



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

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



CDC issued an [Order](#) that requires face masks to be worn by all travelers while on public transportation, including all passengers on board and all personnel operating maritime conveyances traveling into, within, or out of the United States. Masks are also required at all U.S. transportation hubs, including seaports and ferry terminals. For more information on this mask requirement, see the [Frequently Asked Questions](#).

Summary of Recent Changes

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.

Key Concepts

- Preventive measures, including hand hygiene, social distancing, and wearing facemasks or cloth face coverings, 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. Due to the size and number of persons on board cruise ships, identification of contacts should be done on a case-by-case basis.
- 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:

- Cruise ships^[1] that are under CDC's [Framework for Conditional Sailing Order \(CSO\)](#)  should additionally continue to follow the requirements of the CSO and the [Technical Instructions for Mitigation of COVID-19 Among Cruise Ship Crew](#). This guidance does not constitute permission or recommendations for cruise ships under the CSO to resume boarding passengers.
- 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. Guidance for onshore and offshore seafood processing worksites can be found at: [cdc.gov/coronavirus/2019-ncov/community/guidance-seafood-processing.html](https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-seafood-processing.html).

¹ All commercial, non-cargo, passenger-carrying vessels operating in international, interstate, or intrastate waterways and subject to the jurisdiction of the United States with the capacity to carry 250 or more individuals (passengers and crew) with an itinerary anticipating an overnight stay on board or a twenty-four (24) hour stay on board for either passengers or crew

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.

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. CDC's [Interim Guidance for Businesses and Employers Responding to COVID-19](#) provides ways to prevent workplace exposures to COVID-19. Plans should include the following components:

- Training of all crew on COVID-19 prevention and mitigation
- Onboard monitoring of crew and non-crew for [signs and symptoms](#) of COVID-19
- [COVID-19 testing](#) (onboard or onshore)
- Onboard isolation, quarantine, and [social 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

Pre-Boarding Procedures for Ships

Before boarding, 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 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 or greater. Deny boarding of a crew member or non-crew member who is suspected of having COVID-19 because they have symptoms, a temperature of 100.4°F or greater, or have had known exposure to a person with COVID 19 within the previous 14 days. Because the virus that causes COVID-19 can spread from persons without symptoms, ship operators should consider having embarking crew quarantine for 14 days immediately before or upon boarding the ship to prevent introduction of the virus on board.

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 contact with contaminated surfaces.

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

- 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 [social distancing](#) of persons when working or moving through the ship (maintaining at least 6 feet [2 meters] from others).
- Instruct persons to wear a facemask or [cloth face covering](#) when outside of individual cabins (unless work duties prevent their safe use or necessitate personal protective equipment for hazardous reasons).
- Modify meal service to facilitate [social distancing](#) (e.g., reconfigure dining room seating, stagger mealtimes, encourage in-cabin dining).
- 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 greater than 60% ethanol or 70% isopropanol) 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 [social distancing](#) to [help stop the spread](#) 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.

Preventive Measures for Persons on Board the Ship

Persons without symptoms should do the following to protect themselves and others:

- Avoid sharing personal items with other persons, such as blankets, laptops, tablets and other hand-held devices, and video games.
- Wear a facemask or [cloth face covering](#) when outside of individual cabins.
- Maintain a distance of at least 6 feet (2 meters) from others when working or moving through the ship. Note: If a 6-foot (2-meter) 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 greater than 60% ethanol or 70% isopropanol) 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 [Stop the Spread of Germs poster](#)  is available in [Amharic](#) , [Arabic](#) , [Burmese](#) , [Dari](#) , [Farsi](#) , [French](#) , [Haitian Creole](#) , [Kinyarwanda](#) , [Karen](#) , [Korean](#) , [Nepali](#) , [Pashto](#) , [Portuguese](#) , [Russian](#) , [Simplified Chinese](#) , [Somali](#) , [Spanish](#) , [Swahili](#) , [Tigrinya](#) , [Ukrainian](#) , and [Vietnamese](#) .

Symptomatic Persons on Board the Ship

Identifying and isolating persons with possible symptoms of COVID-19 as soon as possible is essential to minimize transmission of the virus. Educate crew to watch themselves for [symptoms of COVID-19](#). Sick persons 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](#).

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](#). 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 14 days.

Isolation of Sick Persons or Confirmed Cases and Quarantine of Close Contacts

Persons with [symptoms of COVID-19](#) should be isolated using the same guidelines as a person with confirmed COVID-19 until COVID-19 testing can be conducted and results are available. All persons on board should be educated on and aware of the [emergency warning signs for COVID-19](#). Quarantine of 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 on board transmission of SARS-CoV-2, the virus that causes COVID-19. On non-cruise ships, all crew members are considered close contacts. Please see table below for quarantine options for crew on non-cruise ships.

- Isolate or quarantine persons in single-occupancy cabins, with private bathrooms, with the door closed, if possible. Persons should wear a facemask or [cloth face covering](#) 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 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 packaged in disposable dining ware with single-use cutlery and 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.

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).

	Recommendations for Non-Cruise Ships and Crew
Option 1: Crew Change Out	• All crew disembark for 14-day shoreside quarantine* • Private company disinfects ship, then • New crew embark ship to resume operations
Option 2: Working Quarantine	• Onboard 14-day “working” quarantine[‡] of all crew without signs or symptoms ◦ Strict social distancing ◦ Mandatory facemask or cloth face covering • Crew or private company disinfects ship • Ship operations resumed with ship remaining close to shore (for potential medical evacuations of crew)

	Any symptomatic crew to be isolated in their cabins[§]
Option 3: Temporarily Discontinue Operations	- Onboard 14-day quarantine of non-essential crew “Working” quarantine[¥] of essential crew without signs or symptoms - Strict social distancing - Mandatory facemask or cloth face covering - Crew or private company disinfects ship - Ship operations suspended (i.e., ship stays at dock, berth, or anchorage) - Any symptomatic crew to be isolated in their cabins[§]

* Approval for quarantine facility required from local health department.

¥ For a “working” quarantine, follow the [CDC Critical Infrastructure Guidance](#). Crew who have been exposed to COVID-19 but remain without symptoms may continue to work, provided they adhere to additional safety precautions.

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

Monitoring after a Suspected or Confirmed Case Is Identified

If a person with known or suspected COVID-19 is on board or disembarked within the past 14 days, then all close contacts should have twice daily temperature checks. If ship operators can provide thermometers, self-temperature checks are preferable. Temperature checks should be reported to and recorded by the ship’s designated medical personnel or the Captain at least daily. Additionally, persons on board should be aware of the [signs and symptoms](#) of COVID-19 and the importance of immediately self-isolating in cabins if they experience signs or symptoms.

Discontinuation of Isolation

Isolation may be discontinued for sick persons with suspected or confirmed COVID-19, or persons without symptoms but with laboratory-confirmed COVID-19, once criteria outlined in CDC’s guidance for [Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings](#) are met.

Discontinuation of Quarantine

Quarantine may be discontinued for persons without symptoms who have had close contact with suspected or confirmed COVID-19 cases under the following conditions:

- 14 days have passed since their last exposure to a suspected or confirmed case (considering the last exposure date to case as Day 0); and
- the exposed person has not developed [signs or symptoms](#) of COVID-19

Disembarking Persons on Board to Obtain Medical Care or for Isolation 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 board 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 for in advance in coordination with the receiving facility.
- Sick persons should wear a facemask or [cloth face covering](#) during the disembarkation process and throughout transportation to the shoreside healthcare facility, if they can tolerate a facemask or [cloth face covering](#).
- If a sick person is known to be infected with or has symptoms compatible with COVID-19:
 - All escorting personnel should wear [appropriate proper 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).

Use of commercial transportation by individuals who are determined to have fully recovered from COVID-19 based on [CDC criteria](#) for discontinuing isolation, and thus do not present a public health risk, may occur as follows:

- Medical personnel are responsible for providing the individual with a medical certificate stating that the person has recovered from COVID-19 and met CDC's criteria for discontinuing isolation.
- The medical certificate must meet the requirements of [Department of Transportation regulations](#)  [\[PDF – 958 pages\]](#) [🔗](#) (14 Code of Federal Regulations § 382.23(c)(2)).

Disembarking Crew without Symptoms from Ships after a Confirmed Case Is Identified

During the COVID-19 pandemic, the following should be observed by ships disembarking crew in the U.S. (cruise ships under CDC's [No Sail Order](#) [🔗](#)] must instead follow the requirements of the [Order](#) [🔗](#) and the [Technical Instructions for Mitigation of COVID-19 Among Cruise Ship Crew](#)).

- Before disembarking crew, the ship operator or shipping agent should get advance approval from the local and state health departments with jurisdiction over:
 - 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 facemasks or [cloth face coverings](#) to disembarking crew members or confirm that they have their own. Crew members without symptoms should wear facemasks or [cloth face](#)

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[coverings](#) during disembarkation and while taking ground transportation until they reach their final destination.

- Ship operator or shipping agent should instruct disembarking crew members to stay in quarantine for 14 days and should arrange for accommodation, 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.
- Ship operator or shipping agent should ensure that disembarking crew members:
 - will not use public transportation (including taxis or ride-share services) to get to the quarantine destination
 - will have no interaction with the public during their travel to quarantine location (e.g., rental car companies, restaurants)

Disembarking Non-crew without Symptoms from Ships after a Confirmed Case Is Identified

During the COVID-19 pandemic, the following should be observed by ships in the U.S. (cruise ships under CDC's [No Sail Order](#) [✕](#) must instead follow the requirements of the [Order](#) [✕](#) and the [Technical Instructions for Mitigation of COVID-19 Among Cruise Ship Crew](#)).

- Ship operator or shipping agent should provide facemasks or [cloth face coverings](#) to disembarking non-crew or confirm that they have their own.
- Ship operator or shipping agent should instruct disembarking non-crew members to stay in quarantine for 14 days after they reach their destination.
- Ship operator or shipping agent should ensure that disembarking non-crew:
 - 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, public transportation, including taxis or ride-share services)
 - will have no interaction with the public during their disembarkation (e.g., rental car companies, restaurants)
 - will follow www.cdc.gov/coronavirus/2019-ncov/travelers/returning-cruise-voyages.html

In addition, the ship operator should follow all state and local stipulations for disembarking non-crew.

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. The sick person's highest recorded temperature

3. The sick person's embarkation date and port
4. If the sick person has been in contact with a person confirmed with COVID-19
5. The ship's ports of call during the 14 days before the person got sick
6. The ports of call where the sick person disembarked during the 14 days before getting sick
7. If there are any other sick persons on the ship with similar symptoms

Ships that do not fall under the [public health jurisdiction of CDC](#) should notify the local or state health department with jurisdiction over the arrival seaport. Passenger-carrying ships on interstate voyages should notify the Federal Drug Administration (FDA) [Interstate Travel Program](#) [↗](#).

For illnesses or deaths occurring on board ships on international voyages to countries other than the United States, complete the [Maritime Declaration of Health](#) [📄 \[PDF – 2 pages\]](#) [↗](#) and send it to the competent authority for the destination port, according to the 2005 International Health Regulations 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.

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Persons at [higher risk for severe illness](#) should not board the ship.

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

1. [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.
2. If soap and water are not readily available, use a hand sanitizer containing greater than 60% ethanol or 70% isopropanol. Cover all surfaces of your hands and rub them together until they feel dry.
3. Avoid touching your eyes, nose, and mouth with unwashed hands (or while wearing gloves, if used).
4. Keep distance (at least 6 feet) between yourself and persons on board or disembarking to the extent possible.
5. Wear a [cloth face covering](#) if it is not possible to maintain 6 feet between yourself and persons on board or disembarking.
6. If you use gloves, wash your hands before putting them on and immediately after removing them.

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 greater than 60% ethanol or 70% isopropanol. 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 facemasks, **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** [\[link\]](#) that includes medical clearance and fit testing should be implemented.
- **Cloth face coverings** 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** [\[PDF – 69 pages\]](#) [\[link\]](#) (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. Training topics can be found in the CDC's **Interim Guidance for Businesses and Employers Responding to COVID-19**. 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** [\[link\]](#) (ADA).

Cleaning and Disinfection

Current evidence suggests that SARS-CoV-2, the virus that causes COVID-19, may remain viable for hours to days on surfaces made from a variety of materials. Cleaning of visibly dirty surfaces followed by disinfection is a best practice measure for prevention of 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 [Recommendations for Environmental Cleaning and Disinfection](#).
- 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:
 - 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.

In areas where sick persons are being housed in isolation, follow [Interim Guidance for Environmental Cleaning and Disinfection for U.S. Households with Suspected or Confirmed Coronavirus Disease 2019](#). 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, and disinfectants) can be provided to sick or quarantined persons, to 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 (for example, counters, tabletops, doorknobs, light switches, bathroom fixtures, toilets, phones, keyboards, tablets, and 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 (1/3rd 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 and contact time, etc.).

- 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:
 - If the items can be laundered, launder them in accordance with the manufacturer's instructions using the [warmest appropriate](#)  [\[PDF – 9 pages\]](#)  water setting for the items and then dry items completely.
 - 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:

- Wear disposable gloves and gowns for all tasks in the cleaning process, including handling laundry and garbage.
 - 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 greater than 60% ethanol or 70% isopropanol. Always wash hands with soap and water if hands are visibly dirty.

Other environmental considerations include:

- Wait 24 hours or as long as practical before beginning cleaning and disinfection of cabins vacated by persons with confirmed COVID-19.
- Launder soiled linens and towels collected from cabins occupied by isolated or quarantined persons in washing machines set at the [warmest appropriate](#)  [\[PDF – 9 pages\]](#)  water setting for the items, and dry items completely.
- 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:

- [CDC Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019](#)
- [NIOSH Workplace Safety and Health Topic website](#)
- [Food Safety and Coronavirus Disease 2019 \(COVID-19\)](#)
- [CDC COVID-19 website](#)
- [OSHA COVID-19 website](#) 
- [USCG Marine Safety Information Bulletin 2020](#) 
- [Operational Considerations for Managing COVID-19 Cases/Outbreak on Board Ships](#) 

Summary of Past Changes

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: January 26, 2021

Content source: [Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases \(NCEZID\), Division of Global Migration and Quarantine \(DGMQ\)](#)