

# COVID-19 Operations Manual for Simulated and Restricted Voyages under the Framework for Conditional Sailing Order

## Audience

This document is intended to assist cruise ship operators in ensuring health and safety protections during simulated and restricted passenger operations in a way that mitigates the risk of spreading COVID-19. This document is issued under CDC's [Framework for Conditional Sailing Order](#) (CSO) and its requirements must be observed in the same manner as other technical instructions issued under the CSO. This document also contains recommendations to further reduce the spread of SARS-CoV-2, the virus that causes COVID-19, that cruise ship operators should consider for incorporation into their health and safety protocols as best practices.

In addition, cruise ship operators must continue to adhere to requirements in CDC's [Technical Instructions for Mitigation of COVID-19 Among Cruise Ship Crew](#) during passenger voyages.

CDC will update this information as needed and notify cruise ship operators of such updates.

## Purpose

CDC's oversight and inspection of cruise ships during simulated and restricted passenger voyages will be based on this Operations Manual. The findings and/or observations of these inspections will be shared with the cruise ship operator. Cruise ship operators are expected to align their health and safety protocols with any CDC findings and observations. Such findings and observations must also be incorporated into the cruise ship operator's simulated voyage after-action report or as a condition of applying for and retaining permission to conduct restricted passenger voyages. Based on these inspections, CDC may also issue additional recommendations to the cruise ship operator that the operator should consider for adoption into their health and safety protocols as best practices.

As per the terms of the CSO, cruise ship operators, upon request, must make their properties and records available for inspection to allow CDC to ascertain compliance. Such properties and records include but are not limited to vessels, facilities, vehicles, equipment, communications, manifests, list of passengers, and employee and passenger health records.

Inspections of cruise ships during simulated and restricted passenger voyages:

- May be conducted by CDC with or without prior notification to the cruise ship operator;
- May be conducted by CDC through in-person or remote means;
- Will be conducted by CDC during a portion of the simulated voyage or restricted passenger voyage;
- May include CDC inspectors sailing on the simulated or restricted passenger voyage with prior notification to the cruise ship operator; and

- Will not have an associated fee<sup>1</sup> or inspection score.

Persons are prohibited from interfering with the ability of CDC inspectors to inspect and conduct oversight, including but not limited to interfering with CDC's ability to interview cruise ship crew and personnel or visually inspect and oversee collection of laboratory specimens and laboratory testing.

This manual is not intended as, and does not constitute, a comprehensive statement regarding a cruise ship operator's duties and obligations under CDC's CSO. These instructions reflect CDC's reasoned judgement based on the best available current science regarding the subject areas covered in the document. Cruise ship operators should carefully consider and incorporate these instructions in developing their own health and safety protocols.

## Applicability of the VSP 2018 Operations Manual

Cruise ship operators must continue to follow the Vessel Sanitation Program ([VSP 2018 Operations Manual](#)). In addition to ascertaining compliance in implementing and maintaining public health standards in accordance with the CSO's [Technical Instructions](#), CDC inspectors will further evaluate adherence to environmental health and sanitation standards outlined in the current VSP 2018 [Operations Manual](#).

All variances involving passenger interactive experiences previously approved by [VSP](#) are suspended until further notice.

CDC will recommend or direct the master of a vessel not to sail when an imminent health hazard is identified and cannot be immediately corrected, in accordance with VSP's 2018 [Operations Manual](#).

## Preventive Measures

Cruise ships involve the movement of large numbers of people in settings where they are likely to have close contact with one another. Close-contact environments facilitate transmission of SARS-CoV-2 and other respiratory viruses from person to person through exposure to respiratory droplets, aerosols, or contact with contaminated surfaces. Cruise ships may also be a means by which infected persons travel between geographic locations.

### **Requirements**

To further reduce the spread of SARS-CoV-2, cruise ship operators must:

- Inform passengers of any mandatory public health measures prior to boarding
- Place posters in high-traffic areas that encourage [hand hygiene](#) to [help stop the spread](#)
- Ensure handwashing facilities are well-stocked with soap and a method to dry hands, such as paper towels or air dryers, in accordance with the 2018 VSP Operations Manual

Cruise ship operators must continue to follow the preventative measures for crew outlined in CDC's [Technical Instructions for Mitigation of COVID-19 Among Cruise Ship Crew](#).

### **Recommendations**

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<sup>1</sup>When not under the Conditional Sailing Order, cruise ship operators pay a fee based on the ship's size for operational inspections or reinspections conducted by CDC's Vessel Sanitation Program.

<https://www.cdc.gov/nceh/vsp/desc/aboutvsp.htm>

To further reduce the spread of SARS-CoV-2, cruise ship operators as best practices should:

- Incorporate COVID-19 vaccination strategies to maximally protect passengers and crew in the maritime environment, seaports, and in land-based communities.
- Encourage passengers to avoid touching eyes, nose, and mouth with unwashed hands.
- Reduce face-to-face interactions between crew and passengers to the extent practicable.
- Discourage handshaking and encourage the use of non-contact methods of greeting.
- Promote respiratory and [hand hygiene](#) and cough etiquette.
- Inform passengers that use of cigarettes, e-cigarettes, pipes, or smokeless tobacco can lead to increased contact between potentially contaminated hands and their mouths.
- Place [hand sanitizer](#) (containing at least 60% alcohol) in multiple locations and in sufficient quantities to encourage hand hygiene

## Surveillance for COVID-19

Because of the close-contact environment on cruise ships and the potential for asymptomatic and pre-symptomatic transmission, it is important that [close contacts](#) of individuals with SARS-CoV-2 infection be quickly identified and tested.

### Requirements

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Implement procedures for maintaining records associated with active COVID-19 surveillance and make these records available to CDC upon request for review. These records include:
  - Surveillance log for acute respiratory illness (ARI), influenza-like illness (ILI), pneumonia, and additional COVID-19-like illness (aCLI) symptoms, positive [antigen](#) results, and positive [nucleic acid amplification test](#) (NAAT) results.
  - Medical documentation of prior positive SARS-CoV-2 viral test results for crew.
    - Because retesting for SARS-CoV-2 is [not recommended](#) during the 90 days post lab-confirmed diagnosis (unless symptomatic), records must be available to review the ship's tracking of the 90-day timeframe for crew who have tested positive prior to these crew resuming routine laboratory testing.
  - Records relating to the isolation of persons positive for SARS-CoV-2 and the quarantine of close contacts. These include dates of isolation and quarantine, originally assigned cabin numbers, cabin numbers for isolation and quarantine, medical records, and sign and symptom logs.
  - Records relating to the [contact tracing](#) of any identified [close contacts](#).
  - All medical records must be maintained for at least 90-days and must be made available to CDC upon request for review.

### Recommendations

To further reduce the spread of SARS-CoV-2, cruise ship operators as a best practice should:

- Consider the use of wearable recording technology, e.g. proximity bands, to rapidly identify close contacts if contact tracing is necessary.

## Medical Centers

Medical centers on cruise ships can vary widely depending on ship size, itinerary, length of cruise, and passenger demographics.

### **Requirements**

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Carry a sufficient quantity of personal protective equipment (PPE), medical and laboratory supplies listed on CDC's [Interim Guidance for Ships on Managing Suspected or Confirmed Cases of Coronavirus Disease 2019](#).
- Healthcare personnel must adhere to Standard and Transmission-based Precautions when caring for patients with suspected or confirmed SARS-CoV-2 infection. Recommended PPE is described in the [Infection Control Guidance](#).
- Maintain adequate supplies of antipyretics (e.g., acetaminophen and ibuprofen), antiviral and antimicrobial medications, oral and intravenous steroids, and supplemental oxygen. Information to estimate needed medical staffing and equipment can be found in the [Federal Healthcare Resilience Task Force Alternate Care Site Toolkit](#), Supplement 2.
- As [treatment](#) and testing become more available in the United States, cruise ships must align with the latest CDC recommendations.
- Healthcare personnel must stay up to date on [COVID-19 training](#) and [Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease \(COVID-19\)](#).

## **Laboratory**

### **Requirements**

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Ensure that a CDC-approved onboard testing instrument is properly installed, and the CDC-approved assay is being used.
- Designate a laboratory point of contact (POC) responsible for managing quality assurance and quality control and decision-making.
- Ensure test results are traceable from specimen collection through reporting to the individual, including all supporting materials, records, and equipment.
- Follow assay storage and handling guidance found in the assay's FDA EUA [Instructions for Use](#) (IFU) document.
- Develop and maintain a **testing manual** to be followed on each applicable ship for the testing instrument and assay. The testing manual must be made available to CDC inspectors upon request for review.
  - The testing manual must include the following content:
    - [CDC's Nasopharyngeal Specimen Collection Infographic](#)
    - Specimen collection, storage, and handling procedures (NP swabs), including documentation and labeling of specimens
    - Instructions for Use (IFU) for the CDC-approved onboard testing instrument
    - Reporting procedures for results, including how results are reported and who receives test results
    - Equipment manual provided by the manufacturer
    - Procedure for daily documentation of testing location & reagent storage area temperatures

- Maintain the following records as part of the **testing manual** or in a separate document accessible to CDC inspectors:
  - Personnel training records for specimen collection, labeling, storage, testing, and reporting
  - Documentation that all onboard medical personnel involved with specimen collection and laboratory testing have completed [“Ready? Set? Test! Checklist”](#) (regulatory sections do not apply)
  - Documentation that all onboard medical personnel involved with specimen collection and laboratory testing have completed [competency testing](#).
  - Documentation that all onboard medical personnel have read and reviewed:
    - [Good Laboratory Practices for Waived Testing Sites: Survey Findings from Testing Sites Holding a Certificate of Waiver Under the Clinical Laboratory Improvement Amendments of 1988 and Recommendations for Promoting Quality Testing](#)
    - [“To Test or Not to Test? Considerations for Waived Testing”](#)
    - [“Ready? Set? Test! Patient Testing Is Important. Get the right results.”](#)
  - Preventative equipment maintenance records as specified by the manufacturer and quality assurance as described in the [“Ready? Set? Test! Checklist”](#)
  - Daily documentation of the testing & reagent storage area temperatures
  - Supplies/reagent inventory records (list of kits, reagents, supplies with lot numbers, expiration dates, storage conditions and other relevant information found in the IFU).
  - Documentation of corrective action if any quality assurance failures occur
  - Documentation of testing, including equipment logs, maintenance records, quality control documents, and test results
- Display instructions, infographics, and similar material in close vicinity to where the CDC-approved onboard testing instrument is used and in clear view of the medical personnel using the instrument. The following posters must be displayed near the onboard testing instrument:
  - [Specimen collection instructions](#)
  - [“Ready Set? Test!” Poster](#)

## Infection Prevention and Control Plan

Infection prevention and control (IPC) is key to reducing the spread of SARS-CoV-2. Procedures and records associated with IPC implementation will be evaluated during inspections. Each cruise ship must maintain a written **Infection Prevention and Control Plan (IPCP)** that details standard procedures and policies to specifically address infection control and cleaning/disinfection procedures to reduce the spread of COVID-19.

### Requirements

To reduce the spread of SARS-CoV-2, cruise ship operators must include the following as part of a written IPCP:

- Duties and responsibilities of each department and their staff for all passenger and crew public areas.
- Steps in IPC management and control and the triggers required for action at each step. At a minimum, triggers must address a graduated approach to IPC management in response to increasing case counts.
- Disinfectant products or systems used, including the surfaces or items the disinfectants will be applied to, concentrations, and required contact times. Use disinfectant products or systems that are listed on the Environmental Protection Agency ([EPA List N: Disinfectants for Coronavirus \(COVID-19\)](#)).
- Procedures for informing passengers and crew members that a threshold of COVID-19 has been met or exceeded. This section must address the procedures for notification of passengers and crew currently onboard the ship and those embarking the vessel on the subsequent voyage.

- Graduated procedures for returning the vessel to normal operating conditions after a threshold of COVID-19 has been met or exceeded, including de-escalation of cleaning and disinfection protocols.
- Procedures to protect passengers and crew from exposure to disinfectants, if not already included in the ship's safety management system. At a minimum, this must include the following:
  - Safety data sheets (SDSs)
  - PPE per [CDC guidance](#) for crew
  - Health and safety procedures to minimize respiratory and dermal exposures to both passengers and crew
- Procedures to align with the preventive measures based on the color-coding status outlined in CSO [Technical Instructions](#).

## Mask Use

At this time, all persons, including port personnel, crew, and passengers (including those that are fully vaccinated) are advised that CDC's Mask [Order](#) remains in effect and requires the wearing of masks on conveyances entering, traveling within or leaving the United States, and in U.S. transportation hubs (see [Maritime-specific Frequently Asked Questions](#)).

- While the Order permits temporarily removing a mask for brief periods of time while eating or drinking, removal of the mask for extended meal service or beverage consumption would constitute a violation of this Order.
- Masks do not have to be worn while inside one's own cabin

### Requirements

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Provide passengers and crew with information on how to [properly wear, take off, and clean cloth masks](#).
- Remind passengers and crew not to touch their masks when wearing them.
- Position posters educating passengers on how to [properly wear masks](#) in high traffic areas throughout the ship
- Ensure bathers wear masks while congregating outside of recreational water facilities (RWFs) and while seated on the pool deck area. Masks do not need to be worn in the water, e.g., in RWFs or while swimming in the ocean. A wet cloth mask can make it difficult to breathe and likely will not work correctly. This means it is particularly important for bathers to maintain social distancing of at least 6 feet (2 meters) when in the water with others who are not traveling companions or part of the same family.

## Social Distancing

Strict adherence to passenger and [crew testing](#) protocols will aid in identifying potential cases of COVID-19 on board a cruise ship, however, continued prevention efforts are necessary to reduce the possibility of transmission to others if a case occurs on board the ship.

### Requirements

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Implement social distancing protocols to provide at least 6 feet (2 meters) between individuals who are not traveling companions or part of the same family, and crowd reduction measures in all congregate and high traffic areas of the vessel.
  - [Dining](#) (also see Food Services section below)
    - Change restaurant and bar layouts to ensure that all parties remain at least 6 feet (2 meters) apart (e.g., removing tables/stools/chairs, marking tables/stools/chairs that are not for use)
  - [Elevators and Stairwells](#)
    - Limit capacity, provide floor markings, and provide marked queuing areas to eliminate congregation
    - Use floor markings in elevator lobbies and near the entrance to escalators to reinforce social distancing of at least 6 feet (2 meters). Place decals inside the elevator to identify where passengers should stand, if needed.
    - Post signs reminding occupants to minimize surface touching. They should use an object (such as a pen cap) or their knuckle to push elevator buttons.
  - [Entertainment Venues and Activities](#) DRAFT
    - Limit capacity in areas with performances, dancing, acting, and singing, and similar activities.
    - Provide social distancing between seating areas, such as by blocking out seats to allow individuals to remain at least 6 feet (2 meters) apart.
    - Limit capacity in areas with activities such as rock-climbing walls, zip-lines, mini golf, sports courts, jogging, skating, arcade rooms, and similar activities.
  - [Casinos](#)
    - Block out seats and gaming equipment to allow individuals to remain at least 6 feet (2 meters) apart
    - Limit customers' sharing of objects (e.g., items used in table games, dice) when possible, and [clean and disinfect](#) these objects between uses as much as possible
    - Set up physical barriers where it is difficult for individuals to remain at least 6 feet (2 meters) apart
  - [Gyms](#)
    - Provide social distancing of at least 6 feet (2 meters) between equipment, such as by blocking out or removing equipment
  - [Public Toilet Rooms](#)
    - Ensure handwashing facilities are well-stocked with soap and a method to dry hands, such as paper towels or air dryers, in accordance with the 2018 VSP Operations Manual.
    - Add physical barriers, such as plastic flexible screens, between toilet room sinks, stalls, and urinals, especially when they cannot be at least 6 feet (2 meters) apart.
    - Ensure that people standing in line can maintain a 6-foot (2-meter) distance from one another. Post signs or markers to help attendees maintain the appropriate physical distance of at least 6 feet (2 meters).
    - Clean public toilet rooms regularly using products from the [EPA List N: Disinfectants for Coronavirus \(COVID-19\)](#), at least twice per day (e.g., in the morning and evening or after times of heavy use).
    - Provide information on how to wash hands properly. Hang [signs](#) in toilet rooms.
  - Gangways
    - Provide physical guides, such as floor markings and signage, to instruct passengers to maintain a 6-foot (2-meter) distance from one another

- o [Recreational Water Facilities](#) (RWFs)
  - Reduce the bather load for each facility to meet [social distancing](#) requirements. When social distancing of at least 6 feet (2 meters) between bathers is not possible, such as in small whirlpool spas, RWFs should be used by the same family or traveling companions only. This can be accomplished by close monitoring. Exceptions to social distancing are permitted when necessary to:
    - Rescue a distressed swimmer, perform cardiopulmonary resuscitation (CPR), or provide first aid; or
    - Evacuate the water or pool deck due to an emergency.
  - Place seating area items located in or around RWFs, such as tables, chairs, loungers, sun beds, and poufs, 6 feet (2 meters) apart from each other to adhere to [social distancing](#) standards. These items can be grouped together for families and traveling companions.
  - Follow the [social distancing](#) protocols of 6 feet (2 meters) for lines to use slides and other interactive RWF areas.
- o Access Points (such as dining room entrances, guest services, disembarkation points)
  - Ensure that crew and passengers maintain 6 feet (2 meters) of social distance while waiting for access.
- o [Signs and Messages](#)
  - Post [signs](#), in highly visible locations (such as at entrances and in toilet rooms), to promote steps that [prevent the spread](#) of the virus (such as practicing social distancing of at least 6 feet (2 meters), and properly wearing a cloth mask).

## **Recommendations**

To further reduce the spread of SARS-CoV-2, cruise ship operators as best practices should:

- Consider the use of wearable proximity alerting technology, e.g. proximity bands, to alert the wearer of social distancing infractions to assist with maintaining social distancing protocols.
- Implement additional social distancing protocols to provide at least 6 feet (2 meters) between individuals who are not traveling companions or part of the same family, and crowd reduction measures.

### o Dining

- Eliminate any self-serve food or drink options, such as buffets, salad bars, and drink stations. This limits the use of shared serving utensils, handles, buttons, or touchscreens and helps customers to stay seated and at least 6 feet (2 meters) apart from people who do not live in their household.

### o Elevators and Stairwells

- Encourage occupants to take stairs when possible, especially when elevator lobbies are crowded or when only going a few flights.
- Where feasible, designate certain stairwells or sides of stairwells as “up” and “down” to better promote social distancing of at least 6 feet (2 meters).
- Use stanchions (for lobbies only; not inside elevators) or other ways to mark pathways to help people travel in one direction and stay 6 feet (2 meters) apart.
- Consider limiting the number of people in an elevator.
- Encourage escalator and elevator passengers to wash their hands and avoid touching their face after holding on to handrails or touching buttons.
- Consider adding supplemental air ventilation or local air treatment devices in frequently used elevator cars.

### o Entertainment Venues and Activities, Gyms, and Spas



- Limit to reservation only time slots or [limit capacity](#).
- Public Hand Washing Facilities
  - Make sure waste receptacles are emptied regularly.
- Muster Drills
  - Conducted virtually or in a staggered manner to allow social distancing of at least 6 feet (2 meters) between individuals who are not traveling companions or part of the same family.
- Signs and Messages
  - Provide [announcements](#) on [preventing the spread](#) of the virus in manner that is accessible to all passengers.

## HVAC Systems

When indoors, ventilation mitigation strategies can help reduce viral particle concentration. The lower the concentration, the less likely viral particles can be inhaled into the lungs (potentially lowering the inhaled dose); contact eyes, nose, and mouth; or fall out of the air to accumulate on surfaces. Protective ventilation practices and interventions can reduce the airborne concentrations and reduce the overall viral dose to occupants.

Heating, Ventilation, and Air Conditioning (HVAC) preventive measures should be implemented to minimize the possibility of dispersing the COVID-19 virus through the air. A layered approach should be applied using more than one preventive measure.

### Requirements

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Ensure ventilation systems operate properly for the occupancy level for each space.
  - Make sure air filters are properly sized and within their recommended service life.
  - Inspect filter housing and racks to ensure appropriate filter fit and minimize air that flows around, instead of through, the filter.
- Ensure toilet room exhaust fans are functional and operating at full capacity.
- Ensure sufficient negative air pressure in medical centers, and predetermined isolation and quarantine cabins.

### Recommendations

To further reduce the spread of SARS-CoV-2, cruise ship operators as best practices should:

- Consider closing exclusively indoor RWFs, due to ventilation concerns.
- Increase the introduction of outdoor air:
  - Open outdoor air dampers beyond minimum settings to reduce or eliminate HVAC air recirculation.
  - Open windows and doors, when weather conditions allow, to increase outdoor air flow. Do not open windows and doors if doing so poses a safety or health risk.
- Use fans to increase the effectiveness of open windows:
  - Avoid placing fans in a way that could potentially cause contaminated air to flow directly from one person to another.
- Rebalance or adjust HVAC systems to increase total airflow to occupied spaces when possible.
- Turn off any demand-controlled ventilation (DCV) controls that reduce air supply based on occupancy or temperature during occupied hours.
- Improve central air filtration:

- o [Increase air filtration](#) to as high as possible without significantly reducing design airflow. Increased filtration efficiency is especially helpful when enhanced outdoor air delivery options are limited.
  - Filters with a higher number of Minimum Efficiency Reporting Value (MERV) have higher efficiency and ability to capture particles from the air. High-Efficiency Particulate Air (HEPA) filters can achieve at least 99.97% removal of viral particles in the air.
- Consider portable high-efficiency particulate air (HEPA) fan/filtration systems to enhance air cleaning (especially in higher risk areas such as the medical center or areas frequently inhabited by people with a higher likelihood of having COVID-19 and/or an increased risk of getting COVID-19).
- Consider using ultraviolet germicidal irradiation (UVGI) as a supplemental treatment to inactivate SARS-CoV-2, especially if options for increasing room ventilation and filtration are limited. [Upper-room UVGI systems](#) can be used to provide air cleaning within occupied spaces, and in-duct UVGI systems can help enhance air cleaning of recirculated air inside central ventilation systems.

## Food Services

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Passenger interactive experiences include, but are not limited to, interactive cooking, culinary workshops and demonstrations, mixology/blending classes, and galley and other “behind the scene” tours.

### Requirements

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Change restaurant and bar layouts to ensure that all customer parties remain at least 6 feet (2 meters) apart (such as removing tables, stools, and chairs or marking any that are not for use).
- Limit seating capacity to allow for social distancing of at least 6 feet (2 meters).
- Discourage crowded waiting areas by using phone app, text technology, or signs to alert patrons when their table is ready. Avoid using “buzzers” or other shared objects.
- Eliminate self-service food and drink options, such as self-service buffets, salad bars, and beverage stations.
- Provide eating utensils in a way that prevents handling by more than one person.
- Install physical barriers, such as sneeze guards and partitions in areas where it is difficult for individuals to maintain proper social distance of at least 6 feet (2 meters), such as serving stations and food pick up areas.
- Provide physical guides, such as tape on decks and signage, to remind individuals to maintain social distance of at least 6 feet (2 meters) where food and beverages are served.
- Provide and encourage outdoor dining and bar/beverage service options.
- Provide and encourage in-room passenger dining service.
- Limit any sharing of food, tools, equipment, or supplies by food workers, to the extent practicable.
- Ensure adequate supplies to minimize sharing of high-touch materials (e.g., serving spoons) to the extent practicable; otherwise, limit use of supplies and equipment by one group of food workers at a time and clean and disinfect between use.
- Avoid using or sharing of items that are reusable, such as menus, condiments, and any other food containers. Instead, use disposable menus, digital menus that can be disinfected between each use, online menus that can be retrieved on diners’ personal cell phones, single serving condiments, and no-touch trash cans and doors.

### Recommendations

To further reduce the spread of SARS-CoV-2, cruise ship operators as best practices should:

- Consider options for consumers to order ahead of time to limit the amount of time spent in the restaurant.
- Provide alternative meal services options, such as prepackaged grab-and-go meals, for consumption on open decks or in individual cabins to minimize risks associated with congregate indoor dining.
- Use touchless payment options as much as possible, if available. If pens are needed for some purposes, disinfect between uses and/or encourage customers to use their own pens.

## Cleaning and Disinfection

Numerous researchers have studied how long SARS-CoV-2 can survive on a variety of porous and non-porous surfaces. On porous surfaces, [studies report](#) inability to detect viable virus within minutes to hours; on non-porous surfaces, viable virus can be detected for days to weeks.

Cleaning of visibly dirty surfaces followed by disinfection helps prevent COVID-19 transmission. Cleaning with products containing soap or detergent reduces germs on surfaces by removing contaminants and may also weaken or damage some of the virus particles, which decreases risk of infection from surfaces. Disinfecting (using [EPA's List N](#)) kills any remaining germs on surfaces, which further reduces any risk of spreading infection.

Additional information on cleaning and disinfecting on cruise ships can be found on CDC's [Interim Guidance for Ships on Managing Suspected Coronavirus Disease 2019](#) and [Technical Instructions for Mitigation of COVID-19 Among Cruise Ship Crew](#).

### Requirements

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Prioritize cleaning and disinfecting high-touch surfaces. Examples of high-touch surfaces include, but are not limited to: pens, counters, shopping carts, tables, doorknobs, light switches, handles, stair rails, elevator buttons, desks, keyboards, phones, toilets, faucets, and sinks.
- Use disinfectant products from the [EPA List N](#) that are effective against COVID-19. Check that the [EPA Registration number](#) on the product matches the registration number in the List N search tool. See [Tips on using the List N Tool](#).
  - o If products on [EPA List N](#): Disinfectants for Coronavirus (COVID-19) are not available, [bleach solutions](#) can be used if appropriate for the surface.
- For RWFs: [Clean and disinfect](#) frequently touched surfaces multiple times a day, and shared objects before and after each time they are used. For example: handrails, slides, and structures for climbing or playing; lounge chairs, tabletops, pool noodles, and kickboards; and door handles and surfaces of toilet rooms, handwashing stations, diaper-changing stations, and showers. ([Considerations for Public Pools, Hot Tubs, and Water Playgrounds During COVID-19 | CDC](#))

# Shore Excursions & Transportation Services

Participating in shore excursions and group transportation increases a person's risk of getting and spreading COVID-19 by bringing people in close contact with others, often for prolonged periods. Additionally, participating in these activities in other communities and countries with [high prevalence of COVID-19](#) further increases the risk of introduction of COVID-19 onto cruise ships.

## Requirements

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Prohibit self-guided or independent exploration by passengers during port stops.
- Ensure all shore excursion tour companies facilitate social distancing to allow for at least 6 feet (2 meters) between individuals who are not traveling companions or part of the same family, mask wearing, cleaning and disinfection, and other COVID-19 public health measures throughout the tour.
- Restrict passenger attendance so that proper [social distancing](#) of at least 6 feet (2 meters) between individuals who are not traveling companions or part of the same family, and risk mitigation protocols can be met.

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## Recommendation

To further reduce the spread of SARS-CoV-2, cruise ship operators as a best practice should:

- Limit shore excursions in foreign ports of call to countries listed as Level 1: COVID-19 Low in [CDC's COVID-19 Travel Recommendations by Destination](#).

# Embarkation/Disembarkation Procedures

Embarkation and disembarkation places large numbers of people in close proximity—including passengers, crew, and port personnel—in indoor and sometimes small, enclosed spaces (e.g., gangways, corridors, waiting areas). This close proximity can increase the risk of introduction and transmission of COVID-19 onto cruise ships and into communities.

## Requirements

To reduce the spread of SARS-CoV-2, cruise ship operators must:

- Ensure embarkation and disembarkation procedures follow the processes outlined in their Phase 2A port agreements.
- Ensure there is a private screening area for people identified as needing additional medical screening during the embarkation and check-in process.

## Recommendations

To further reduce the spread of SARS-CoV-2, cruise ship operators as best practices should:

- Stagger or schedule embarkation/disembarkation times.
- Provide touchless check-in/check-out processes.
- Install signage and floor marking reminders and predetermined and spatially identified queue areas inside port terminals and onboard ships for passengers who are embarking and disembarking.
- Ensure written notifications about COVID-19 prevention and control are presented before passengers reach the check-in point to give them enough time to review prior to check-in.

- Use touchless garbage cans or pails and cashless payment options when possible. Otherwise, exchange cash or card by placing payment in a receipt tray, if available, or on the counter.
- Make alcohol-based hand sanitizer available to passengers, crew, and port personnel in these areas.

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