has COVID-19 symptoms shall not depart for port.
    - 2.4.5.1 Individuals who test positive should immediately notify the following (negative tests do not need to be reported):
      - 2.4.5.1.1 Scientists: their EPM.
      - 2.4.5.1.2 JRSO staff: their supervisor.
      - 2.4.5.1.3 Siem staff: the ODL Crewing Manager.
- 2.5 Before leaving for the airport, participants should prepare to fly safely by following [CDC guidelines for travelers](#). If traveling with any other participants, please note this information because this information may be needed for contact tracing.
  - 2.5.1 Although the CDC can no longer enforce the use of masks for those traveling on public transportation, they recommend travelers wear a well-fitting or respirator style mask (e.g., N95, KN95, KN94, FFP2/P2/KMOEL/DS) to protect themselves and others in travel and transportation settings. Despite decreased use of masks by the general public, as part of the COPE protocols, all CSS should wear a respirator mask during travel to the ship to minimize the risk of infection.
- 2.6 Most pathways for COVID reaching the ship are during travel from home to the ship. It is, therefore, essential that participants adhere to the COPE protocols and be mindful of risk during travel and while in port and utilize mitigation measures while in public. Breakthrough cases occur, re-infection is possible, and infection rates are still high in many source nations of participants and in the airports, airplanes, local transport, and hotels through which the participants pass on their way to the ship. Because the ship is a congregate setting where social distancing is challenging and because IODP expeditions can operate many days from ports (i.e., critical care to treat severe COVID disease), reducing the risk that COVID infection gets onboard vessel is important for the health of all participants and for successfully implementing the expedition.

### 3 Protocols in Port Prior to Moving Onboard the JR

- 3.1. The ODL Commercial Operations Manager and a few additional staff from the JRSO and Siem are attending upcoming port calls. The ODL Commercial Operations Manager will work with the Captain, who will have authority for decisions that need to be made in port, in consultation with the ship's doctor and shore management as appropriate. Should the JRSO Director and any managers be unable to attend port calls, the JRSO Operations Superintendent will be the senior JRSO staff in port. If the Operations Superintendent is unavailable, JRSO port decision-making falls to the shipboard Lab Officer and then EPM, in consultation with shore management as needed.
- 3.2. Transportation from the airport to hotel will be by either prearranged transportation or individual transport options (e.g., taxi), depending on the situation in port, which will be communicated separately.
  - 3.2.1. If prearranged transportation will not be implemented, the traveler should seek transportation that allows as much social distancing as possible, rather than riding in crowded vans or buses. Please note those who travel with you because this information may be needed for contact tracing.
  - 3.2.2. When transportation is arranged for a port, numbers should be limited to allow as much social distancing as possible based on the size of the vehicle.
- 3.3. Hotel stay, testing, and symptom monitoring:
  - 3.3.1. Participants will not be required to quarantine.
    - 3.3.1.1. Personal travel prior to the required arrival time in port is allowed.
    - 3.3.1.2. All participants should remain mindful of exposure and minimize risks while traveling and in port prior to boarding.
  - 3.3.2. A prearranged COVID-19 test will be conducted prior to boarding and in most cases will be conducted at the hotel. This may take the form of self-administration of a rapid antigen test. Details will be communicated to participants depending on logistical considerations for the particular port. Positive tests are to be reported to the respective supervisor.
  - 3.3.3. Prior to departing the hotel for the ship it is critical to report ANY COVID symptoms. Although testing reduces the risk of someone moving onboard who has been infected, it cannot completely eliminate the risk (i.e., false negatives of asymptomatic or pre-symptomatic individuals). Therefore, it is critical that all CSS monitor for and report any of the following to their supervisor for assessment by the ship's doctor:
    - Fever or chills
    - Cough
    - Shortness of breath or difficulty breathing
    - Fatigue
    - Muscle or body aches
    - Headache
    - New loss of taste or smell

- Sore throat
  - Itchy or scratchy throat
  - Congestion or runny nose
  - Nausea or vomiting
  - Diarrhea
- 3.3.4. If a test result is positive, the individual’s supervisor will assist with contact tracing and providing assistance to management in port with identifying close contacts.
- 3.3.5. A positive test prior to boarding:
- 3.3.5.1. Additional testing may be conducted to verify and eliminate the chance of a false positive.
- 3.3.5.2. Depending on when the ship departs, an individual who is confirmed to have COVID-19 may be able to board the ship and re-join an expedition.
- 3.4.7.3.2 A minimum isolation period of 5 days (from first symptoms or positive test, if asymptomatic) is required. Ending isolation requires the individual be fever-free for 24 hrs, with symptoms improving, and have two consecutive negative antigen tests to confirm they are not infectious and to eliminate the chance of a false negative. Masking should continue for 5 days after the second consecutive negative test. The decision on whether the individual will be able to return to the ship will be made on a case-by-case basis to allow associated risks to be assessed. The ship may depart before the end of the isolation period if the expedition can be conducted without the infected personnel.
- 3.3.5.3. If mission-critical personnel test positive, there are two options:
- 3.4.7.3.2 Ship departure will be delayed until they are allowed to board, unless there is a replacement available.
- 3.4.7.3.2 It may be possible for the ship to depart on time if the infected essential personnel can complete their isolation period onboard before their services are required (see also 7.2.1.5).
- 3.3.5.4. Housing arrangements will need to be made for an individual who tests positive and who may not be able to return home until they meet local health and reentry requirements for the home country.
- 3.3.5.5. Individuals determined to be in close contact with someone who is infected may have extended hotel stays and receive additional testing.
- 3.3.5.6. Costs for hotel and per diem for JRSO staff will be covered based on the JRSO travel policy.
- 3.3.5.7. Scientists’ expenses fall under their respective PMO policy.
- 3.3.5.8. Any medical care required for scientists or JRSO staff is to be covered by the individual’s insurance.

- 3.3.5.9. Cost for housing and meals for the crew is covered by Siem Offshore (to be reimbursed by JRSO). Medical care, if needed, for the crew is covered by Siem Offshore.

## 4 Port Calls

- 4.1 Off-going CSS are allowed shore leave after arriving in port. In-person crossovers are allowed when no quarantines are being implemented. All participants will be masked on crew change day when crossing over.
- 4.2 When feasible, all sailing personnel board on the same day.
  - 4.2.1 All onboarding personnel will wear masks (see 5.2) during the transition from exiting the hotel room through boarding the ship.
- 4.3 Once crew change has been completed, shore leave is not allowed.
  - 4.3.1 Non-essential access to the dock will be allowed for exercise/breaks if dock work allows and personnel can stay socially isolated. Any participant must wear a mask when in proximity to other participants or shore/port personnel.
- 4.4 Minimize interaction between SBSC and crew and within each cohort group when possible.
- 4.5 Non-sailing personnel access onboard:
  - 4.5.1 Prior to boarding the vessel, visitors/vendors will be given antigen tests, which must be confirmed negative. Masking (see 5.2) is required for visitors indoors and outdoors when in proximity to shipboard participants.
  - 4.5.2 Prior to and on the day of crew change (normally day 2 of port call), Siem and JRSO shore managers and supervisors will be allowed onboard.
  - 4.5.3 After crew change, shore personnel are not allowed onboard with exception of visitors/vendors as required by Siem Offshore or the JRSO, and the normal required government officials and technical personnel associated with vessel coming in and out of port.

## 5 Shipboard Mitigation Period

This period begins the day after crew change and lasts for 6 days, assuming there are no suspected COVID-19 cases identified during that time. If any COVID-positive cases are identified onboard, the 6-day mitigation period will be extended from the last positive case. Depending on circumstances, the shipboard mitigation period may be adjusted upon request from Captain, Drilling Supervisor, LO, and/or Operations Superintendent and approval by JRSO and Siem Management. The goal of the mitigation period is to reduce the potential of exposure to COVID-19 that may not have been identified prior to boarding.

- 5.1 Shipboard mitigation testing
  - 5.1.1 Daily antigen testing will be conducted on the ship until the end of the mitigation period. Testing may include a PCR test instead of an antigen test while in port, typically 2 days prior to departure for science expeditions.



- 5.2 **Wear masks in indoor laboratories and common areas, including passageways, and outdoors when working in close quarters.** This is a critical mitigation measure to prevent spread of COVID-19.
  - 5.2.1 Masks should cover mouth and nose and fit snugly.
  - 5.2.2 [Public health guidance](#) on masking with the prevalence of the more infectious Omicron variants recommends use of quality, well fitted masks, preferably high-filtration respirators (e.g., N95, KN95, KN94, FFP2/P2/KMOEL/DS). Masks with valves are not acceptable.
  - 5.2.3 High-filtration masks will be provided onboard with some options on mask type. Face fit and comfort are key to effective mask use. If you have a preferred mask, you are welcome to bring your own supply.
  - 5.2.4 Surgical masks have better filtration efficiency than cloth and are *acceptable if properly fitted with a good face seal*. Surgical masks that do not fit well can be improved by double masking with a cloth mask on top.
  - 5.2.5 Cloth masks, gaiters, and similar masks are much less effective against Omicron and its variants and should not be used without the addition of another approved type of mask.
- 5.3 Work in small groups when possible.
- 5.4 Minimize mingling with/in large groups.
- 5.5 During the mitigation period, no room or office cleaning by Entier staff should occur. Cleaning supplies, towel, and bed linen replacement will be provided to each room occupant as needed.
- 5.6 Where practicable, galley use will be regulated as follows:
  - 5.6.1 Galley access will be scheduled to minimize interaction between shifts and groups.
  - 5.6.2 Scheduling will be used to minimize the number of people in the galley at a time.
    - 5.6.2.1 This number should be small enough to allow diners to socially distance as much as possible.
    - 5.6.2.2 Taking meals to other locations to eat, when available, is encouraged.
    - 5.6.2.3 If eating in the mess hall, please depart when finished and do not linger for conversations, etc.
  - 5.6.3 Galley restrictions during the mitigation period require that individuals wear masks when using self-service items.
- 5.7 Use of some common areas should be minimized:
  - 5.7.1 Meetings in the conference room should be minimized. When meetings are held, individuals should mask.
  - 5.7.2 Gym usage will be restricted to one maskless person at a time, implemented as 30 min slots, maximum two slots in a row.

- 5.7.3 Movie room and lounges may be scheduled for small groups from the same shift with all participants masked.

## 6 Dealing with a Suspected COVID-19 Case Onboard

- 6.1 Predefined isolation cabins or other rooms (at the Captain's discretion) will be available for housing suspected or positive cases of COVID-19.
  - 6.1.1 For each expedition, the ship's doctor, Captain, and JRSO LO will develop a plan to redistribute personnel to make isolation rooms available, if needed. Redistribution that results in double occupation of rooms should be with personnel on opposite shifts.
    - 6.1.1.1 The vessel's air handling system includes MERV 13 hospital-grade filtration and ultraviolet light disinfecting systems in the accommodations. These systems provide assurance that isolating an individual in a cabin protects the other crew and scientists onboard.
  - 6.1.2 All designated isolation cabins should have a hand sanitizer dispenser and designated lined disposal bin with cover outside the door.
  - 6.1.3 If a confirmed case onboard occurs while the vessel is in port, it may be possible to move the case to a hotel, if allowed by the health and port authority, to provide additional isolation flexibility for preventing additional spread of the virus.
- 6.2 If it is determined that there is a suspected case of COVID-19 onboard, the patient will be isolated immediately in a predefined isolation cabin with the door closed and implement the following measures:
  - 6.2.1 The patient will be given a rapid antigen test. If positive, a second test will be administered to confirm the result. Additional tests may be necessary if conflicting results are obtained. Even when the results are negative, if the patient has other COVID-19 symptoms, they will be treated as a suspected case.
  - 6.2.2 Instruct the patient to wear a mask and regularly wash hands with soap and water and use alcohol-based hand sanitizer.
  - 6.2.3 Make sure all persons entering the isolation room wear proper PPE and perform hand hygiene using the hand sanitizer outside the room after removal of PPE.
  - 6.2.4 Perform hand hygiene following all contact with ill person's immediate environment.
  - 6.2.5 PPE used by the care provider should be disposed in a designated double-lined bin with cover outside the isolation cabin. Do not re-use. Tissues, masks, and other waste generated by ill persons or in the care of ill persons should be placed in a double-lined container in the ill person's room and treated as biological waste and incinerated.
  - 6.2.6 Limit the number of persons entering the isolation room to the doctor or two other crewmembers (AM/PM shifts), in charge of cleaning the cabin and/or delivering food. They should use proper PPE when entering the patients' cabin. Ideally, assign one who is in good health without risk conditions. Visitors are not allowed.

- 6.2.7 If patient is strong enough, their food tray can be placed in front of their door cabin on a table for pick up. This way, the crew member delivering food need not wear PPE. Full PPE is required to retrieve food tray.
- 6.2.8 Food to the patient can be served using single-use utensils and disposed of and incinerated afterward.
- 6.2.9 Master can implement more frequent cleaning and sanitizing regime than usual (disinfecting tables/handrails/door knobs/soles, etc.).
- 6.3 Individuals who had close contact with the symptomatic person should be notified and closely monitor themselves for possible onset of symptoms and isolate as necessary.
  - 6.3.1 Contact tracing will be used to identify individuals that they came into close contact recently.
    - 6.3.1.1 Masking, if not already in effect, and testing will be required.
    - 6.3.1.2 These individuals may need to isolate.
- 6.4 Report suspected cases to the JR's Vessel Manager, Crewing Manager, and the JRSO.
- 6.5 Release from isolation will follow Section 7.1 and medical history of the individual.

## 7 Dealing with Confirmed Cases

- 7.1 Isolation and resumption of duties
  - 7.1.1 An individual who is confirmed to have COVID-19 will be able to return to work 5 days after testing positive (or first symptom) once they are fever-free for 24 hrs, with symptoms improving, and have two consecutive negative antigen tests to confirm they are not infectious and to eliminate the chance of a false negative. The two tests may be conducted on the same day. If the individual tests positive on either test, antigen tests should be continued daily until two consecutive negative results are obtained.
    - 7.1.1.1 Isolation begins on the day of first symptoms (day 0) or positive test if asymptomatic.
    - 7.1.1.2 Individuals in isolation who have mild symptoms (and thus feel up to it) are allowed an hour outdoors daily, masked and socially distanced, weather permitting, and as practicable.
    - 7.1.1.3 The isolation period will be capped at 10 days.
    - 7.1.1.4 Masking by the individual should continue for an additional 5 days after their second consecutive negative test or when they are released from isolation.
    - 7.1.1.5 The Master will have the flexibility to allow an infected person(s) to do essential tasks (masked, and isolated from others, as possible) for operations to continue, or to safely transit to port, as required.
  - 7.1.2 If the positive case is onshore, port health authority/public health department may have different requirements for isolation, which we are obligated to follow. The

exception would be if the COPE protocol is more conservative, which would then govern return to the vessel and resumption of duties.

- 7.2 If shore-based medical treatment is needed for a positive case(s) 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.
- 7.2.1 The ship may be asked to proceed to another nearby port if this capacity is not available, or if warranted by the critical medical status of the suspect case of COVID-19.
- 7.2.2 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.
- 7.2.3 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 or disposed of if relevant.
- 7.2.4 The cabin or quarters where the suspected case of COVID-19 was isolated and managed should be thoroughly cleaned according to current best practices.
- 7.2.5 If the return to port is related to COVID cases that are not severe, arrangements should be made with the port authority via the agent for isolation period in a suitable hotel.

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## Appendix: General Protocols for Tie up/Maintenance Periods

Pre-travel requirements remain the same as the main document.

### Port call

- Oncoming personnel:
  - Personal travel allowed pre-expedition.
  - No quarantine required in hotel.
  - Personnel should take appropriate measures to mitigate risk during travel and in port.
- In person crossover is allowed during crew change, properly masked.
- Testing protocol is the same
  - First test taken at hotel before boarding the ship.
  - Test daily for next 6 days.
- Implement standard initial shipboard mitigation program (masking, testing) as described in the main document, with the following exceptions
  - Galley usage will return to pre-pandemic practices for shipboard staff.
  - Use of conference room and movie rooms will return to pre-pandemic practices, other than that masking and social distancing should continue during the mitigation period.
  - Gym usage will be restricted to two maskless persons at a time, implemented as 30 min slots, maximum two slots in a row.
- Allow shore leave
  - Access to shore may be restricted based on COVID case numbers onboard or in the port city.
  - No quarantine for new arrivals; test before boarding (shipboard testing).
  - New arrivals mask and test for 6 days as above.
- Daily antigen testing on ship, as needed
  - If daily antigen testing and masking is discontinued due to a lack of cases, periodic testing may occur if deemed necessary.
- Vendors and shore personnel working port call are allowed onboard with daily testing and masking.
  - Meals
    - Dockside containers will be available for vendors to use for meals.
    - Siem or JRSO shore staff may eat on board, if needed, with appropriate onboard management of meal segregation from participants.
- Cabin isolation for personnel who test positive, which may require rearrangement of rooms or move to hotel.

### Transits associated with the maintenance period:

- If the transit is at the beginning of the period, no shore leave is allowed after crew change. Shore leave is allowed after arriving at the tie up location.
- If the transit is in the middle or end of the tie up period, restart daily antigen testing at least 2 days before departure and continue testing for 6 days, unless positives are discovered.