Preface

This document defines protocols for operating the Research Vessel JOIDES Resolution (JR) as safely as possible during a time when the novel Coronavirus Disease 2019 (COVID-19) is present globally and has the potential to cause illness, long-term health complications, and even death. The approach taken here is to mitigate pathways for COVID to get on the JR and, if it does get on the JR, to prevent or limit the spread while caring for those who have become ill. The protocols outlined here will be followed to the extent that is practical, and may have to be modified due to constraints imposed by local authorities or logistical issues.

The protocols outlined in COVID Mitigation Protocols Established for Safe JR Operations (COPE) will be updated and revised continually as more is learned about COVID-19, as rules and regulations for travel are revised, as specific national port requirements are applied, as tests become more readily available and accurate, and as effective treatments and vaccines become readily accessible. Until then, all of those involved in the many aspects of implementing a successful International Ocean Discovery Program (IODP) expedition will need to cope, which is “to deal effectively with a difficult situation.” 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.
Acronyms and Definitions

CDC: Centers for Disease Control and Prevention (US)
COPE: COVID Mitigation Protocols Established for Safe JR Operations
COVID: Coronavirus Disease
COVID-19: Coronavirus Disease 2019
Cohorts: Groups of individuals who commonly work in close proximity on the ship
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

Introduction

COPE is a plan for how to conduct IODP expeditions on the JOIDES Resolution as safely as possible once it is prudent to return to operations. Currently, the timing of when to move forward is still uncertain and depends on several factors, many of which are still in flux. The health and safety of all those who participate on IODP expeditions—the ship’s crew, the JRSO staff, and the scientists—is paramount in determining whether IODP operations can recommence. To conduct operations with low 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, with an emphasis on shipboard preparedness, ports, and staffing
2. Recommended procedures to follow prior to departure for 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**

Well before the start of an expedition, the following steps will be taken to ensure the ship is prepared for dealing with COVID-19.

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 a number of 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
1.1.4 Availability/willingness of port country to provide medical care if needed

1.2. The ship will be stocked with sufficient supplies for infection mitigation and treatment, following guidance consistent with [CDC latest information](https://www.cdc.gov/) (also see Appendix I).

1.3. A reduced shipboard science complement (SBSC) and technical staff will be selected using the following criteria:

1.3.1 The number of staff and scientists will be reduced to provide isolation rooms should they be required, which has the additional benefit of maximizing social distancing onboard the JR as much as feasible during the 2-week onboard mitigation period, with the goal to have few or no JRSO staff or scientist cabins housing more than one person.

1.3.2 Only essential personnel required to accomplish the base objectives of the expedition will be allowed to sail.

1.3.2.1 The JRSO EPM together with the expedition co-chief scientists will identify and rank positions of the science party that are essential to have onboard.

1.3.2.2 The JRSO will make the determination on an expedition-by-expedition basis which support staff positions are required to sail.

1.4 For expeditions that have already had staffing completed, scientists who cannot sail will remain part of the primary science party as a shore-based complement with same rights and access to data and samples.

1.4.1 For those expeditions not yet staffed, decisions will be made about what constitutes the SBSC and shore-based complement, preferably prior to initiating staffing.

2. **Recommended Procedures to Follow Prior to Departure for Port**

2.1 The JRSO medical exam includes a new COVID-19 Risk Assessment form.
2.1.1 The COVID-19 risk 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.

2.1.2.1 Those scientists deemed at high risk have the option to become part of the science party as a shore-based member (see “Shipboard Science Complement”).

2.1.2.2 Those scientists deemed not to be at high risk must sign a Waiver/Consent form acknowledging that they understand the risk factors, particularly the risks related to their own medical conditions and history, and agree to participate on the JR.

2.2 Shipboard participants will shelter at home for 14 days prior to departure for port.

2.2.1 Sheltering at home means stay at home, leaving only for essential services (e.g., food, healthcare). Avoid people outside your household, and maintain safe practices (e.g., handwashing with soap and water, clean and disinfect frequently touched surfaces). When outside your household, maintain a distance of 2 m (6 ft) and limit time of exposure to others. Wear a face covering when around others outside your household, especially indoors where social distancing alone does not protect you from infection.

2.3 A COVID-19 RT-PCR 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.

2.3.1 Currently, most nations are requiring a PCR test as part of their entry requirements. Because these requirements continue to change, the timing of the pre-departure required test will be communicated to participants separately.

2.3.2 JRSO staff will be tested with costs covered by the JRSO.

2.3.3 Costs for scientists are dependent on their respective Program Member Office (PMO) policy.

2.3.4 Vaccinated participants: Current guidance for vaccinated individuals continues to be cautious because there is not definitive evidence that the vaccinated cannot transmit the virus, especially with respect to variants. Although initial evidence indicates that the fully vaccinated may have decreased transmission risk, until more is known about transmissivity of vaccinated individuals and while the number of vaccinated participants sailing on expeditions is low, and infection rates are high in source nations of crew, JRSO staff, and scientists, vaccinated participants will follow the protocol outlined in this document.
2.4 All CSS are required to complete the online Siem screening questionnaire (Siem Form FO-619) 48–72 hours prior to departure for travel from home.

2.4.1 Anyone who tests positive or is determined to be a suspected COVID-19 case based on the Siem questionnaire shall not depart for port.

2.4.1.1 An exception may be possible for individuals who recently fully recovered from COVID-19 but still test positive. Such individuals should consult with their JRSO or Siem supervisor because they may be allowed to travel to port if the port country allows entry with proof of prior COVID-19 infection.

2.4.2 If the answer to any question on the FO-619 questionnaire is “yes,” the individual should not travel to the ship.

2.4.3 Individuals who test positive should notify the following so replacements can be sought, if required:

2.4.3.1 Scientists should immediately notify their EPM.

2.4.3.2 JRSO staff should immediately notify their supervisor.

2.4.3.3 Siem staff should immediately notify the ODL Crewing Manager.

2.5 Before leaving for the airport, be prepared to fly safely by following CDC guidelines for travelers.

3. Protocols in Port Prior to Moving Onboard the JR

3.1 Until more staff are vaccinated, the JRSO will not send non-sailing personnel to port calls in an effort to minimize the number of paths of transmitting the virus to the vessel. In the meantime, the ODL Commercial Operations Manager will be the only non-sailing staff member to attend the port. The 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. The JRSO Operations Superintendent is the senior JRSO staff at 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 obtained at the airport by the traveler, as done in the past.

3.2.1 The traveler should, however, seek transportation that allows as much social distancing as possible. This approach allows staggering of check-in at the hotel.

3.2.2 When transportation is arranged for a port, this should be limited to small groups (5 or less) with as much social distancing as possible. Transportation cohorts will be recorded for contact tracing purposes.

3.3 Upon arriving at the hotel:
3.3.1 Essential items should be acquired before leaving home so that each CSS can check into the hotel, go immediately to their rooms, and begin to self-isolate. They should not leave the hotel to purchase items. If an individual has forgotten something crucial, they may request assistance by contacting their supervisor or by directly contacting the Commercial Operations Manager, who may be able to assist. In some cases, the front desk of the hotel may be able to assist directly.

3.3.2 As soon as possible, begin a period of self-isolation in the hotel room.

- Do not leave the hotel room, minimize personal contact with in-room/delivery food service staff, and otherwise have no personal contact with others except medical personnel conducting testing.
- Quarantines are very challenging, so all CSS should have a plan for in-room entertainment, exercise, additional preferred amenities (e.g., snacks, etc.), and social support.
- The selected hotel should have in-room service for meals.
- Ideally, the selected hotel will have windows that open or balconies to allow access to fresh air. Such hotels may be rare and it is likely that other means will be need to be sought to accommodate fresh air and smoking breaks. Details will need to be worked out for each port.
- Hotels with amenities such as Wi-Fi, phone, TV, refrigerator, microwave, coffee maker, and bottled water will be sought but may not be available.
- The hotel should be instructed that room service personnel should leave food or beverages at the door and not wait at the door to personally handover.
- Avoid using hotel common room/facilities for provisioning of water, coffee, etc.

3.4 Hotel quarantine, testing, and symptom monitoring:

3.4.1 A 7-day quarantine with testing and symptom monitoring will be required for all personnel based on CDC guidance for close-contact quarantine, which must be assumed during travel to port. Prearranged COVID-19 RT-PCR tests will be conducted twice for all CSS before they are allowed to board the ship.

3.4.2 The first test will take place on day 3 or 4 of the quarantine (day 0 is arrival date), with preference on day 4.

3.4.3 The second test will take place within the last 48 hours of the 7-day quarantine (i.e., day 5 or 6), with preference for day 6, depending local testing turnaround times.

3.4.4 The safest method for sample collection for testing is performed at individual’s room, if at all possible. If no company will provide sampling at each individual’s room, the procedure and schedule must avoid clustering and long queues with maximum social distancing, masking, and in a well-ventilated environment.
3.4.5 Whenever possible, flights will be arranged to attempt to have all CSS arrive the same day at the hotel. Ultimately, the hour the flights arrive will vary. The 7-day quarantine is, therefore, based on 7 calendar days, reflecting the reality that flight itineraries will vary.

3.4.6 In most ports where a company is contracted to provide testing, results are communicated in batch to the ship’s doctor and the Captain. Results will then be communicated to individuals as well as the ODL Commercial Operations Manager and JRSO port leadership (Ops Superintendent, LO, and EPM). If a test result is positive, the individual’s shipboard supervisor will assist with contact tracing and providing assistance as required via ODL Commercial Operations Manager and/or ship’s doctor. If port testing requirements provide test results directly to the individual, that individual should send those results to their supervisor immediately, who will circulate to the port management team listed above.

- Additional testing may be conducted to verify and eliminate the chance of a false positive.
- A positive test will result in additional testing of transportation cohorts if small group transportation from the airport was used.
- Housing arrangements will need to be made for an individual who tests positive and who may not be able to return home until local health authorities clear them to do so. Although local guidelines will take precedent and may vary, please see CDC guidelines for typical quarantine requirements for COVID-19 infections.
- Costs for hotel and per diem for JRSO staff will be covered based on the travel policy.
- Scientists’ expenses fall under their respective PMO policy.
- Any medical care required for scientists or JRSO staff is to be covered by the individual’s insurance.
- Cost for housing and meals for the crew is covered by Siem (to be reimbursed by JRSO). Medical care, if needed, for the crew is covered by Siem.

3.5 During the time in the hotel:

3.5.1 Although the quarantine and testing protocol greatly reduces post-quarantine transmission risk, 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 and likely testing prior to being allowed to move onboard.
- Fever or chills
• Cough
• Shortness of breath or difficulty breathing
• Fatigue
• Muscle or body aches
• Headache
• New loss of taste or smell
• Sore throat
• Congestion or runny nose
• Nausea or vomiting
• Diarrhea
• Rash on skin or discoloration of fingers or toes

3.5.2 Expedition preparation should be conducted.
• Scientists can use Zoom to start preparation activities and training with JRSO staff.
• JRSO staff and crew conduct crossover remotely (Zoom or phone).
• If practicable, CSS may begin adjusting to their assigned work schedule in preparation for going on shift when they get to the ship.
• JRSO staff and scientists will be assigned to cohort groups by the EPM and LO. Although completely isolating cohort groups from each other is impracticable, members of a cohort group should strive to minimize contact with individuals from other cohort groups. As much as possible, cohorts move as a group during transport to the vessel and once onboard. This will include assigned times to eat in the galley and attend safety drills.

3.5.3 Stagger checking out at the hotel to prevent clustering in a line at the front desk, and remain socially distanced in the lobby while preparing to go to the ship.

4. Port Calls

4.1 Off-going CSS will depart the vessel prior to the oncoming CSS arriving, except for essential personnel for which in-person crossovers are required.

4.2 When practicable, all sailing personnel board on the same day.
  4.2.1 The departing crew will disinfect high-touch surfaces prior to departure.
  4.2.2 Oncoming personnel will be brought to the ship in isolated cohort groups, when practicable. If multiple cohort groups must travel together on a bus, each cohort group should seek to physically distance from other groups, while also socially distancing from each other as much as possible.
  4.2.3 The shipboard complement will move onboard after being screened on the dock. Screening requires that all CSS complete Siem form FO-630, which asks the individual if they are experiencing COVID-19 symptoms and requires that the
individual’s temperature be taken. If the individual has no symptoms and a normal body temperature, they may board the ship. If not, then the individual returns to the hotel for 2 days to see if symptoms resolve, and possibly test again for COVID-19.

4.3 Cohorts will immediately move on shifts to maximize social distancing in common areas.

4.4 Once on board, all personnel are restricted to the vessel, with the exception of those who must work on the dock.

4.5 Minimize interactions of staff with port personnel.

4.6 Gangway security and safety measures include the following:

4.6.1 Siem form FO-630, available at the gangway, must be completed before boarding the ship.

4.6.2 Only shipboard personnel can come onboard (with exception of 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), and only authorized personnel can leave the vessel.

4.6.3 A sanitization station is available on the gangway with extra masks, work gloves, hand sanitizer, and disposal bin.

4.6.4 Any staff going from the vessel to the dock must wear masks and safety glasses/protective eyewear.

4.6.5 Staff returning from the dock must sanitize their hands.

4.7 Depending on port and berth, freight from containers should not be de-stuffed by local stevedores but off-loaded at the ship with ship’s crew if possible; otherwise treat as local freight. *The contents of oversea container shipments should be safe to handle given the time in transit.*

4.8 Local freight/purchases should be sanitized as follows:

4.8.1 Disinfect interior packing as necessary.

4.8.2 Sanitize hands.

4.9 In the event that mission-critical personnel (e.g., Captain, Doctor, Operations Superintendent) are not allowed to board the vessel due to these protocols, the expedition may be delayed while replacement(s) are found or until the individual has recovered sufficiently to be released from quarantine. Replacement personnel will be required to undergo the full protocol. If key personnel are not allowed onboard, it is possible that the expedition could be cancelled, which would be determined based on the specifics of the cases involved and the distance to shore (assistance) of the operating area.
5. **Shipboard Mitigation Period**

This period begins after the last contact with shore personnel, which will typically be when the harbor pilot disembarks after guiding the ship out of port, and extends through the next 14 days of the expedition, assuming there are no suspected COVID-19 cases identified during that time. The goal of the mitigation period is to reduce the potential of exposure to COVID-19 that may not have been identified during the quarantine and testing period by having staff take the following steps. Depending on circumstances, the shipboard mitigation period may be shortened upon request from the Captain, Offshore Installation Manager, LO, and/or Operations superintendent and approval by JRSO and Siem Management.

5.1 *Wear masks in indoor laboratories and common areas, including passageways, and outdoors when working in close quarters (<6 ft [<2 m]).* This is a critical mitigation measure to prevent spread of COVID-19 if an infected individual was asymptomatic or presymptomatic during the hotel testing and quarantine period.

5.2 See updated CDC guidance on masks and on effective masking, including how to properly double mask (cloth mask over a surgical mask). **Masks with valves, single layer cloth, or bandanas, and single layer neck gaiters are not acceptable.** Masks should cover your mouth and nose and fit snugly.

5.3 Be ready to work assigned shifts upon boarding the ship.

5.4 Work in small cohort groups.

5.5 Minimize mingling with/in other cohort groups.

5.6 Disinfect work areas and high-use touch surfaces.

5.7 Assign single-user instruments/computers/microscopes, as practical.

5.8 Where practicable, galley use will be regulated as follows:

5.8.1 Galley access will be scheduled by cohort groups.

5.8.2 Galley scheduling will be used to minimize the number people in galley at a time.

5.8.3 This number should be small enough to allow diners to socially distance as much as possible.

5.8.4 Enhanced barriers will be used between the food-serving line and diners.

5.9 Access to some common areas may be prohibited or limited, including the following:

5.9.1 Conference room, which will preferably be limited to 10 or fewer individuals.

5.9.2 Gym, movie room, and lounges may be scheduled by small cohort groups, or access may need to be totally prohibited.

5.10 Safety drills will be staggered into cohort groups, when feasible.

5.11 Shift crossovers:
5.11.1 During the first 14 days onboard, no room or office cleaning by Entier staff should occur. Cleaning supplies, towel and bed linen replacement to be provided to each room occupant as needed.

5.11.2 Following the first 14 days, CSS will ensure their cabin is vacant during scheduled times to allow Entier staff to clean and replace linens.

5.11.3 Those sharing a common room will leave their rooms before their shift starts and not return to their room until after their shift to minimize contact between roommates.

5.11.4 Where practicable, exchange of information during crossovers between cohort groups should be done remotely, especially during the first 14 days onboard, and when not possible, social distance as much as possible and wear masks.

6. Dealing with a Suspected COVID-19 Case Onboard

Everyone onboard will follow Siem Offshore’s procedures:

6.1 Predefined isolation cabins or other rooms (at the Master’s discretion) will be available for housing suspected 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 15 hospital-grade filtration and ultraviolet light disinfecting systems in the hotel stack. This system helps prevent the spread of COVID-19 between cabins.

6.1.1.2 Note, however, this does not impact the issue that common areas (e.g., galley/mess, labs, passageways) could contain COVID-19 aerosols for some time. Hence, masking is critical for mitigation in these areas.

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, which will 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, isolate the patient immediately in a predefined isolation cabin with the door closed and implement the following measures:

6.2.1 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.
6.2.2 Perform hand hygiene following all contact with ill person’s immediate environment.

6.2.3 PPE used by 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.

6.2.4 Limit the number of persons entering the isolation room to Medic or Medical Person-in-Charge 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.

6.2.5 If the 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 full PPE (masking still required). Full PPE is required to retrieve food tray.

6.2.6 Food to the patient can be served using single-use utensils and disposed of and incinerated afterward.

6.2.7 The Master shall consider implementing more frequent cleaning and sanitizing regime than usual (disinfecting tables/handrails/door knobs/ consoles, etc.).

6.2.8 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.

6.2.9 In the event of a suspected case of COVID-19, the Master is to consult with the medical advisor appointed by Siem.

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 members of the symptomatic person’s cohort or other individuals that they came into close contact recently.

6.3.1.1 These individuals may need to isolate.

6.4 Other actions that may be taken on the ship to reduce the potential spread of Covid, particularly in the event of suspected or confirmed Covid cases, include:

6.4.1 Limiting self-serve food stations with unwrapped food items.

6.4.2 Wrapping individual food items, like desserts and cheeses.

6.4.3 Providing individually wrapped cutlery.

6.4.4 Using only bottle spigots on water fountains.
6.4.5 Being proactive in reminding coworkers to wear masks fitted properly when they forget or have masks positioned inappropriately.

6.5 Suspected cases shall be reported to the JR’s Vessel Manager, Crewing Manager, and the JRSO.

7. **Medivac or Return to Port**

7.1 In the event that shore-based medical treatment is needed for a suspected case 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.

7.1.1 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.

7.2 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.

7.3 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.

7.4 The cabin or quarters where the suspected case of COVID-19 was isolated and managed should be thoroughly cleaned and disinfected after a period of 24–48 hours after the patient has been removed from the ship.

7.5 The port health authority will most likely conduct a risk assessment and all contacts of the suspect case will try to be identified. Participants and crew shall 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.

8. **Ensuring a Safe Return Home**

8.1 Travel itineraries home should be arranged to minimize time in the port city to reduce the risk of being exposed to COVID-19 while in port.

8.1.1 When possible, disembarking CSS should travel directly from the ship to the airport for returning home.

8.1.2 Travel itineraries may need to accommodate testing requirements for return flights and could impact planned crossover dates in port.

8.2 Extended stays in port unrelated to an expedition or travel other than to an individual’s home base will be considered personal travel, for which the traveler is responsible.
Personal travel should follow local laws, as well as laws and travel restrictions imposed by destination countries, and may be further limited by travel restrictions imposed by the individual’s employer.

8.3 Upon returning home from an expedition, all CSS must be prepared to follow local laws, guidance, or employer requirements on self-isolating/quarantining.

References

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CDC: Improve How Your Masks Protects You:

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Additional references

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d. CDC COVID-19 Travel Recommendations by Country:

e. Discovery Health - COVID-19 ONBOARD PROCEDURES:

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