

Technical Instructions for CDC's COVID-19 Program for Cruise Ships Operating in U.S. Waters



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 05, 2022

Changed cruise ship vaccination status thresholds from 95% of passengers to 90% of passengers.

Purpose

This document provides instructions for cruise lines operating foreign-flagged cruise ships^[1] in U.S. waters that have chosen to opt in to CDC's COVID-19 Program for Cruise Ships. For the purposes of this program, cruise ships are defined as all commercial, non-cargo, foreign-flagged, passenger-carrying vessels 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. This program is designed to ensure health and safety protections for travelers (crew and passengers) in a way that mitigates the risk of spreading COVID-19.

Cruise lines choosing to opt into this program on a voluntary basis will be required to follow all recommendations and guidance as a condition of their participation in the program (i.e., they will not be able to choose which recommendations to follow). These recommendations are aimed at reducing the introduction and spread of SARS-CoV-2, the virus that causes COVID-19, on board cruise ships and are aligned with current health and safety protocols. This guidance will be reevaluated periodically based on public health conditions and available scientific evidence and updated as needed.

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.

CDC will update these instructions for cruise ships as needed to reflect the state of the pandemic and notify cruise lines when these instructions are updated.

[1] U.S.-flagged cruise ships operating exclusively in U.S. waters may follow CDC's COVID-19 Program for Cruise Ships at the cruise ship operator's discretion.

CDC's COVID-19 Program for Cruise Ships

Opting into CDC's COVID-19 Program

Cruise lines operating foreign-flagged cruise ships^[2] in U.S. waters that choose to participate in this program on a voluntary basis ("opting in") are requested to notify the Maritime Unit in writing at eoevent349@cdc.gov of their decision to opt in by February 18, 2022. ^[3]

Cruise lines choosing to opt into this program will be required to follow all recommendations and guidance as a condition of their participation in the program (i.e., they will not be able to pick and choose which recommendations they follow). Those opting in will continue to receive a color status for cruise ships operating in U.S. waters on CDC's [Cruise Ship Color Status](#) webpage.

For cruise ship operators opting into CDC's COVID-19 Program for Cruise Ships, CDC will continue to exercise enforcement discretion regarding the requirements of its January 29, 2021, Mask Order, applicable to operators of, and crew and passengers on board, cruise ships.

Cruise lines with ships not currently in U.S. waters—but that are expecting to return to U.S. waters after February 18, 2022—are requested to contact Maritime Unit at eocevent349@cdc.gov at least 28 days prior to their ships' arrival. Instructions on how to participate in the program will be provided.

Cruise lines that initially decide to opt into the program but then later decide to opt out should contact Maritime Unit at eocevent349@cdc.gov for instructions.

Opting Out of CDC's COVID-19 Program

Cruise lines operating in U.S. waters choosing **not** to participate in the program ("opting out") are requested to notify CDC's Maritime Unit in writing at eocevent349@cdc.gov by February 18, 2022.

Cruise lines that do not notify CDC's Maritime Unit by February 18, 2022, will be considered to have opted out of this program. Cruise lines that decide to opt out will have any cruise ships operating in U.S. waters listed as "Gray" ships ^[4] on CDC's [Cruise Ship Color Status](#) webpage. This designation means that CDC has **neither reviewed nor confirmed** the cruise ship operator's health and safety protocols.

Cruise lines that initially decide to opt out but later decide to opt into the program should contact CDC's Maritime Unit at eocevent349@cdc.gov at least 28 days prior to the day they intend to join the program. Instructions on how to participate in the program will be provided.

Cruise Ship Vaccination Status Classifications

As part of CDC's COVID-19 Program for Cruise Ships, cruise ship vaccination status classifications ^[5] are defined as:

- **Not Highly Vaccinated:** ships with less than 90% passengers and 95% crew who are fully vaccinated. ^[6]
- **Highly Vaccinated:** ships with at least 90% passengers and 95% crew who are fully vaccinated, but with less than 90% of passengers and 95% of crew who are up to date with their COVID-19 vaccines.
- **Vaccination Standard of Excellence:** ships with at least 90% passengers and 95% crew who are [up to date with their COVID-19 vaccines](#). ^[7]

Cruise lines that choose to participate in CDC's COVID-19 Program must advise CDC of the vaccination status classification for each participating ship. This information will be included on CDC's [Cruise Ship Color Status](#) webpage. ^[8] Ships adhering to the "Highly Vaccinated" or "Vaccination Standard of Excellence" classifications must maintain these thresholds for each voyage.

[2] U.S.-flagged cruise ships operating exclusively in U.S. waters may follow CDC's COVID-19 Program for Cruise Ships at the cruise ship operator's discretion. U.S.-flagged cruise ships on international itineraries porting in the U.S. will be treated in the same manner as foreign-flagged cruise ships.

[3] As of January 15, 2022, the Temporary Extension & Modification of Framework for Conditional Sailing Order (CSO) has expired and is no longer in effect. CDC encourages cruise lines to continue to follow all CDC public health measures for cruise ships, including reporting, testing, and infection prevention and control, pending a cruise line's decision whether to opt into CDC's COVID-19 Program for Cruise Ships.

[4] U.S.-flagged cruise ships operating exclusively in U.S. waters may follow CDC's COVID-19 Program for Cruise Ships at the cruise ship operator's discretion and receive a color status on CDC's [Cruise Ship Color Status](#) webpage. However, such cruise ships will not be listed as "Gray" if the operator chooses to opt out of the program. This is because these ships report cases to

state and local public health departments which exercise primary public health jurisdiction over these vessels. Interstate vessels also operate under the jurisdiction of the Food and Drug Administration's (FDA) Interstate Travel Program under the provisions of 21 CFR 1240, 1250.

[5] At this time, children under the age of 5 years (i.e., children who are not eligible for COVID-19 vaccines) will not be counted when determining the percentage of passengers on board who are fully vaccinated or up to date with their COVID-19 vaccines.

[6] "Fully vaccinated" is defined in CDC's [Technical Instructions for Implementing Presidential Proclamation *Advancing Safe Resumption of Global Travel During the COVID-19 Pandemic*](#) and CDC's associated Order. While CDC's COVID-19 Program for Cruise Ships operates as a voluntary program and not pursuant to an order, CDC is incorporating this definition as a program component for consistency.

[7] Up to date with COVID-19 vaccines means a person has received all recommended COVID-19 vaccines, including any booster dose(s) when eligible. For more information: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html>. For CDC's COVID-19 Program for Cruise Ships, the following criteria should be used when evaluating if a traveler is up to date with their COVID-19 vaccines:

Date of booster eligibility: A traveler becomes eligible to receive a booster dose 5 months after they have completed their primary series of an mRNA vaccine, or 2 months after a single dose of Johnson & Johnson's Janssen COVID-19 vaccine.

"Up to date" status: If an eligible traveler has not received a booster dose but is within 6 months after completing their primary series of an mRNA vaccine, or within 3 months after a J&J/Janssen single dose, then they can be considered up to date with their COVID-19 vaccines. If it has been more than 6 months since a traveler completed their primary series of an mRNA vaccine, or more than 3 months since a traveler's single dose J&J/Janssen vaccine, the traveler is not considered up to date with their COVID-19 vaccines.

Example for mRNA vaccines (Pfizer-BioNTech/Moderna):

1. Traveler A received their 2nd Pfizer BioNTech/Moderna dose on January 1, 2022, the traveler can be considered up to date with their COVID-19 vaccines until July 1, 2022. If Traveler A does not get a booster by July 1, 2022, then they will not be considered up to date with their COVID-19 vaccines.

Example for J&J/Janssen vaccine:

1. Traveler B received their J&J/Janssen dose on January 1, 2022, then the traveler can be considered up to date with their COVID-19 vaccines until April 1, 2022. If Traveler A does not get a booster by April 1, 2022, then they will not be considered up to date with their COVID-19 vaccines.

[8] For a ship to be listed with a Vaccination Standard of Excellence classification on CDC's [Cruise Ship Color Status](#) webpage, the cruise line has committed to operate the ship with at least 90% passengers (excluding children under 5 years of age) and 95% crew up to date with their COVID-19 vaccines.

COVID-19 Response Plans

Cruise ships opting into CDC's COVID-19 Program for Cruise Ships must have a COVID-19 response plan that includes the following components:

- Terminology and use of definitions that align with how CDC uses and defines the following terms: "confirmed COVID-19," "COVID-19-like illness," "close contact," "fully vaccinated," "[up to date with COVID-19 vaccinations](#)," and "isolation" and "quarantine" (including timeframes for isolation and quarantine).
- Protocols for onboard surveillance of passengers and crew with COVID-19 and COVID-19-like illness.
- Protocols for training all crew on COVID-19 prevention, mitigation, and response activities.
- Protocols for onboard isolation and quarantine, including how to increase capacity in case of an outbreak.
- Protocols for COVID-19 testing that align with CDC technical instructions.

- Protocols for onboard medical staffing—including number and type of staff—and equipment in sufficient quantity to provide a hospital level of care (e.g., ventilators, [well-fitting masks](#), personal protective equipment) for the infected without the immediate need to rely on shoreside hospitalization.
- Procedures for disembarkation of passengers who test positive for COVID-19.
- Statement that the cruise ship operator has observed and will continue to observe all elements of its COVID-19 response plan including following the most current CDC recommendations and guidance for any public health actions related to COVID-19.

Surveillance for COVID-19

- As an interim replacement to the Maritime Conveyance Cumulative Influenza/Influenza-Like Illness (ILI) Form for each international voyage, CDC requires daily submission of the “Enhanced Data Collection (EDC) During COVID-19 Pandemic Form.” This EDC Form will be used to conduct surveillance for COVID-19 on board cruise ships using cumulative reports of confirmed COVID-19 ^[9] and COVID-19-like illness ^[10], which includes acute respiratory illness (ARI), influenza-like illness (ILI), pneumonia, and additional COVID-19-like illness (aCLI) clinical criteria.
- Access to the online EDC form has been provided to cruise lines by the Cruise Lines International Association (CLIA) or CDC. Cruise lines that do not have access should contact CLIA or CDC (email eocevent349@cdc.gov).
- In addition to this daily surveillance via the online EDC form, cruise ship operators should continue to report to USCG via Advance Notice of Vessel Arrival (ANOA), which constitutes the most timely source of illness information when the cruise ship is within waters subject to the jurisdiction of the United States.

CDC may publish these surveillance data on its website or in other documents to inform the public.

[9] Confirmed COVID-19 means laboratory confirmation for SARS-CoV-2, the virus that causes COVID-19, by viral test.

[10] COVID-19-like illness clinical criteria include the following:


- At least one or more of the following symptoms: fever, cough, difficulty breathing, shortness of breath, new olfactory disorder, or new taste disorder; OR
- At least two or more of the following symptoms: sore throat, nasal congestion, runny nose (rhinorrhea), chills, rigors, muscle or body aches (myalgias), headache, fatigue, vomiting, or diarrhea in the absence of a non-infectious diagnosis as determined by the ship’s physician (e.g., allergies); OR
- Severe respiratory illness with at least one of the following:
 - Clinical or radiographic evidence of pneumonia,
 - Acute respiratory distress syndrome (ARDS).

Port Agreements

A cruise ship operator must document the approval of all U.S. port and local health authorities where the ship intends to dock or make port during one or more passenger voyages. For more information, please see the [Technical Instructions for a Foreign-Flagged Cruise Ship Operator’s Agreement with Port and Local Health Authorities under CDC’s COVID-19 Program for Cruise Ships Operating in U.S. Waters](#).

Shoreside COVID-19 Laboratory Screening Testing of All Crew

- Cruise ship operators must have adequate health and safety protections for crew members while they build the onboard laboratory capacity needed to test crew and future passengers. Ships entering U.S. waters for the first time that have chosen to opt into CDC’s COVID-19 Program for Cruise Ships must complete COVID-19 screening testing of all crew and passengers prior to embarkation/disembarkation in the United States.
- Viral (NAAT or antigen) testing may be conducted on board or at a shoreside laboratory. Specimen collection for all crew must occur within a 48-hour time period.
- If a shoreside laboratory is used, it must be a Clinical Laboratory Improvement Amendments (CLIA)-certified laboratory.

- Examples of available NAATs for SARS-CoV-2 include but are not restricted to reverse transcription polymerase chain reaction (RT-PCR), reverse transcription loop-mediated isothermal amplification (RT-LAMP), transcription-mediated amplification (TMA), nicking enzyme amplification reaction (NEAR), and helicase-dependent amplification (HDA).
- Nucleic acid amplification tests (NAAT) must meet the following standards:
 - Authorized by FDA for use in a CLIA-waived setting;
 - Be evaluated using the [FDA reference panel](#)  for SARS-CoV-2 and possess a limit of detection (LoD) value $\leq 18,000$ NDU/ml. ^[11] For tests that do not have the FDA reference panel available, tests will be accepted using sensitivity data $\geq 95\%$ from clinical samples as indicated in the manufacturer's instructions for use (IFU);
 - Allow for specimen-to-instrument transfer in a way that minimizes the risk of contamination.
- For more information on NAAT, please visit: [Nucleic Acid Amplification Tests \(NAATs\)](#)
- Antigen test systems must meet the following standards:
 - Authorized by FDA for use in a CLIA-waived setting or authorized for use by the national authority in another country where the ship has operated;
 - Allow for specimen-to-test system transfer in a way that minimizes the risk of contamination.
- For antigen testing, cruise ship operators should follow CDC's [Interim Guidance for Antigen Testing for SARS-CoV-2](#).
- Cruise ship operators may contact CDC at eocevent349@cdc.gov to request a list of acceptable NAAT and antigen tests.
- Cruise ship operators must report all laboratory results in aggregate to CDC through the Enhanced Data Collection (EDC) form.
 - To ensure the integrity of testing, persons with positive NAAT results must not be retested, and the original positive results must be reported. Subsequent negative NAAT results do not negate an initial positive result.
- Persistent Positives: CDC considers all positive viral test (NAAT or antigen) results as new cases unless the individual is asymptomatic and has documentation of having recovered from COVID-19 in the previous 90 days. Cruise ship operators must have a protocol for evaluating documentation of recovery, including reviewing previous laboratory results. Documentation of recovery includes:
 - Paper or electronic copies of the crew member's previous positive viral test result dated no less than 10 days and no more than 90 days before the date of embarkation.
- Medical personnel should document all positive SARS-CoV-2 test results (pre-embarkation, throughout crew members' contract duration, and post-disembarkation) in the ship's medical records. These medical records must be made available for CDC inspection upon request.
- Crew who test positive for SARS-CoV-2 via NAAT should not be re-tested (e.g., as part of a contact tracing investigation) until 90-days post lab-confirmed diagnosis, unless they are symptomatic and no alternate infectious etiology (e.g., influenza, respiratory syncytial virus [RSV], Legionella, *Streptococcal* pharyngitis) has been identified through laboratory testing. These symptomatic crew must be isolated and re-evaluated, including retesting, regardless of prior positive test results.
- CDC has provided an alternative to ships sailing out of foreign ports with passengers and repositioning to the U.S. and have choose to opt into CDC's program, in lieu of operating with no passengers for 14 days prior to resuming passenger operations in U.S. waters. Cruise ship operators may contact CDC at eocevent349@cdc.gov to request this information.

*Note: Cruise lines with ships not currently in U.S. waters—but that are expecting to return to U.S. waters after February 18, 2022— and that have chosen to opt into CDC's COVID-19 Program are requested to contact CDC's Maritime Unit at eocevent349@cdc.gov at least 28 days prior to their ships' arrival and:

- Provide a copy of the cruise ship operator's COVID-19 Response Plan;
- Submit the EDC form for the 14 days preceding the cruise ship's expected arrival in U.S. waters.

[11] NDU=RNA NAAT detectable unit; CDC's 2019-nCoV RT-PCR diagnostic panel was used to define the LoD cut-off value. A high LoD indicates that the assay has a lower sensitivity which may result in more false negative results, especially in asymptomatic infected people. A lower LoD represents an assay's ability to detect a smaller amount of viral genetic material in a given sample, signaling a more sensitive test.

Onboard COVID-19 Testing for Symptomatic Travelers (Crew and Passengers) and Close Contacts

Symptomatic Travelers

All travelers onboard the cruise ship with signs and symptoms of COVID-19, regardless of vaccination status, must be isolated and tested for SARS-CoV-2 infection immediately upon notifying medical staff of symptom onset. Results must be reported to CDC in aggregate through the EDC form.

Close Contacts

Because of 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.

- **Travelers who Are Up to Date with their COVID-19 Vaccines:** These close contacts must quarantine until at least 5 full days after their last exposure (the day of last close contact is counted as day 0). They must receive a viral test (NAAT or antigen, NAAT preferred) immediately and on day 5 (or later) before ending quarantine. They may end quarantine after 5 days if they remain asymptomatic after 5 days and both viral tests are negative. **Alternatively**, cruise ship operators, at their discretion, may opt to test these travelers with a viral test daily until 5 days after their last exposure in lieu of a 5-day quarantine.
 - For a full 10-day period after their last exposure, these individuals 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.
- **Travelers who Are Not Up to Date with their COVID-19 Vaccines:** These close contacts must quarantine until at least 10 days after their last exposure (the day of last close contact is counted as day 0). They must receive a viral test (NAAT or antigen, NAAT preferred) immediately and on day 10 before ending quarantine. If they remain asymptomatic after 10 days and both viral tests are negative, they may end quarantine.
 - **Alternatively**, cruise ship operators, at their discretion, may opt to quarantine these travelers until 5 days after their last exposure followed by 5 days of *daily* viral testing.
 - If they end quarantine after 5 days, then during days 6-10 after their last exposure, these individuals 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.

Onboard COVID–19 Testing for Symptomatic Travelers (Crew and Passengers) and Testing and Quarantine of Close Contacts

	Travelers Who Are Not	Travelers Who Are
Testing of Travelers with Signs and Symptoms of COVID-19	NAAT	Viral (NAAT or antigen) Negative antigen test must be confirmed with NAAT

	Travelers Who Are Not	Travelers Who Are
Testing and Quarantine of Asymptomatic Close Contacts without Documentation of Recovery in Past 90 Days	<p>Testing: Viral (NAAT or antigen, NAAT preferred) immediately and on day 10 before ending quarantine</p> <p>Quarantine: until at least 10 days after their last exposure (the day of last close contact is counted as day 0).</p> <p>*Alternatively, cruise ship operators, at their discretion, may opt to quarantine these travelers until 5 days after their last exposure followed by 5 days of daily viral testing.</p> <p>**See guidance above for masking and dining requirements</p>	<p>Testing: Viral (NAAT or antigen, NAAT preferred) immediately and on day 5 before ending quarantine</p> <p>Quarantine: until at least 5 days after their last exposure (the day of last close contact is counted as day 0)</p> <p>*Alternatively, cruise ship operators, at their discretion, may opt to test these travelers with a viral test daily until 5 days after their last exposure in lieu of a 5-day quarantine.</p> <p>**See guidance above for masking and dining requirements</p>
Testing and Quarantine of Asymptomatic Close Contacts with Documentation of Recovery in Past 90 Days	<p>Testing: Not Applicable</p> <p>Quarantine: Not Applicable[^]</p>	<p>Testing: Not Applicable</p> <p>Quarantine: Not Applicable[^]</p>

[^] Individual must properly wear a [well-fitting mask](#) at all times when outside of cabin (indoors and outdoors) until 10 days after the last close contact with someone with COVID-19 (the date of last close contact is considered day 0). They must also wear a well-fitting mask inside their cabin if any other person (e.g., a crew member) enters the cabin.

[†] If a cruise ship cannot maintain minimum safe manning because crew members are in isolation or quarantine, the cruise ship *may* consider a “working quarantine” (i.e., crew perform job duties then return to cabin quarantine) for essential crew who are not up to date with their COVID-19 vaccines to ensure the safety of ship as it immediately returns to port. When choosing essential crew for a working quarantine, the cruise ship should prioritize crew who are fully vaccinated over those who are not.

- All cruise ships must procure NAAT point-of-care equipment to test symptomatic travelers (and identified close contacts, regardless of vaccination status).
 - This test system must:
 - Authorized by FDA for use in a CLIA-waived setting;
 - Be evaluated using the [FDA reference panel](#) [↗](#) for SARS-CoV-2 and possess a limit of detection (LoD) value $\leq 18,000$ NDU/ml. For tests that do not have the FDA reference panel available, tests will be accepted using sensitivity data $\geq 95\%$ from clinical samples as indicated in the manufacturer’s IFU; and
 - Allow for specimen-to-instrument transfer in a way that minimizes the risk of contamination.
- At their discretion, cruise ships may procure antigen test systems to test symptomatic travelers who are [up to date with their COVID-19 vaccinations](#).
 - Antigen test systems must be:
 - Authorized by FDA for use in a CLIA-waived setting or authorized for use by the national authority in another country where the ship has operated; and
 - Allow for specimen-to-test system transfer in a way that minimizes the risk of contamination.
 - For antigen testing, cruise ship operators should follow CDC’s [Interim Guidance for Antigen Testing for SARS-CoV-2](#).
 - Cruise ship operators may, at their discretion, contact CDC at eocevent349@cdc.gov prior to procuring antigen test systems to ensure the selected test meets the specifications listed above. Include “Diagnostic Testing for Travelers – [SHIP NAME]” in the subject line.
- Cruise ship operators may contact CDC at eocevent349@cdc.gov to request a list of acceptable NAAT and antigen tests.
- Symptomatic persons with COVID-19-like illness who initially test negative for SARS-CoV-2 via NAAT and for whom no alternative etiology is identified (e.g., influenza, Legionella, *Streptococcal* pharyngitis, infectious mononucleosis, or

respiratory syncytial virus [RSV]):

- Must be isolated for COVID-19 per isolation guidelines below, and
- May be retested via NAAT collected at least 24 hours after the initial COVID-19 test
 - Isolation may be discontinued if the repeat NAAT result is negative.
 - If an alternate infectious etiology is identified (through either laboratory testing or clinical diagnosis), routine infection control precautions (e.g., isolation) recommended for the diagnosis should be followed.
 - For example, if symptomatic person has only vomiting and diarrhea and tests negative for COVID-19 twice, then acute gastroenteritis (AGE) protocols should be followed.
- Cruise ships should report only final diagnostic test results on EDC.
- Cruise ships that have chosen to opt into CDC's COVID-19 Program must follow the requirements in section *Screening Testing Specifications* below.

Symptomatic Travelers (Crew and Passengers)

Identifying and isolating travelers with possible symptoms of COVID-19 as soon as possible is essential to minimize transmission of the virus. Crew must self-isolate immediately and inform the onboard medical center if they develop a fever (100.4°F / 38°C or higher), begin to feel feverish, develop acute respiratory symptoms (cough or difficulty breathing), or other [symptoms of COVID-19](#). Passengers who become symptomatic should follow ship-specific protocols.

Cruise ship medical personnel and cruise line 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, or identifying [close contacts](#). For additional information, please refer to [Interim Guidance for Ships on Managing Suspected or Confirmed Cases of Coronavirus Disease 2019](#).

Isolation of Symptomatic Travelers (Crew and Passengers) and Confirmed Cases and Quarantine of Close Contacts

Travelers with COVID-19-like illness (CLI) must be isolated using the same procedures as a traveler with confirmed COVID-19. If the symptomatic traveler has a negative SARS-CoV-2 test result, then isolation may be discontinued if a repeat NAAT result—collected at least 24 hours from the initial COVID-19 test—is negative. If an alternate infectious etiology is identified (through either laboratory testing or clinical diagnosis), routine infection control precautions (e.g., isolation) recommended for the diagnosis should be followed. For example, if symptomatic person has only vomiting and diarrhea and tests negative for COVID-19 twice, then acute gastroenteritis (AGE) protocols should be followed.


See the section *Onboard COVID-19 Testing for Symptomatic Travelers (Crew and Passengers) and Close Contacts* above for details about quarantine based on vaccination status.

- Isolate or quarantine travelers in single-occupancy cabins, with private bathrooms, with the door closed.
- Ensure predetermined isolation and quarantine cabins are in separate areas from other cabins.
 - If a traveler identified as a case or a close contact is disembarking the ship within 36 hours, the cruise ship operator may allow the traveler to stay in the original cabin if the traveler will be the only person in that cabin.
- Selection of cabins for isolation or quarantine should consider the following:
 - Proximity to the medical facility and gangways for ease of patient transport
 - Location in dead-end corridors or low-traffic areas to minimize potential exposures
 - Spacing between other occupied cabins to reduce transmission risk
 - Absence of interconnecting doors to reduce accidental exposures
 - Positioning within view of security cameras for enforcement of isolation or quarantine
 - Presence of balconies for psychological morale
- Isolated or quarantined travelers (except if the traveler is a child or other dependent person who needs a caregiver) must have no direct contact with other travelers except for designated medical staff.
- Designated medical staff or other personnel must wear proper personal protective equipment (PPE) per [CDC guidance](#) when in proximity to isolated or quarantined travelers

[guidance](#) when in proximity to isolated or quarantined travelers.

- Meals must be delivered to individual cabins with no face-to-face interaction during this service.
- Cabins housing isolated or quarantined travelers should not be cleaned by crew members. Supplies such as paper towels, cleaners, and disinfectants, and extra linens can be provided to isolated or quarantined persons so they can clean their cabin by themselves as necessary.
- Food waste and other trash should be collected and bagged by the isolated or quarantined traveler and placed outside the cabin during designated times for transport to the waste management center for incineration or offloading.
- Soiled linens and towels should be bagged in water-soluble bags by the isolated or quarantined traveler and placed outside the cabin during designated times for transport to the laundry room.
- Consider use of surveillance cameras or security personnel to ensure compliance with isolation or quarantine protocols wherever possible.

Medical Management of Suspected or Confirmed COVID-19

Cruise ship medical centers are recommended to follow the [operational guidelines](#) published by the American College of Emergency Physicians (ACEP). Ships should carry a sufficient quantity of PPE, medical and laboratory supplies listed on CDC's [Interim Guidance for Ships on Managing Suspected or Confirmed Cases of Coronavirus Disease 2019](#). Maintaining adequate supplies of antipyretics (e.g., acetaminophen and ibuprofen), antivirals and other therapeutics for COVID-19, if commercially available, other antimicrobial medications, oral and intravenous steroids, and supplemental oxygen is also recommended. Information to estimate needed medical staffing and equipment can be found in the [Federal Healthcare Resilience Task Force Alternate Care Site Toolkit](#)  [PDF – 227 pages] , Supplement 2. As [treatment](#) and testing become more available in the United States, cruise ships must align with the latest CDC recommendations.

Disembarking Travelers (Crew and Passengers) to Obtain Medical Care

Cruise lines are responsible for the medical care of ill or infected persons on board, including those who need hospitalization on board. Cruise ship operators should have clear protocols that avoid medical evacuations at sea to the extent possible for COVID-19 and non-COVID-19-related medical reasons. Protocols must rely on commercial resources (e.g., ship tender, chartered standby vessel, chartered airlift) for unavoidable medical evacuations at sea and be designed to minimize the burden on federal (including U.S. Coast Guard), state, and local government resources. All medical evacuations at sea must be coordinated with the U.S. Coast Guard.

- Traveler must properly wear a [well-fitting mask](#) covering their mouth and nose during the disembarkation process and throughout transportation to the shoreside healthcare facility, if a mask can be tolerated and does not interfere with medical treatment (e.g., supplemental oxygen administered via an oxygen mask).
- If a traveler is known to be infected with or has symptoms compatible with COVID-19:
 - All escorting personnel should wear appropriate proper PPE per [CDC guidance](#).
 - The cruise ship operator must ensure a separate pathway or sanitary corridor where the disembarking traveler will exit with their personal belongings such as luggage.
 - 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).

Discontinuation of Isolation for Travelers (Crew and Passengers)

- To calculate the traveler's isolation period, day 0 is their first day of symptoms or the day of their positive viral test if asymptomatic.
- Isolation may be discontinued for symptomatic travelers with suspected or confirmed COVID-19 after 10 days from symptom onset, if 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 travelers with confirmed COVID-19 after 10 days from their first positive viral test.

- **Alternatively**, at the cruise ship operator's discretion, isolation may be discontinued for:
 - **symptomatic** travelers with suspected or confirmed COVID-19 after 5 days from symptom onset, if:
 - 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), and
 - they have two negative antigen ^[12] tests collected at least 24 hours and no more than 48 hours between tests.
 - If either test result is positive, traveler should continue to isolate for a full 10 days.
 - If both test results are negative, travelers can end isolation, but must continue to properly wear a well-fitting mask when outside of cabin (indoors and outdoors) during days 6-10. During this time, these individuals must have in-cabin dining and also wear a [well-fitting mask](#) inside their cabin if any other person (e.g., a crew member) enters the cabin.
 - **asymptomatic** travelers with confirmed COVID-19 after 5 days from date of first positive test, if:
 - they have two negative antigen tests collected at least 24 hours and no more than 48 hours between tests.
 - If either test result is positive, traveler should continue to isolate for a full 10 days.
 - If both test results are negative, travelers can end isolation, but must continue to properly wear a well-fitting mask when outside of cabin (indoors and outdoors) during days 6-10. During this time, these individuals must have in-cabin dining and also wear a well-fitting mask inside their cabin if any other person (e.g., a crew member) enters the cabin.

Symptomatic persons with CLI who initially test negative via COVID-19 NAAT and no alternative etiology is identified (e.g., influenza, *Legionella*, *Streptococcal* pharyngitis, infectious mononucleosis, or respiratory syncytial virus [RSV]):

- must be isolated for COVID-19 per CDC guidelines, and
- may be retested via NAAT collected at least 24 hours after the initial COVID-19 test
 - Isolation may be discontinued if the repeat NAAT result is negative.
 - If an alternate infectious etiology is identified (through either laboratory testing or clinical diagnosis), routine infection control precautions (e.g., isolation) recommended for the diagnosis should be followed.
 - For example, if a symptomatic person has only vomiting and diarrhea and tests negative for COVID-19 twice, then acute gastroenteritis (AGE) protocols should be followed.

[12] As noted in the labeling for authorized over-the counter antigen tests: Negative results should be treated as presumptive. Negative results do not rule out SARS-CoV-2 infection and should not be used as the sole basis for treatment or patient management decisions, including infection control decisions.

Disembarking Travelers (Crew and Passengers) who Test Positive for SARS-Cov-2 and Close Contacts

- Travelers who test positive for COVID-19 *cannot* travel commercially after they disembark from a ship until they have completed at least 5-days of isolation. Travelers who disembark before completing their 10-day isolation, should follow [CDC's guidance for the general population](#). This does not apply to crew who are transferring to another ship or passengers on back-to-back voyages.
 - Use of commercial transportation by travelers who have recovered from COVID-19 and met criteria for release from isolation according to [CDC guidance](#) may occur as follows:
 - If discontinuation of the 10-day isolation period occurs on board, cruise ship medical personnel are responsible for providing the travelers with a signed letter, on official letterhead that contains the name, address, and phone number of a licensed healthcare provider, stating that the traveler has been cleared to end isolation and therefore can travel.
- Travelers with [signs and symptoms](#) of COVID-19 *cannot* travel commercially until COVID-19 has been ruled out.
- Travelers who are identified as [close contacts](#):
 - If up to date with their COVID-19 vaccinations or recovered from COVID-19 in the past 90 days, there is no requirement for quarantine and commercial travel is permitted if they remain asymptomatic. Ideally, they should have a negative viral test (NAAT or antigen) at least 5 days after their last close contact before they travel. If they travel during the 10 days after their last close contact, they should be advised to properly wear a [well-fitting mask](#) for the entire duration of travel within the 10 days

for the entire duration of travel within the 10 days.

- If not up to date with their COVID-19 vaccinations and did not recover from COVID-19 in the past 90 days, commercial travel is *not* permitted until quarantine and testing requirements are completed. CDC [recommends](#) these persons avoid commercial travel until 10 days after their last close contact. If they must travel during days 6-10 after their last close contact, they must be asymptomatic, have a negative viral test collected at least 5 days after their last close contact, and be advised to properly wear a [well-fitting mask](#) for the entire duration of travel during days 6-10.
- If travel is needed urgently for travelers who are not permitted to travel commercially, travel may occur following CDC [Guidance for Transporting or Arranging Transportation by Air of People with COVID-19 or COVID-19 Exposure](#).

Screening Testing of All Newly Embarking Crew

- On the day of the crew members’ embarkation, cruise ship operators must collect specimens for SARS-CoV-2 viral testing [\[13\]](#) from all [\[14\]](#) newly embarking land-based crew (see table below).
- Consider quarantine of embarking crew who are fully vaccinated but have been in areas with high or very high levels of COVID-19 transmission per [CDC COVID-19 Travel Recommendations by Destination](#).
- Medical personnel must document all positive SARS-CoV-2 test results (pre-embarkation, throughout crew member’s contract duration, and post-disembarkation) in the ship’s medical records. These medical records must be made available for CDC inspection upon request.
- Cruise ship operators must report results in aggregate to CDC daily through the EDC form.
- Crew who test positive for SARS-CoV-2 should not be re-tested (e.g., as part of a contact tracing investigation) until 90-days post lab-confirmed diagnosis, unless they are symptomatic. Symptomatic crew must be isolated and re-evaluated, including retesting for SARS-CoV-2. If an alternate infectious etiology (e.g., influenza, respiratory syncytial virus [RSV], *Legionella*, streptococcal pharyngitis) is identified through laboratory testing; routine infection control precautions recommended for the diagnosis should be followed.
- Cruise ships must follow the requirements in section *Screening Testing Specifications* below.

Screening Testing and Quarantine for All Newly Embarking Crew

	Crew Who Are Not Fully Vaccinated	Crew Who Are Fully Vaccinated or Up to Date with COVID-19 Vaccines
Embarkation Day Testing	NAAT	Viral (NAAT or antigen)
Embarkation Quarantine Testing [& Duration]	Quarantine; NAAT on day 7 [end quarantine after day 7 if negative]	No quarantine‡; no testing on day 7
Routine Screening Testing	Viral (NAAT or antigen)	Viral (NAAT or antigen)
Disembarkation Day Testing	Viral (NAAT or antigen)	At cruise ship operator’s discretion

‡ Consider quarantine of embarking crew who are fully vaccinated or up to date with their COVID-19 vaccines and have been in areas with high or very high levels of COVID-19 transmission per [CDC COVID-19 Travel Recommendations by Destination](#).

Embarkation Quarantine and Testing for All Newly Embarking Crew

- All embarking land-based crew who are:
 - **fully vaccinated or up to date with COVID-19 vaccines** do not need to quarantine, although quarantine may be considered for those who have been in areas with high or very high levels of COVID-19 transmission per [CDC COVID-19 Travel Recommendations by Destination](#). These crew members must be tested at embarkation. If the crew member’s results are positive, they must be isolated until criteria are met for discontinuation of isolation according to the [Discontinuation of Isolation for Travelers \(Crew and Passengers\)](#) section above.

- **not fully vaccinated** must be immediately quarantined in single-occupancy cabins, with private bathrooms and must be tested via onboard NAAT point-of-care equipment or at a shoreside laboratory on day 7 of quarantine (i.e., specimen collection must occur on day 7 [prior to leaving quarantine]). If the crew member’s results are:
 - Pending, they must remain in quarantine until the test result is available.
 - Positive, they must be isolated until criteria are met for discontinuation of isolation according to [Discontinuation of Isolation for Travelers \(Crew and Passengers\)](#) section above.

[13] Viral tests for SARS-CoV-2 include nucleic acid amplification tests (NAAT) and antigen tests. Examples of NAAT include but are not restricted to reverse transcription polymerase chain reaction (RT-PCR), reverse transcription loop-mediated isothermal amplification (RT-LAMP), transcription-mediated amplification (TMA), nicking enzyme amplification reaction (NEAR), helicase-dependent amplification (HDA). Tests used must be cleared or authorized for emergency use by the FDA.

[14] CDC considers all positive viral test results as new cases, unless laboratory documentation of a previous SARS-CoV-2 by viral test result within the previous 90-days is provided and the individual is asymptomatic. Cruise ship operators may use confirmatory testing for a positive antigen screening test [following Interim Guidance for Antigen Testing for SARS-CoV-2](#). Cruise ship operators must have a protocol for evaluating documentation of recovery, including reviewing previous laboratory results.

Routine COVID-19 Screening Testing of All Crew

Laboratory testing for every crew member must be conducted on a weekly basis or at such other intervals as described in the table below.

Screening Testing[†] Frequency by Ship Color Status

	Ships Operating with Only Crew		Ships Operating with Passengers*		
	Crew Who Are Not Fully Vaccinated	Crew Who Are Fully Vaccinated or Up to Date with COVID-19 Vaccines	Crew Who Are Not Fully Vaccinated	Crew Who Are Fully Vaccinated	Crew Who Are Up to Date with COVID-19 Vaccines
Red	Weekly	Every two weeks	Weekly	Weekly	Weekly
Orange	Weekly	Every two weeks	Weekly	Weekly	Every two weeks
Yellow	Every two weeks	Every two weeks	Weekly	Weekly	Every two weeks
Green	Every 28 days	Every 28 days	Weekly	Every two weeks	Every 28 days

[^]Screening Testing is defined as testing of asymptomatic crew who have not been identified as a close contact to a confirmed case or a case of COVID-19-like illness.

[†] Crew who test positive for SARS-CoV-2 via NAAT should not be re-tested (e.g., as part of routine screening testing) until 90 days post lab-confirmed diagnosis.

*Once a ship has commenced passenger voyages, it falls under the “Ships Operating with Passengers” column.

- Cruise ship operators must collect specimens for SARS-CoV-2 viral testing for routine screening testing of all crew, regardless of vaccination status (as outlined above in the *Screening Testing Frequency by Ship Color Status* table).
- Cruise ship operators should consider enhancing viral (antigen or NAAT) screening testing of crew to every 48–96 hours for ships designated as “Orange” or “Red” status.
- Repeat Testing of Positive Results: To ensure the integrity of testing, persons with positive NAAT results must not be retested, and the original positive results must be reported. Subsequent negative NAAT results do not negate an initial


positive NAAT result. Confirmatory testing for a positive antigen screening test should take place as soon as possible after the antigen test, and not longer than 48 hours after the initial antigen testing. If more than 48 hours separate the two specimen collections, or if there have been opportunities for new exposures, a NAAT should be considered a separate test – not a confirmation of the earlier test.

- Staggered Testing: Cruise ship operators at their discretion may stagger whole ship crew testing during the corresponding color-coding interval (e.g., weekly, every two weeks, every 28 days). For example, the cruise ship operator may choose to test the same percentage of crew on each day of the week if required to test weekly. To ensure consistency, screening testing must be completed within 4 consecutive days of each color-coding interval and the testing schedule for each crew member should remain the same across all color-coding intervals.
- Cruise ships must follow the requirements in section *Crew Screening Testing Specifications* below.

Crew Screening Testing Specifications

- When choosing a testing method, cruise ship operators should consider the differences in sensitivity between NAAT and antigen tests. At this time, CDC prefers NAAT because it is less likely to miss cases of SARS-CoV-2 infection (i.e., higher sensitivity) when compared to antigen testing.
- Tests must be performed as authorized under their Emergency Use Authorization (EUA) and described in the manufacturer's instructions for use (IFU) or equivalent for those authorized in other national jurisdictions. Any specimen type and source specified in the IFU may be used and must be collected by, or under the supervision of, a health care professional.
 - Refer to the U.S. Food and Drug Administration (FDA) website for a list of the SARS-CoV-2 point-of-care and rapid tests that have received [Emergency Use Authorization \(EUA\)](#) [↗](#).
 - Tests that have been authorized for use in a point-of-care setting will have a W, for Waived, in the Authorized Settings column of the FDA table.
 - The laboratory or testing site must use a test authorized for point-of-care use by the FDA and must follow the manufacturer's instructions for each test.
- Cruise ship operators must immediately transport the specimens to the testing equipment location. Locations may include a CLIA-certified laboratory, onboard laboratory, pier-side equipment, or an offsite area.
- Viral test (including NAAT and antigen tests) systems must:
 - Authorized by FDA for use in a CLIA-waived setting or authorized for use by the national authority in another country where the ship has operated;
 - Allow for specimen-to-test system transfer in a way that minimizes the risk of contamination.
- If SARS-CoV-2 antigen tests that are FDA cleared or authorized under the EUA are used for the screening of asymptomatic individuals without known exposure, these tests must be performed according to the frequency and intervals specified in the test's IFU to ensure adequate detection of infected individuals. For antigen testing, cruise ship operators should follow CDC's [Interim Guidance for Antigen Testing for SARS-CoV-2](#).
- Shoreside testing is to be conducted by a CLIA-certified laboratory using a viral test.
- For NAAT, the test must have been FDA cleared or authorized for emergency use by FDA and be a laboratory-based test or a test performed in a CLIA-certified laboratory.
 - Tests must be evaluated on the [FDA reference panel](#) [↗](#) for SARS-CoV-2 with a limit of detection (LoD) value $\leq 18,000$ NDU/ml prior to use, or,
 - If test has not been evaluated on the FDA reference panel, sensitivity data must be $\geq 95\%$ using clinical samples included in the manufacture's IFU must be taken into consideration.
- Cruise ship operators may contact CDC at eocvent349@cdc.gov to request a list of acceptable NAAT and antigen tests.
- Self-tests, sometimes referred to as home tests or at-home tests, are tests performed by an individual at home or anywhere outside of a CLIA-certified laboratory and are not permitted at this time to meet the screening or diagnostic testing requirements of CDC's COVID-19 Program for Cruise Ships.
- Self-collection of the sample is permitted with the following stipulations:
 - Self-collection must be permitted in the IFU.
 - The specimen must be collected under the observation of trained medical staff.
 - Trained medical staff may only observe the collection of a single individual at a time.
- Staff conducting screening testing staff must be trained and competent in specimen collection, be able to properly use testing equipment, follow all manufacturer's instructions, and have access to and use recommended [personal protective](#)

equipment (PPE) for specimen collection, handling, and testing.

- CDC may ensure competency by conducting oversight of these practices through remote, visual observation.
- Cruise ship operators must maintain onboard SARS-CoV-2 testing equipment to manufacturer's specifications.
- The SARS-CoV-2 virus has developed [mutations](#) with the potential to negatively impact the performance of tests for its detection.
 - [FDA webpage](#)  provides information regarding the potential impact of viral mutations on COVID-19 tests.
 - CDC will continue to assess the information provided by the FDA, public health authorities, and the test manufacturer to determine which test should remain in use or be approved for future use.
- Clarification regarding requirement for "CLIA-waived point-of-care testing" as used in CDC's COVID-19 Program for Cruise Ships:
 - All facilities in the United States that perform laboratory testing on human specimens for health assessment or the diagnosis, prevention, or treatment of disease are regulated by the Centers for Medicare and Medicaid Services (CMS) under the Clinical Laboratory Improvement Amendments of 1988 (CLIA).
 - Waived COVID-19 diagnostic test systems include those cleared or with an EUA by FDA for point-of-care use (e.g., outpatient medical facilities or mobile clinics) and those tests categorized by FDA as waived after FDA approval or clearance (though no COVID-19 tests have been cleared or approved yet). Laboratories that perform only waived tests must obtain and maintain, at minimum, a Certificate of Waiver.
 - CLIA allows for a primary site (e.g., a shoreside corporate office) to have a CLIA Certificate of Waiver and perform testing at temporary sites (e.g., cruise ship medical centers).
 - Cruise ship operators must use viral tests that are cleared or authorized for emergency use by FDA.
 - For onboard testing, cruise ship operators must use a point-of-care test that is "CLIA-waived" (i.e., tests that have been determined by FDA to be simple and have a low level of erroneous results through the EUA process or CLIA test categorization process).
 - To the extent that CLIA might apply to a foreign-flagged cruise ship operating or intending to operate in U.S. waters, CMS is temporarily exercising enforcement discretion under CLIA for SARS-CoV-2 testing. Specifically, neither CMS nor the State survey agencies on its behalf will require such foreign-flagged cruise ships to obtain a Certificate of Waiver to perform such testing.

Procedures for Embarking Overnight Contractors, Vendors, and Visitors

In lieu of requiring overnight contractors, vendors, and visitors to quarantine on board as detailed in the section *Embarkation Quarantine and Testing for all Newly Embarking Crew* above, ships may follow the procedures below if the contractor, vendor, or visitor will be onboard for 7 or fewer nights:

- For embarkation-day testing, cruise ships must follow the testing requirements outlined for crew in the *Screening Testing and Quarantine for All Newly Embarking Crew* table.
 - If test is negative, the contractor, vendor, or visitor may board the ship.
 - If test is positive before embarkation, contractor, vendor, or visitor should not board until [criteria for discontinuing isolation](#) are met.
 - If test result not available same day, contractor, vendor, or visitor must quarantine onboard until the result is available.
- If negative, individual can be released from quarantine following public health measures above.
- If positive, individual must remain in isolation on board until criteria for discontinuing isolation are met or disembarked for land-based isolation.
- Overnight contractors, vendors, and visitors must:
 - Wear masks at all times in indoor areas except individual cabins. Mask use is recommended in crowded outdoor areas.
- Overnight contractors, vendors, and visitors who are not fully vaccinated (or whose vaccination status is unknown) must also:
 - Observe strict physical distancing
 - Eat all meals in cabin
 - Limit interaction with crew, except to perform duties

- Receive daily COVID-19 signs and symptom checking
- Not roam the ship when off duty and return to their cabins when not working

All contractors, vendors, and visitors who are not fully vaccinated and are expected to remain onboard for more than 7 nights are required to quarantine on board as detailed in the section *Embarkation Quarantine and Testing for Newly Embarking Crew* and are subject to all crew protocols including a negative test at a shoreside or onboard laboratory on day of embarkation.

All overnight contractors, vendors, and visitors, regardless of how many nights they remain on the ship, must be reported on the EDC form as crew members. They must be included in the total number of crew onboard, and their day of embarkation test results must be reported to CDC on the EDC form.

Procedures for Embarking Day Contractors, Vendors, and Visitors

- Day contractors, vendors, and visitors must:
 - Be denied boarding if they are:
 - exhibiting [signs or symptoms](#) of COVID-19, or
 - known to have exposure to a person with COVID-19 within the past 10 days, unless they have documentation of recovery from COVID-19 (positive viral test result dated no less than 10 days and no more than 90 days before date of embarkation).
 - Wear a [mask](#) for the duration of their visit onboard the ship:
 - Required indoors.
 - Recommended outdoors unless fully vaccinated.
 - Maintain appropriate physical distancing of 6 feet (2 meters) when possible if **not** fully vaccinated or if vaccination status is unknown.
 - Observe proper hand hygiene.
- Due to the increased transmissibility of some [SARS-CoV-2 variants of concern](#), cruise ship operators should consider requiring pre-embarkation day screening of all day contractors, vendors, and visitors.
- For persons who are fully vaccinated and are known to have been exposed to a person with COVID-19 within the past 10 days, cruise ship operators may choose to deny boarding.
- Cruise ship operators must ensure that all areas in which day contractors, vendors, and visitors worked while onboard are cleaned and disinfected after they exit the areas.

Crew Monitoring

Cruise ship operators should educate crew members about: the [signs and symptoms](#) of COVID-19; the need to notify cruise ship medical staff immediately if symptoms develop; and the importance of not working and isolating in their cabins while sick with fever or other symptoms or COVID-19 until they meet criteria for discontinuation of isolation according to the *Discontinuation of Isolation for Travelers (Crew and Passengers)* section above, as determined by cruise ship medical staff.

Crew who are not fully vaccinated must be monitored daily for signs and symptoms of COVID-19. If cruise ship operators can provide thermometers, self-temperature checks are preferable.

Disembarking Crew for Repatriation and Shore Leave

- For crew members who disembark for repatriation, but whose travel arrangements are canceled:
 - If crew member re-embarks the same day of disembarking (i.e., without an overnight shoreside stay), then:
 - Ship re-embarkation testing is not required
 - Quarantine is not required
 - If crew member re-embarks less than 48 hours from disembarking and with an overnight shoreside stay, then:
 - Ship re-embarkation testing is not required


- Quarantine is required until next disembarkation or for 7 days if test-negative on day 7, whichever is lesser (unless crew member is fully vaccinated or recovered in past 90 days, in which case quarantine is not required)
- If crew member re-embarks more than 48 hours from disembarking, then:
 - Ship re-embarkation testing is required
 - Quarantine is required until next disembarkation or for 7 days if test-negative on day 7, whichever is lesser (unless crew member is fully vaccinated or recovered in past 90 days, in which case quarantine is not required)
- Crew members who recovered from COVID-19 more than 90 days ago are subject to the same conditions for disembarkation as other crew members on board the ship, according to their vaccination status.
- Cruise ship operators, at their discretion, may advise crew that—if they are fully vaccinated—they may engage in self-guided or independent exploration during port stops or shore leave. The cruise ship operator is additionally advised that foreign or local jurisdictions may have their own requirements.

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 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 people travel between geographic locations and may spread infection.

To reduce spread of SARS-CoV-2, the virus that causes COVID-19, CDC recommends that cruise ship operators take measures to limit the spread of illness.

General Preventive Measures

- Implement physical distancing of crew members who are not [up to date with their COVID-19 vaccinations](#) when working or moving through the ship (maintaining at least 6 feet [2 meters] from others).
- Instruct crew members to properly wear a [well-fitting mask](#) when outside of individual cabins.
- Modify meal service to facilitate physical distancing (e.g., reconfigure dining room seating, stagger mealtimes, encourage in-cabin dining).
- Discourage handshaking – encourage the use of non-contact methods of greeting.
- Promote respiratory and [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 and paper towels.
- Place posters that encourage [hand hygiene to help protect yourself and others](#)  [\[PDF – 1 page\]](#) in high-trafficked areas.
- Crew should remain [up to date with their vaccines](#), which includes [additional doses](#) for individuals who are immunocompromised or [booster doses](#) at the appropriate time.

Enhanced Preventive Measures (for ships to consider when in Yellow status)

- Minimize the number of crew sharing a cabin or bathroom to the extent practicable.
- Instruct crew members to remain in cabins as much as possible during non-working hours.
- Cancel all face-to-face employee meetings, group events (such as employee trainings), or social gatherings.
- Close all crew bars, gyms, and other group settings.
- Expedite contact tracing (including the use of wearable technology, recall surveys, and the onboarding of additional public health staff).
- Close crew indoor smoking areas.
- Provide all crew members with well-fitting, high-quality [masks or respirators](#), such as KN95s.


Outbreak Public Health Interventions (for ships to consider when in Orange status)

- Require mask use by passengers when indoors and any crowded outdoor settings, regardless of vaccination status

- Require mask use by passengers when indoors and any crowded outdoor settings, regardless of vaccination status.
- Provide all passengers with well-fitting, high-quality [masks or respirators](#), such as KN95s.
- Enhance viral (antigen or NAAT) screening testing of crew to every 48–96 hours. The onboarding of additional laboratorians may be needed to facilitate the testing process.
- Implement a “working quarantine” (i.e., crew perform job duties then return to cabin quarantine) policy for crew who were *not* identified as close contacts.
- Reduce the dining cohort size for crew (to as few as 20 crew members per dining room) while ensuring physical distancing and shorter dining times.
- Maximize the introduction of outdoor air and adjust HVAC systems to increase total airflow to occupied spaces.
- Ensure physical distancing and maximize air circulation in crew outdoor smoking areas.
- Eliminate self-serve dining options at all crew and officer messes.
- Cancel crew shore leave.
- Test all passengers prior to the end of the voyage, regardless of their vaccination status.
- Send written notification to passengers on the current, previous, and subsequent voyages informing them of the COVID-19 conditions and measures being taken to reduce transmission on board.

Cleaning and Disinfection

Current evidence suggests that 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 routine cleaning and disinfection strategies, ships should focus on cleaning and disinfecting common areas where crew members may come into contact with infectious persons. Frequent, routine cleaning and disinfection of commonly touched surfaces such as handrails, countertops, and doorknobs with an [EPA-registered disinfectant](#)  effective against coronaviruses is required.

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](#).

Other environmental considerations include:

- Wait 24 hours or as long as practical before beginning cleaning and disinfection of cabins vacated by crew members with confirmed or suspect COVID-19.
- In order to minimize the possibility of dispersing virus through the air, do not shake dirty laundry.
- Launder soiled linens and towels collected from cabins occupied by isolated or quarantined crew in washing machines set at the warmest appropriate water setting for the items, and dry items completely.
- Identify pathways to minimize risk of respiratory transmission when crew are required to move in and out of isolation and quarantine corridors and during the transport of waste and soiled linens generated by isolated or quarantined crew members.
- Designated trolleys/carts used for the transportation of waste and soiled linens from isolated or quarantined cabins must be cleaned and disinfected with an effective disinfectant after each use.

Medical personnel who have direct contact with isolated or quarantined persons and crew members who handle waste or soiled linens must wear proper PPE per CDC’s [Interim Guidance for Ships on Managing Suspected Coronavirus Disease 2019](#).

COVID–19 Color–coding System for Cruise Ships

The color-coding system is only applicable to the following cruise ship types:

- Foreign-flagged cruise ships currently operating in U.S. waters;
- Foreign-flagged cruise ships currently operating outside of U.S. waters but planning to return to operation in U.S. waters; or
- U.S.-flagged cruise ships ^[15] opting into CDC’s COVID-19 Program for Cruise Ships.

Status of ships is contingent upon daily submission of the Enhanced Data Collection (EDC) during COVID-19 Pandemic form. For ships currently outside of U.S. waters but intending to opt into CDC's COVID-19 Program, submission of the EDC form for 14 days preceding the cruise ship's expected arrival in U.S. waters is required prior to being assigned a color status. These ships will be added to CDC's [Cruise Ship Color Status](#) webpage after submission of the EDC form for 7 days.

While cruising will always pose some risk of COVID-19 transmission, CDC is committed to working with cruise ship operators to ensure that cruise ship passenger operations are conducted in a way that mitigates this risk among crew members, passengers, and port personnel.

When a cruise ship notifies CDC of suspected or confirmed cases of COVID-19 on board, CDC determines whether an investigation is needed. The threshold for investigation (see details below) was developed based on several factors, including the need for transparency while acknowledging that cruising is not a zero-risk activity. This investigation gives CDC and the cruise industry the ability to work closely together to protect the health and safety of those on board and in communities. CDC's objectives for establishing the threshold included mitigating ongoing COVID-19 transmission between voyages and ensuring medical resources on board are not overwhelmed. This threshold may be modified for future passenger voyages based on lessons learned from completed passenger voyages, the evolution of the pandemic, or other factors.

CDC will investigate cruise ships that reach its investigation threshold for COVID-19 cases among crew or passengers. As part of this investigation, CDC will obtain additional information from the cruise ship, such as case exposure and vaccination histories, details about [close contacts](#), and medical capacities. CDC will work closely with the cruise line and consider multiple factors before assigning a "Red" status to the ship (see criteria below).

Ship color status is determined using data from the previous 7 days, regardless of voyage dates.

Definition of a COVID-19 Case for the Purpose of Ship's Color Status

- A positive viral test result for COVID-19 in any traveler (passenger or crew member)
- [COVID-19-like illness](#) in any traveler (passenger or crew member) with:
 - a repeatedly inconclusive/invalid test result (i.e., never able to register a positive or negative result) for COVID-19, or
 - an unavailable test result (e.g., traveler refuses to be tested, testing resources unavailable onboard).
- The following persons are not included when determining a ship's color status:
 - passengers who test positive on day of embarkation who do not board the ship, or
 - newly embarking crew members who test positive during quarantine.

Green Ship Criteria

- No reports of COVID-19 or COVID-19-like illness (CLI) for 7 days, as determined by a qualified medical professional, and
- On-time (by 1200 ET) daily submission of EDC form during past 7 days.

Yellow Ship Criteria

- COVID-19 or CLI has been reported in the past 7 days, and the ship is below CDC's investigation threshold:
 - Passenger Voyages:
 - Cases reported in fewer than 0.30% of passengers and/or crew (e.g., if 2,000 passengers are on board, it would take at least 6 passenger-cases during the previous 7 days to meet CDC's investigation threshold).
 - This percentage may include passenger cases occurring within 5 days of disembarkation if state or local health departments notified CDC of these cases.
 - Ships with Crew Only (i.e., not yet commenced passenger voyages):
 - Cases reported in less than 1.0% of crew.

Orange Ship Criteria

- Ship is at or above CDC's investigation threshold:
 - Passenger Voyages:
 - Cases reported in 0.30% or more of passengers and/or crew (e.g., if 2,000 passengers are on board, CDC's investigation threshold is met if there are 6 or more cases among passengers occurring during the previous 7

investigation threshold is met if there are 5 or more cases among passengers occurring during the previous 7 days).

- This percentage may include passenger cases occurring within 5 days of disembarkation if state or local health departments notified CDC of these cases.
- Ships with Crew Only (i.e., not yet commenced passenger voyages):
 - Cases reported in 1.0% or more of crew.

OR


- During the past 7 days, the ship failed to submit one or more daily EDC submissions on time (by 1200 ET). On a weekly basis, CDC emails all ships a reminder to submit the EDC form. In addition, CDC sends a reminder email if a ship does not submit their EDC form.

Red Ship Criteria

“Red” status means the ship is at or above the CDC investigation threshold for passenger and crew COVID-19 cases. Based on CDC’s investigation, additional public health precautions, such as returning to port immediately or delaying the next voyage, may be taken to help ensure the health and safety of onboard travelers or newly arriving travelers.

- A ship may be identified as “Red” status if it experiences one or more of the following factors:
 - Sustained transmission of COVID-19 or CLI, defined as a 7-day
 - Crew attack rate greater than or equal to 10% occurring at least once weekly over 3 consecutive weeks;
 - Passenger attack rate greater than or equal to 10% occurring at least once weekly over 3 consecutive weeks;
 - Crew attack rate greater than or equal to 20% occurring on any single day;
 - Passenger attack rate greater than or equal to 20% occurring *on any single day*, or
 - Traveler (crew AND passenger) attack rate greater than or equal to 30% occurring *on any single day*^[16].
 - Severe COVID-19 acquired onboard resulting in:
 - Shortages of supplemental oxygen or other medical supplies related to COVID-19 treatment, or
 - 2 or more deaths in passengers and/or crew in a 7-day period.
 - Potential for COVID-19 cases to overwhelm on board medical center and/or public health resources, defined as the inability to maintain:
 - Adequate staff to
 - Evaluate symptomatic travelers and their close contacts,
 - Conduct routine and diagnostic testing of travelers,
 - Conduct routine medical checks of travelers in isolation or quarantine, or
 - Conduct contact tracing of close contacts.
 - Adequate supplies of
 - Personal protective equipment (PPE) listed on CDC’s [Interim Guidance for Ships on Managing Suspected or Confirmed Cases of Coronavirus Disease 2019](#),
 - Testing equipment for routine and diagnostic screening,
 - Antipyretics (fever-reducing medications such as acetaminophen and ibuprofen),
 - [Antivirals and other therapeutics for COVID-19](#), [🔗](#) if commercially available,
 - Oral and intravenous steroids, or
 - Supplemental oxygen.
 - Inadequate onboard capacity to fulfill minimal operational services, including but not limited to housekeeping and food and beverage services.
 - A [variant of concern](#) or a new or emerging variant with undefined characteristics identified among cases on board.
- A cruise ship may be required to implement the following measures if CDC has advised the cruise line that a ship is likely to be assigned “Red” status:
 - Test all passengers mid-voyage, and/or prior to the end of the voyage, regardless of their vaccination status.
 - Increase the frequency of routine screening testing of crew.
 - Require mask use by all passengers and crew indoors and in crowded outdoor areas.

regardless of whether passengers and crew receive and understand color status.

- Send written notification about the increased number of COVID-19 cases on the ship to passengers on the current, previous, and subsequent voyages, and
 - If any passenger decides not to sail on the subsequent voyage, the passenger must be offered a full refund for the cruise.
- Submit specimens for genetic sequencing
 - CDC will provide specific instructions if this is needed. Cruise ship operators must ensure that they have the following items available:
 - Freezer to temporarily store specimens (the colder the better)
 - Media that allows for viral culture (e.g., viral transport media, phosphate-buffered saline)
 - Serum separator tubes (containing no anticoagulant [red tops])
 - Shipping containers (for diagnostic specimens)
 - Shipping container labels and markings ([as required by current shipping regulations for diagnostic specimens](#)  [\[PDF – 10 pages\]](#))
 - Dry ice (either onboard or at a port) for shipping specimens to a pre-determined laboratory
- In addition, CDC will work closely with the cruise line and consider multiple factors before assigning a “Red” status to the ship. These factors *may* include, but are not limited to the following:
 - Percentage of passengers and crew on board who are [up to date with their COVID-19 vaccinations](#).
 - [Variants of concern](#) are identified among cases on board.
 - Epidemiologic data from EDC reporting (e.g., symptomatic persons on board requiring medical care).
 - Epidemiologic links between cases.
 - Number of hospital beds, ventilators, oxygen, and other medical supplies on board relative to the number of cases on board.
 - Ship has not replied to CDC’s request for information within 48 hours.
 - During the past 7 days, the ship missed one or more daily submissions of the EDC form. On a weekly basis, CDC emails all ships a reminder to submit the EDC form. In addition, CDC sends a reminder email if a ship does not submit their EDC form.

[15] U.S.-flagged cruise ships operating exclusively in U.S. waters may follow CDC’s COVID-19 Program for Cruise Ships at the Cruise Ship operator’s discretion and receive a color status on CDC’s Cruise Ship Color Status webpage. However, such cruise ships will not be listed as “Gray” if the operator chooses to opt out of the program. This is because these ships report cases to state and local public health departments which exercise primary public health jurisdiction over these vessels. Interstate vessels also operate under the jurisdiction of the Food and Drug Administration’s (FDA) Interstate Travel Program under the provisions of 21 CFR 1240, 1250.

[16] These thresholds are subject to change based on the characteristics of the dominant COVID-19 variant in the U.S.

Gray-designated Ships

- CDC’s COVID-19 Program for Cruise Ships operates as a voluntary program for cruise lines that have chosen to opt into the program. Cruise lines that have chosen to opt out of CDC’s voluntary program will have their ships designated as “Gray.” This designation means that CDC has **neither reviewed nor confirmed** the cruise ship operator’s health and safety protocols. Therefore, CDC does not have current information about public health measures, such as mask use, crew testing, or vaccination status, that may or may not have been implemented on board Gray-designated ships.

Summary of Past Changes

March 18, 2022

Provided quarantine cabin options for close contacts identified within 36 hours before disembarking.

February 18, 2022

Clarified that children under the age of 5 years will not be counted when determining the percentage of passengers on board who are fully vaccinated or up to date with their COVID-19 vaccines.

February 17, 2022

- Provided options for isolation and quarantine.
 - Provided guidance for cruise ship operators on how to calculate the dates of eligibility for COVID-19 vaccine booster doses and “up to date” status.
 - Updated Screening Testing Frequency by Ship Color Status table for crew who are up to date with their COVID-19 vaccines.
-

February 9, 2022

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

November 1, 2021

CDC narrowed the definition of cruise ship by adding “foreign-flagged,” in accordance with the minor modifications made in the Temporary Extension & Modification of the CSO. However, *U.S.-flagged* cruise ships previously covered by the CSO may continue to participate voluntarily.

August 27, 2021

Added language reflecting that as of July 23, 2021, the Conditional Sailing Order (CSO) and accompanying measures, such as technical instructions, are nonbinding recommendations for cruise ships arriving in, located within, or departing from a port in Florida. However, CDC will continue to operate the CSO as a voluntary program for such ships should they choose to follow the CSO measures on a voluntary basis. Added definition of “Gray” designated ships under the color-coding system for ships opting not to follow the CSO.

Revised screening testing for fully vaccinated close contacts and newly embarking crew, and routine screening of fully vaccinated crew, for cruise ships operating under the CSO, including those choosing to follow CSO measures on a voluntary basis. This change was due to the increased transmissibility of some [SARS-CoV-2 variants of concern](#) and evidence of breakthrough cases in fully vaccinated individuals.

Clarified the following: isolation practices for COVID-19-like illness; which medical management sections are for crew and passengers; and shore leave for crew-only ships.

Removed the “Boarding Non-Essential Crew” section.

July 13, 2021

Clarified documentation of recovery. Updated Screening Testing Frequency by Ship Color Status Table. Updated information for tests that do not have the U.S. Food and Drug Administration (FDA) reference panel available and provided additional requirements for use of self tests. Updated color criteria and removed the Preventive Measures Based on Ship Status table.

June 4, 2021

Clarified mask use for crew who are not fully vaccinated. Removed attestations for commercial travel status. Updated *Preventive Measures Based on Ship Status* table.

May 14, 2021

Clarified testing and vaccination status based on vaccination status.

Clarified testing and quarantine options based on vaccination status.

April 2, 2021

Added the Routine COVID-19 Laboratory Screening Testing of All Crew Section, the Procedures for Embarking Contractors Overnight and Visitors Overnight Section, and the Procedures for Embarking Day Contractors and Day Visitors Section. Clarified laboratory parameters and testing options. Updated surveillance reporting requirement to daily, revised the color-coding system, and COVID-19-like illness definition.

December 31, 2020

Clarified “CLIA-waived point-of-care testing” in the context of CDC’s Framework for Conditional Sailing Order.

December 23, 2020

Expanded testing options to include nucleic acid amplification tests (NAATs), such as reverse transcription polymerase chain reaction (RT-PCR), reverse transcription loop-mediated isothermal amplification (RT-LAMP), and transcription-mediated amplification (TMA).

November 3, 2020 Update

Renamed this document to Technical Instructions and added information about CDC’s Framework for Conditional Sailing Order. Added instructions for laboratory testing.

September 30, 2020 Update

Added information about the third extension to CDC’s No Sail Order, effective September 30, 2020.

July 23, 2020 Update

Added information about the second extension to CDC’s No Sail Order, effective July 16, 2020.

June 1, 2020 Update

Added requirements for use of commercial travel to disembark crew members and clarified routine testing for SARS-CoV-2 infection.

April 28, 2020 Update

Clarified the stipulations for disembarking asymptomatic crew for transfer or repatriation.

April 21, 2020 Update

Clarified that notification to health departments for disembarking crews must include health departments with jurisdiction for the seaport and those with jurisdiction for the crew members’ residence.