

Interim Guidance for Ships on Managing Suspected or Confirmed Cases of Coronavirus Disease 2019 (COVID-19)



CDC's Temporary Extension & Modification of Framework for Conditional Sailing Order (CSO) expired on January 15, 2022. CDC recommends that cruise ships operating in U.S. waters choose to participate in CDC's COVID-19 Program for Cruise Ships.

Summary of Recent Changes

May 16, 2022

- Clarified quarantine and isolation recommendations for crew.
- Updated the table Options for Managing Non-Cruise Ships with One or More Cases of COVID-19.

Key Concepts

- Preventive measures, including physical distancing and wearing well-fitting masks, are essential to maintaining ship operations during the COVID-19 pandemic.
- After a COVID-19 case is identified on a non-cruise ship, all persons on board are considered contacts because of the close living and working conditions.
- Cleaning and disinfection protocols may reduce transmission of COVID-19 on ships.

Who this Guidance Is for

This document provides guidance for ships originating from or porting in the United States to help prevent, detect, report, and medically manage suspected or confirmed COVID-19 cases. As ships travel worldwide, ship management and medical staff need to be aware of and respond to local jurisdictional requirements. Important points to be aware of:

- Foreign-flagged cruise ships [1] operating in U.S. waters that have chosen to opt in to CDC's COVID-19 Program for Cruise Ships, should continue to follow the recommendations and guidance in CDC's Technical Instructions for CDC's COVID-19 Program for Cruise Ships Operating in U.S. Waters and the Operations Manual for CDC's COVID-19 Program for Cruise Ships Operating in U.S. Waters.
- In this guidance, *non-cruise ship* refers to cargo/container ships, bulk carriers, tanker ships, offshore ships, and special purpose ships (e.g., research vessels).
- This guidance is not intended for ships used to transit passengers (and vehicles) on short-distance routes (e.g., ferries) or seafood processing worksites.

[1] U.S.-flagged cruise ships may follow CDC's COVID-19 program for cruise ships at the cruise ship operator's discretion.

Purpose

This document provides guidance for preventing the spread of COVID-19 during and after a voyage, including personal protective measures, management of sick or exposed persons on board, reporting suspected or confirmed cases, and cleaning and disinfection recommendations for common areas on the ship and areas previously occupied by individuals with suspected or confirmed COVID-19. CDC will update this interim guidance for ships as needed and as additional information becomes available.

Planning and Prevention

Plans to Mitigate COVID-19 on Board Ships

Ship companies should develop, implement, and operationalize an appropriate, actionable, and robust plan to prevent, mitigate, and respond to the spread of COVID-19 on board ships. The Occupational Safety and Health Administration's webpage, Protecting Workers: Guidance on Mitigating and Preventing the Spread of COVID-19 in the Workplace , provides ways to prevent workplace exposures to persons with COVID-19. Plans should include the following components:

- Training of all crew on COVID-19 prevention and mitigation
- On-board monitoring of crew and non-crew for signs and symptoms of COVID-19
- COVID-19 testing (onboard or onshore)
- On-board isolation, quarantine, and physical distancing
- Adequate medical staffing (this can include telehealth or telemedicine providers)
- Maintaining sufficient quantities of Personal Protective Equipment (PPE), oxygen, and other supplies, and the ability to obtain additional resources, if needed
- COVID-19 outbreak management and response information
- Medical arrangements for onshore evaluation and hospitalization
- Screening of embarking or disembarking crew and non-crew
- A system to notify respective national, state, and local public health authorities

Preventive Measures for Ship Operators

Shipping involves the movement of people from different geographic areas in settings with inevitable close contact. Like other close-contact environments, ships may facilitate transmission of respiratory viruses from person to person through exposure to respiratory droplets or small particles that contain the virus or contact with contaminated surfaces.

To reduce spread of respiratory infections including COVID-19, CDC recommends that ship operators take the following actions:

- Explore options to keep crew up to date on their COVID-19 vaccines, which includes booster doses if eligible. This includes encouraging crew to get a COVID-19 vaccine and working with local authorities to make arrangements for crew to get vaccinated while the ship is at port. Ship operators should keep records of the vaccination status of all crew.
- Encourage crew to wear masks in indoor areas (unless work duties prevent their safe use or necessitate personal protective equipment for hazardous reasons) or when interacting with port personnel.
- Educate all persons on board about the signs and symptoms of COVID-19.
- Assign crew to single-occupancy cabins with private bathrooms, if possible.
- Implement physical distancing of persons when working or moving through the ship (maintaining at least 6 feet [2 meters] from others).
- Modify meal service to facilitate physical distancing if one or more cases are identified on board (e.g., reconfigure dining room seating stagger mealtimes encourage in-cabin dining)



TOOTH SCALING, SUASSCE THEATHING, CHOOLIASC IT CASH AITHINS,

- Eliminate self-serve dining options at all meals.
- Minimize shore leave; if shore leave occurs, preventive measures are recommended.
- Discourage handshaking and instead encourage the use of non-contact methods of greeting.
- Promote hand hygiene and cough etiquette.
- Place hand sanitizer (containing at least 60% alcohol) in multiple locations and in sufficient quantities to encourage hand hygiene.
- Ensure handwashing facilities are well-stocked with soap, paper towels, and a waste receptacle or air dryer.
- Place posters that encourage hand hygiene and physical distancing to help protect yourself and others [PDF 1 page] in high-trafficked areas.
- Educate workers that use of cigarettes, e-cigarettes, pipes, or smokeless tobacco can lead to increased contact between potentially contaminated hands and their mouths, and that avoiding these products may reduce their risk of infection.
- Because of how easily COVID-19 spreads in the close quarter environment on board ships, ship operators should consider having embarking crew quarantine for 10 days immediately before or upon boarding the ship to prevent introduction of the virus on board. If testing is feasible, crew members, regardless of vaccination status, should be tested using a viral COVID-19 test with a result available prior to boarding.

Preventive Measures for Persons on Board the Ship

CDC recommends that all crew stay up to date with their COVID-19 vaccine, which includes booster doses if eligible.

Crew should do the following to protect themselves and others:

- Avoid sharing personal items with other persons, such as blankets, laptops, video games, tablets, and other hand-held devices.
- Wear a well-fitting mask indoors (unless work duties prevent their safe use or necessitate personal protective equipment for hazardous reasons) and when outside of individual cabins.
- Maintain distance from others when working or moving through the ship. Note: If a distance cannot be maintained in narrow corridors, then allow persons to pass completely before entering.
- Avoid physical contact with other people, including shaking hands, giving hugs, and cheek kissing.
- Avoid touching eyes, nose, and mouth with unwashed hands.
- Wash hands often with soap and water for at least 20 seconds.
- Use hand sanitizer (containing at least 60% alcohol) if soap and water are not available.

CDC has free, simple posters available to download and print, some of which are translated into different languages. The Help Protect Yourself and Others [PDF – 1 page] is also available in Spanish [PDF – 1 page].

COVID-19 Vaccinations

CDC recommends that people remain up to date with their COVID-19 vaccines, which includes booster doses if eligible. For more information, please see CDC's COVID-19 Vaccine Booster Shots. For the purposes of this guidance, those that are not fully vaccinated are referred to as unvaccinated.

As the majority of non-cruise ships are flagged in other countries, for the purposes of this guidance, maritime crew members *on board* a non-cruise ship are considered fully vaccinated for COVID-19 if they have received the appropriate series of a vaccination authorized by a national government authority (this may include booster doses, as applicable). While booster doses for COVID-19 vaccines approved or authorized by the Food and Drug Administration are widely available for those eligible in the United States, many other countries do not offer booster doses because of limits on available vaccines. If the maritime crew member *disembarks* the non-cruise ship at a U.S. port, CDC's guidance for persons up to date with their COVID-19 vaccines [2] will apply.

Pre-Boarding Procedures for Ships

Before anyone boards the ship, conduct verbal or written screening in appropriate languages and in a private environment to determine whether persons have had signs or symptoms of COVID-19 or a known exposure (close contact) to a person with COVID-19 within the past 14 days. In addition, temperature checks should be used to identify any person with a temperature of 100.4°F (38°C) or greater.

Persons with signs or symptoms of COVID-19: Persons with signs or symptoms of COVID-19 who intend to board the ship should be denied boarding, regardless of vaccination status. These symptomatic persons should be assessed by medical personnel and either be determined not to have COVID-19 or complete isolation for COVID-19 before they are allowed to board.

Close Contacts:

Ship operators, at their discretion, may deny boarding to crew who were exposed to a person with COVID-19 until they complete a 10-day quarantine period and have tested negative.

- If boarding is allowed, the following options should be considered:
 - o 10-day quarantine period, or
 - o 10-day "working" quarantine [3] period wearing a well-fitting mask any time they are around others and monitoring their health until 10 days after their last exposure. If viral COVID-19 testing is available, testing before the end of quarantine is recommended.
- People who recovered from COVID-19 in the past 3 months do not need to quarantine or be tested after an exposure but should wear a well-fitting mask any time they are around others and monitor their health until 10 days after their last exposure. If they develop symptoms, they should isolate until COVID-19 testing can be conducted and results are available.

Anyone who develops symptoms of COVID-19 after an exposure should isolate until COVID-19 testing can be conducted and results are available according to the *Isolation or Quarantine Procedures* section below.

[3] For a "working" quarantine, crew are permitted to work but must observe activity restrictions while off duty. These crew must have in-cabin dining and properly wear a well-fitting mask at all times when outside of their cabin (indoors and outdoors). They must also wear a well-fitting mask inside their cabin if any other person (e.g., a crew member) enters the cabin.

Testing for COVID-19

If testing is feasible, crew members, regardless of vaccination status, should be tested using a viral COVID-19 test. Please see the following infographics for additional information on COVID-19 testing for crew: COVID-19 Testing: What You Need to Know [PDF – 1 page] and COVID-19 Testing: Information for Crew on Ships [PDF – 1 page].

Crew who are self-testing for COVID-19 using "home tests," "at-home tests," or "over-the-counter (OTC) tests", should review CDC's Self-Testing At Home or Anywhere webpage.

Isolation or Quarantine Procedures

Isolation Basics

Isolation is used to separate people with confirmed or suspected COVID-19 from those without COVID-19. Persons with symptoms of COVID-19, regardless of vaccination status or previous recovery from COVID-19, should be isolated using the same procedures as a person with confirmed COVID-19 until testing can be conducted and results are available. Sick persons, regardless of vaccination status or previous recovery from COVID-19, should self-isolate immediately and inform the Captain or medical designee if they develop a fever (100.4°F / 38°C or higher), begin to feel feverish, or develop acute respiratory symptoms (cough or difficulty breathing) or other symptoms of COVID-19. Please see table below for isolation options for crew on non-cruise ships.

Quarantine Basics

Quarantine is a strategy used to prevent transmission of COVID-19 by keeping people who have been in close contact with someone with COVID-19 apart from others. Quarantine of unvaccinated persons without symptoms who are identified as close contacts of sick persons (until COVID-19 test results are available) or confirmed cases is also needed to minimize onboard transmission. On non-cruise ships, all crew members are considered close contacts if a person with known or suspected COVID-19 is on board or disembarked within the past 10 days. Please see table below for quarantine options for crew on non-cruise ships.

The following procedures are recommended for both isolation and quarantine onboard a ship:

- Isolate or quarantine persons in single-occupancy cabins, with private bathrooms, with the door closed, if possible. Persons should wear a well-fitting mask or respirator, any time they are outside of isolation or quarantine.
- Isolated or quarantined persons should have no direct contact with other persons except for medical designee.
- Designated ship medical personnel or the Captain should communicate with each person in isolation or quarantine at least once per day to check on their status.
- Designated ship medical personnel or other personnel should wear proper personal protective equipment (PPE) when in proximity to isolated or quarantined persons. Breaches in PPE or any potential exposures should be reported to the appropriate medical designee.
- Meals should be delivered to individual cabins with no face-to-face interaction during this service.
- To the extent possible, cabins housing isolated or quarantined persons should not be cleaned by other persons. Supplies such as paper towels, cleaners, disinfectants , and extra linens can be provided to isolated or quarantined persons so they can clean their own cabin as necessary.
- Food waste and other garbage should be collected and bagged by the isolated or quarantined person and placed
 outside the cabin during designated times for transport to the garbage/recycle room for incineration or offloading.
- Soiled linens and towels should be handled by the isolated or quarantined person and placed outside the cabin in labeled bags during designated times for transport to the laundry room.
- Ship medical personnel and telemedicine providers should reference CDC's COVID-19 website, Information for Healthcare Professionals, for the latest information on infection control, clinical management, collecting clinical specimens, evaluating patients who may be sick with or who have been exposed to COVID-19, and identifying close contacts.

Isolation Discontinuation

If isolated on board the non-cruise ship:

- Isolation may be discontinued for symptomatic crew with suspected or confirmed COVID-19 after 10 days from symptom onset, if:
 - o they are fever-free for 24 hours without the use of fever-reducing medication, and
 - their other symptoms have improved (loss of taste and smell may persist for weeks or months after recovery and need not delay the end of isolation).
- Isolation may be discontinued for asymptomatic crew with confirmed COVID-19 after 10 days from their first positive viral test.
- If isolated off the ship (i.e., post-disembarkation) in the United States: Travelers should follow the isolation guidance for the general population. See additional information about air travel. Note: the isolation guidance for the general population does **not** apply to crew who are transferring to another ship or reembarking the same ship (i.e., these crew would need to isolate until 10 days after symptom onset/positive test shoreside or on the ship).

Quarantine Discontinuation

- Due to the high risk of secondary transmission onboard ships, CDC recommends a 10-day quarantine for crew members, regardless of vaccination status.
- People who recovered from COVID-19 in the past 3 months do *not* need to quarantine or be tested after the last close contact with someone with COVID-19 (the date of last close contact is considered day 0) but should:

- wear a well-fitting mask when *outside* of cabin (indoors and outdoors),
- o wear a well-fitting mask inside their cabin if any other person (e.g., a crew member) enters the cabin, and
- o monitor their health until 10 days after their last exposure.
- If the crew member is disembarked in the United States, then the person should follow CDC's quarantine guidance for the general population (including testing at least 5 days after last exposure). See additional information about air travel and other public conveyances (e.g., buses, trains).
- If a non-cruise ship cannot maintain minimum safe manning because crew members are in quarantine, then the ship may consider a "working quarantine" (i.e., crew perform job duties then return to cabin quarantine) for essential crew to ensure the safety of ship.
 - The ship should prioritize crew who are up to date with their COVID-19 vaccines (which includes booster doses if eligible) over those who are not.
 - Crew in working quarantine should:
 - wear a well-fitting mask when outside of cabin (indoors and outdoors [unless working alone in an outdoor area]),
 - wear a well-fitting mask inside their cabin if any other person (e.g., a crew member) enters the cabin,
 - eat their meals in-cabin (i.e., instead of the crew mess),
 - monitor their health until 10 days after their last exposure, and
 - isolate and get tested if they develop COVID-19 symptoms.

Options for Managing Non-Cruise Ships with One or More Confirmed Cases of COVID-19

The following table provides management options for non-cruise ships and their crew after a confirmed case of COVID-19 is identified. Decisions regarding the best option for managing an individual ship and exposed crew on board should take into account various factors (e.g., the industry, seaport location, itinerary, and the availability of alternate crew).

Note: The ship should be allowed to come into port for all disembarkations, disinfection, and embarkations. There is an increased safety risk, to the crew and port partners, associated with embarking or disembarking a ship while at anchorage (i.e., keeping the ship at sea). In addition, quarantine of crew while the ship is at anchorage can be difficult due to the increased number of essential crew needed to safely maintain ship operations at anchor (i.e., operations are minimized on a ship while it is at a dock, which allows crew to quarantine more safely).

Options for Managing Non-Cruise Ships with One or More Cases of COVID-19

| | Contact Management | Case Management |
|---------------------------------|--|---|
| Option 1: Crew Change Out | All crew (regardless of vaccination status) disembark for 10-day shoreside quarantine[†] Frequently touched surfaces (e.g., door handles, handrails, light switches, phones) in shared spaces on board are cleaned and disinfected, then New crew [‡] embark ship to resume operations | • First case: isolation (ideally shoreside [†]) § |

| | Contact Management | Case Management |
|---|--|---|
| Option 2: Working Quarantine | Onboard 10-day "working" quarantine * of all crew without signs or symptoms (i.e., working quarantine of crew without signs or symptoms, regardless of vaccination status) Strict physical distancing Properly worn well-fitting mask Frequently touched surfaces (e.g., door handles, handrails, | First case: isolation (ideally shoreside †) Additional symptomatic crew or confirmed cases (regardless of vaccination status) to be isolated in cabins § |
| | light switches, phones) in shared spaces on board are cleaned and disinfected | |
| | Ship resumes operations If any <i>unvaccinated</i> crew stay on board, ship should remain close to shore (i.e., within approximately 1-hour medivac distance) for potential medical evacuations of crew | |
| | Note: Crew without symptoms who recovered from COVID-19 in the past 3 months do not need to quarantine | |
| Option 3: Temporarily Discontinue Operations | Non-essential crew: onboard 10-day quarantine Essential crew without signs or symptoms: onboard 10-day "working" quarantine ¥ of (i.e., working quarantine of crew without signs or symptoms, regardless of vaccination status) Strict physical distancing Properly worn well-fitting mask Frequently touched surfaces (e.g., door handles, handrails, | First case: isolation (ideally shoreside[†]) Additional symptomatic crew or confirmed cases (regardless of vaccination status) to be isolated in cabins[§] |
| | light switches, phones) in shared spaces on board are cleaned and disinfected | |
| | Ship operations suspended (i.e., ship stays at dock, berth, or anchorage) | |
| | Note: Crew without symptoms who recovered from COVID-19 in the past 3 months do not need to quarantine | |

- [†] Approval for quarantine or isolation facility required from local health department.
- [‡] Preferable that all new crew are up to date with COVID-19 vaccines, which includes booster doses if eligible.
- *For a "working" quarantine, crew are permitted to work but must observe activity restrictions while off duty. These crew must have in-cabin dining and properly wear a well-fitting mask at all times when outside of their cabin (indoors and outdoors). They must also wear a well-fitting mask inside their cabin if any other person (e.g., a crew member) enters the cabin. Unvaccinated crew who have been exposed to COVID-19 but remain without symptoms may continue to work, provided they adhere to additional safety precautions. When choosing essential crew for a working quarantine, the ship should prioritize crew who are up to date with their COVID-19 vaccines (which includes booster doses if eligible) over those who are not.

[§] If emergency medical evacuations are needed, U.S. Coast Guard (USCG) and/or Customs and Border Protection (CBP) should be notified.

Disembarkation

During the COVID-19 pandemic, cruise ships operating under CDC's COVID-19 Program for Cruise Ships, should continue to follow the recommendations and guidance in Technical Instructions for CDC's COVID-19 Program for Cruise Ships Operating in U.S. Waters and the Operations Manual for CDC's COVID-19 Program for Cruise Ships Operating in U.S. Waters.

Disembarking Persons with Symptoms of COVID-19 and Confirmed Cases to Obtain Medical Care on Shore

Ship operators and shipping agents are responsible for the medical care of sick or infected persons on board, including those who need hospitalization. For persons who need emergency medical attention that cannot be provided on the ship, ship operators and shipping agents should coordinate with the shoreside healthcare facility, port authority, U.S. Coast Guard, and state and local health department, if required.

- Medical transport to the shoreside medical facility must be arranged in advance in coordination with the receiving facility.
- Sick persons should wear a well-fitting mask during the disembarkation process and throughout transportation to the shoreside healthcare facility, if they can tolerate a well-fitting mask.
- If a sick person is known to have COVID-19 or has symptoms compatible with COVID-19:
 - All escorting personnel should wear appropriate PPE.
 - The gangway should be cleared of all other personnel until the sick person has disembarked.
 - The pathway used for disembarkation, any potentially contaminated surfaces (e.g., handrails) along the pathway, and any equipment used (e.g., wheelchairs) should be cleaned and disinfected immediately after disembarkation (see Cleaning and Disinfection section below).

Disembarking Close Contacts from Ships after a Case Is Identified

- Prior to disembarkation of close contacts, the ship operator or shipping agent should get advance approval from the local and state health departments with jurisdiction over:
 - o the port of disembarkation, and
 - the state and county of residence for any quarantine locations
- Ship operator or shipping agent should inform ship pilots and ground transportation of the situation and confirm the operators have plans in place to notify and protect the health and safety of their staff.
- Ship operator or shipping agent should provide well-fitting masks to disembarking crew members or confirm that they have their own. Persons without symptoms should wear well-fitting masks during disembarkation and while taking ground transportation until they reach their final destination.
- Ship operator or shipping agent should instruct disembarking persons who are not up to date with their COVID-19 vaccines to stay in quarantine after they reach their final destination.
 - For unvaccinated crew close contacts, operators should arrange for:
 - accommodations, meals, garbage collection, and laundry services during that time
 - facility and housekeeping personnel must be aware of the situation and precautions should be in place to prevent their exposure
- For unvaccinated non-crew close contacts, operators should ensure they:
 - will not stay overnight in a hotel (unless pre-arranged with hotel and local public health)
 - will have private transportation procured (non-crew will not use commercial air or public transportation, including taxis or ride-share services)
 - will have no interaction with the public during their disembarkation (e.g., rental car companies, restaurants)

Reporting

CDC requires that ships destined for a U.S. port of entry immediately report any death on board or illness that meets CDC's definition of "ill person," including confirmed or suspected cases of COVID-19, to the CDC Quarantine Station with jurisdiction for the port.

Additional information for non-cruise ships: If the person's signs and symptoms are consistent with CDC's standard required reporting requirements, please have the following information available before notifying the nearest CDC Quarantine Station:

- 1. List of the sick person's signs and symptoms, including onset dates.
- 2. If the sick traveler has been in contact with a person with COVID-19 or a sick person.
- 3. Has this sick traveler been vaccinated against COVID-19? If yes, please confirm vaccine type/name and dates of administration.
- 4. Will the sick travelers be medically disembarked? If deceased, will the body be transferred to the medical examiner?
- 5. Are there any other sick persons on the ship with similar symptoms? If so, have they been isolated?
- 6. What is the vaccination status of each traveler onboard?

Ships that are *not* arriving from a foreign port of entry should notify the local or state health department with jurisdiction over the arrival seaport. Passenger-carrying ships on interstate voyages within the United States should notify the Federal Drug Administration (FDA) Interstate Travel Program .

For illnesses or deaths occurring onboard ships on international voyages to countries other than the United States, complete the Maritime Declaration of Health and send it to the competent authority for the destination port, according to the 2005 International Health Regulations [PDF – 32 pages] [1] and the national legislation of the country of disembarkation.

Port Staff Interactions with Ships after a Suspected or Confirmed Case is Identified on Board

CDC recommends that port staff who will board the ship do **not** have contact with persons on board. Crew members should not disembark unless they need medical care or will be isolated shoreside.

Persons at higher risk for severe illness should not board the ship.

Port staff and travelers should wear a well-fitting mask over their nose and mouth while indoors at seaports and ferry terminals. Well-fitting masks are also recommended in indoor areas of a conveyance. For more information, see Wearing Masks in Travel and Public Transportation Settings.

Due to the current COVID-19 pandemic, CDC recommendations include the following precautions for port staff:

- 1. Stay up to date on your COVID-19 vaccines.
- 2. Wear a well-fitting mask indoors, regardless of vaccination status.
- 3. Keep distance between yourself and persons on board or disembarking to the extent possible.
- 4. Wash your hands often with soap and water for at least 20 seconds after disembarking the ship or after interacting with crew, touching a potentially contaminated surface, blowing your nose, coughing, or sneezing, or using the toilet, and before eating or drinking.
- 5. If soap and water are not readily available, use a hand sanitizer containing at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
- 6. If you use gloves, wash your hands before putting them on and immediately after removing them.
- 7. Avoid touching your eyes, nose, and mouth with unwashed hands (or while wearing gloves, if used).

Due to the current COVID-19 pandemic, port staff should remember the signs and symptoms of COVID-19 and know what to do if they get sick.

Supplies

Ships should ensure availability of conveniently located dispensers of alcohol-based hand sanitizer containing at least 60% alcohol. Where sinks are available, ensure handwashing supplies (such as soap and disposable towels and waste receptacle, or air dryer) are consistently available.

Ships should carry a sufficient quantity of:

- Personal Protective Equipment (PPE), including well-fitting masks, NIOSH-approved disposable N95 filtering facepiece respirators or higher, eye protection such as goggles or disposable face shields that cover the front and sides of the face, and disposable medical gloves and gowns.
 - If NIOSH-approved disposable N95 filtering facepiece respirators or higher are required, an OSHA or equivalent respiratory protection program that includes medical clearance and fit testing should be implemented.
- Well-fitting masks to meet day-to-day needs.
- Medical supplies to meet day-to-day needs. Have contingency plans for rapid resupply during outbreaks.
- Sterile viral transport media and sterile swabs to collect nasopharyngeal and nasal specimens for diagnostic testing if COVID-19 is suspected.
- Maintain adequate onboard supplies of antipyretics (fever-reducing medications such as acetaminophen, paracetamol, or ibuprofen), routine antiviral and antimicrobial medications, and supplemental oxygen. Please note that during the COVID-19 pandemic, this may vary from what is stipulated under the Guidelines on the Medical Examinations of Seafarers
 [PDF 70 pages] (Appendix H, Standard A4.1, #4).

These optimal recommendations can be modified to reflect individual ship capabilities and characteristics.

Additional Considerations

- Develop role-based policies to protect employees and provide training to all crew and cleaning staff before they begin work. Follow applicable guidance for bloodborne pathogens, PPE, and hazards associated with cleaning, disinfection and other chemicals used.
- Educate employees to recognize the signs and symptoms of COVID-19 and provide instructions on what to do if they develop symptoms.
- Instruct crew members and other staff who may have contact with people with symptoms of COVID-19 in the proper use, storage, and disposal of PPE. Incorrect use or handling of PPE can increase the spread of disease. All crew who are required to wear PPE as part of their job should be trained on the following topics:
 - An understanding of when to use PPE
 - What PPE is necessary and why for each role (see above for PPE recommendations)
 - How to properly don (put on), use, and doff (take off) PPE
 - How to properly dispose of PPE
- If a U.S.-based crewmember is a confirmed case, maintain the person's confidentiality as required by the Americans with Disabilities Act [4] (ADA).

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 the 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.

In addition to using routine cleaning and disinfection strategies, ships should focus on cleaning and disinfecting common areas where persons may come into contact with infectious persons. Consider frequent, routine cleaning and disinfection of commonly touched surfaces, such as handrails, countertops, and doorknobs, with an EPA-registered disinfectant effective against coronaviruses.

Timing and location of cleaning and disinfection of surfaces

- Follow CDC's Cleaning and Disinfecting Your Facility recommendations.
- Close off areas used by sick persons after they are vacated and wait as long as practical before beginning cleaning and disinfection to minimize potential for exposure to respiratory droplets or small particles that contain the virus:
 - Use the ship's ventilation system to exhaust as much air as possible from indoor areas and, if possible, open outside doors and windows to increase air circulation in the area.

- If possible, wait up to 24 hours before beginning cleaning and disinfection.
- Cleaning staff should clean and disinfect all areas (e.g., cabins, bathrooms, and common areas) used or visited by the sick persons, focusing especially on frequently touched surfaces (see PPE guidance below). .

In areas where sick persons are being housed in isolation, follow CDC's guidance for cleaning and disinfecting after someone is sick. This includes focusing on cleaning and disinfecting common areas where crew members providing services may come into contact with sick persons. To the extent possible, cabins housing sick or quarantined persons should not be cleaned by other crew members. Supplies (e.g., paper towels, cleaners, disinfectants) can be provided to sick or quarantined persons, to the extent possible, so they can clean their own cabins as necessary. If cleaning by another person is essential, the person should be trained to use PPE, provided with the necessary PPE, and trained on safe cleaning procedures.

How to Clean and Disinfect Surfaces

- Clean all high-touch surfaces in the sick person's cabin (e.g., counters, tabletops, doorknobs, light switches, bathroom fixtures, toilets, phones, keyboards, tablets, bedside tables)
- If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection.
- For disinfection, diluted household bleach solutions, alcohol solutions with at least 70% alcohol, and most common EPA-registered disinfectant should be effective.
 - Diluted household bleach solutions can be used if appropriate for the surface. Follow manufacturer's instructions
 for application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix
 household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against
 coronaviruses when properly diluted.
 - Prepare a bleach solution by mixing:
 - 5 tablespoons (1/3 cup) bleach per gallon of water or
 - 4 teaspoons bleach per quart of water
 - Products with EPA-approved emerging viral pathogens claims are expected to be effective against SARS-CoV-2 based on data for harder-to-kill viruses. Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method, contact time).
 - For soft (porous) surfaces such as carpeted floor, rugs, and drapes, remove visible contamination if present and clean with appropriate cleaners indicated for use on these surfaces. After cleaning:

 - Otherwise, use products with the EPA-approved emerging viral pathogens claims

 that are suitable for porous surfaces.

Laundered Items (e.g., linens, clothing)

- Do not shake dirty laundry; this minimizes the possibility of dispersing SARS-CoV-2, the virus that causes COVID-19, through the air.
- Wash items as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate [PDF 9 pages] [water setting and dry items completely. Dirty laundry that has been in contact with a sick person can be washed with other people's items.
- If possible, have the sick person place laundry in a disposable plastic bag for transport to the laundry facilities.
- Clean and disinfect hampers or other carts for transporting laundry according to guidance above for hard or soft surfaces.

Other areas

- No additional cleaning is needed for the ship's supply-and-return ventilation registers or filtration systems.
- No additional treatment of wastewater is needed.

Personal Protective Equipment (PPE) and Hand Hygiene for Cleaning Staff

Cleaning staff should:

- Wait 24 hours or as long as practical before beginning cleaning and disinfection of cabins vacated by persons with confirmed COVID-19.
- Wear disposable gloves and gowns for all tasks in the cleaning process, including handling laundry and garbage.
 - If cleaning occurs soon after the departure of the person with COVID-19, consider all using respiratory protection and eye protection.
 - Gloves and gowns should be compatible with the disinfectant products being used per the manufacturers' directions.
 - Additional PPE might be required based on the cleaning/disinfectant products being used and whether there is a risk of splash.
 - Gloves and gowns should be removed carefully to avoid contamination of the wearer and the surrounding area. Be sure to perform hand hygiene after removing gloves.
- Remove and replace PPE that has been breached (e.g., tear in gloves). Report breaches in PPE or any potential exposures to the supervisor.
- Perform hand hygiene often, including immediately after removing gloves and after contact with a sick person, by washing hands with soap and water for 20 seconds. If soap and water are not readily available, use an alcohol-based hand sanitizer containing at least 60% alcohol. Always wash hands with soap and water if hands are visibly dirty.

Other environmental considerations include:

- Identify pathways to minimize risk of respiratory transmission when persons are required to move in and out of isolation or quarantine corridors and during the transport of waste and soiled linens generated by isolated or quarantined persons.
- Clean and disinfect designated trolleys/carts used for the transportation of waste and soiled linens from isolation or quarantine cabins with an effective disinfectant after each use.
- Properly dispose of items that cannot be effectively cleaned and disinfected or laundered.

Resources for More Information

Stay informed. Use these sources for more information on COVID-19:

- NIOSH Workplace Safety and Health Topic website
- CDC COVID-19 website
- OSHA COVID-19 website
- World Health Organization (WHO): Operational Considerations for Managing COVID-19 Cases/Outbreak on Board Ships ☑

Summary of Past Changes

February 09, 2022

Updated language for new COVID-19 Program for Cruise Ships Operating in U.S. Waters.

On November 5, 2021, the criteria for people considered fully vaccinated against COVID-19 was updated.

On November 1, 2021, the definition of cruise ships was narrowed by adding "foreign-flagged," in accordance with the minor modifications made in the Temporary Extension & Modification of the CSO. Additionally, the criteria for people considered fully vaccinated against COVID-19 was updated.

On October 25, 2021 the COVID-19 Vaccination guidance was updated to align with updated guidance for fully vaccinated people

On September 23, 2021 this guidance was updated to clarify CDC's recommendations for crew members who are fully vaccinated.

On September 17, 2020, this guidance was updated to clarify CDC's recommendation for non-cruise ships upon entry into a U.S. port after one or more confirmed cases of COVID-19 is identified.

On July 20, 2020, this guidance was updated to provide the following:

- Specific guidance for ships when one or more suspected or confirmed cases of COVID-19 is identified.
- Clarified disembarkation recommendations for ships after one or more suspected or confirmed cases of COVID-19 is identified.
- Supplemental guidance on cleaning and disinfection.

Revisions were made on February 18, 2020 to reflect the following:

• Clarified guidance on laundry and disposal of used PPE and other disposable items.

Revisions were made on February 13, 2020 to reflect the following:

- Updated guidance title to include "Suspected"
- Updated 2019-nCoV to "Coronavirus Disease 2019 (COVID-19)"
- Updated guidance on managing sick passengers or crew when boarding and onboard to isolate passengers or crew onboard who are suspected of having COVID-19.
- Updated guidance on preventing infection in crew members to include asking the sick person to wear a facemask if tolerated, any time they leave their cabin or interact with other people.
- Updated guidance on additional items to report for non-cruise ships.

Page last reviewed: May 16, 2022