About COVID-19

COVID-19 is an illness caused by a virus that can spread primarily from person-to-person. The virus that causes COVID-19 is a new coronavirus that has spread throughout the world. COVID-19 symptoms can range from mild (or no symptoms) to severe illness. You can become infected by coming into close contact (about 6 feet or two arm lengths) with a person who has COVID-19. You can become infected from respiratory droplets when an infected person coughs, sneezes, or talks. You may also be able to get it by touching a surface or object that has the virus on it, and then touching your mouth, nose, or eyes.1

The latest health facts below are intended to provide general information about the illness. While this information is broadly available, feedback we have received so far indicates a need and willingness to continually train mariners on how to prevent, protect, identify, and respond to possible situations involving exposure to the virus throughout the rotation process. This continuous training ensures everyone has the necessary information to minimize risks onboard.

Current data shows COVID-19 is highly contagious but definitive quantitative analysis has been difficult to determine this accurately, as about 80% of those with the illness only have mild symptoms, similar to the common cold. About 20% of those infected with the virus develop more severe symptoms. This typically occurs in individuals with higher risk factors, such as older adults and those with chronic medical problems, especially comorbidities (one or more conditions) that impact lung function. People under the age of 20 seem to have some protection against the virus but they can still get it and spread it. Large studies show only about 1% of children were affected.2 These studies also show the virus is predominantly spread by droplets from close person-to-person contact. Though some spread occurs through touching surfaces, close person-to-person contact with droplets remains the primary threat.3

Symptom Awareness

It is important that crews continue to be made aware of the symptoms associated with COVID-19. These symptoms may appear 2-14 days after exposure to the virus. Some persons exposed to the virus show no symptoms at all (asymptomatic*). The most common presenting symptoms include:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Cough</td>
<td>68%</td>
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<tr>
<td>Fever, 44%**</td>
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<tr>
<td>Fatigue, 38%</td>
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<tr>
<td>Sputum production, 34%</td>
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<tr>
<td>Shortness of breath, 19%</td>
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<tr>
<td>Sore throat, 14%</td>
<td></td>
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<tr>
<td>Headache, 14%</td>
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<tr>
<td>Anosmia and dysgeusia (loss of smell / loss of taste)**</td>
<td></td>
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</tbody>
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1 Coronavirus disease 2019 (COVID-19) Factsheet
2 CDC Demographic Characteristic of COVID-19
3 Future Care Bulletin No. 7
Asymptomatic carriage and transmission have been reported. Clearly, being asymptomatic and infected is very concerning and believed responsible for the exponential expansion in the number of cases. This is why social distancing and other practical steps found in the General Prevention for Vessels section of this document can be critical to maintaining a healthy vessel.

**Fever is NOT required to make the diagnosis. Fever was present in 44% of patients at initial presentation, but this increased to 90% of patients during their hospital admission.

***Anecdotal evidence suggests that anosmia (loss of smell) and dysgeusia (abnormal or loss of taste) are significant symptoms and may occur without other symptoms or be present prior to the onset of other symptoms.

Bottom line, screening for an elevated temperature is not a bad idea, if you use a no touch forehead thermometer and the temperature threshold is lowered to 100 F. However, this will only identify 44% of those presenting with symptoms. Numerous external factors need to be considered when utilizing this screening method. While most patients develop a fever once they are very ill, only 44% present with fever initially.

### When to Seek Medical Attention

If you develop emergency warning signs for COVID-19, get medical attention immediately. Emergency warning signs include:

Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face
- Shortness of breath worsening with mild exertion
- Severe joint pain

**IMPORTANT:** This list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning.

### General Prevention for Vessels

The best way to protect yourself against COVID-19 is to follow the guidelines provided by the Center for Disease Control (CDC). Use a heightened sense of care when interacting with others that are ill, just as you would with anyone showing symptoms of other respiratory illnesses like the common cold or flu. There is currently no vaccine to protect against COVID-19. The best way to protect yourself is to avoid being exposed to the virus that causes COVID-19.

- Require anyone entering your work area or boarding your ship to abide by requirements for masks and hand washing.
- Postpone any non-essential travel
- Self-isolate prior to joining a vessel per guidance in this guide

4 [CDC Symptoms of Coronavirus](https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html)
To prevent the introduction of COVID-19 onto the vessel, a pre-shipment screening (see Appendix F) shall be put in place to help detect any illness that would help labor partners, marine personnel departments, and mariners identify any symptoms or concerns that would make the mariner an at-risk traveler.

As always, we care for our shipmates and their families. Some of our shipmates may be deeply worried about their families and loved ones back home, and we encourage you to be mindful and supportive under these circumstances.

Guidelines for On / Off Signers Travel

As part of the standard travel process, below is a set of recommendations to enhance ongoing efforts to reduce the threat of COVID-19 exposure while transiting to or from a vessel and should be provided to crewmembers. It is recommended that these items be incorporated into existing travel processes. A sample travel to the vessel and travel to home (“Offsigners”) are included in Appendices C and G respectively.

Take PPE issued to you either during your pre-screen or upon preparation for disembarkation with you for travel to/from the vessel. Remember to practice superior hygiene always:

- Stay focused on frequent and rigorous cleaning of hands, face, and surfaces you come into contact with as part of your daily routine.
- Hand sanitizer can be used while wearing gloves.
- Wash hands before and after using a mask.
- Don and remove the Face Mask using the straps or sides.
- A mask should be used when it is difficult to keep social distancing while traveling.
- Treat all surfaces as if they could be contaminated. If wipes are available, wipe down arm rests, table surfaces, etc. If wipes are unavailable, wear pants and a long sleeve shirt to protect skin.
- The virus cannot penetrate healthy skin, but if you have any sores, open cuts, or wounds please be sure to protect these adequately at all times utilizing standard first aid coverings.
- If traveling through ports with confirmed COVID and there is unavoidable close contact with third party personnel:
  - Going to ship: depending on whether onboard follow up testing is available, you will be required to self-quarantine for an additional 5-10 days onboard while being monitored.
  - Going to home: self-quarantine from your family or in a separate room for 14 days to observe if you develop symptoms.
- Wear a fresh (or washed/disinfected) mask while self-isolating.
- Utensils, towels, linens should not be shared.
- Frequent touch areas such as doorknobs, light switches, cabinet doors, countertops, remotes, etc. should be regularly disinfected.
- If you develop flu-like symptoms consult a medical provider.
  - At home: Depending on State policies, mild symptoms will not be tested for COVID-19 and you will be sent home. It is advisable with mild symptoms to stay home and monitor rather than risk a trip to the hospital and potential exposure.
- If experiencing difficulty breathing or a persistent, high-grade fever, it is recommended to proceed to the nearest health facility to be evaluated and, if deemed appropriate, tested for COVID-19.

Keep organizations, responsible for marine personnel, informed of your fitness status. If a crewmember has traveled and is presenting with symptoms, the crewmember should be isolated before boarding. Review the symptoms with your medical advisory service and direct him or her per their guidance.

**Illness While Onboard**

Crewmembers must be instructed to report any illness immediately. As long as there is no difficulty breathing – regardless of other symptoms – the individual’s illness will most likely be managed aboard ship. Crew with significant comorbidities, such as cardiac disease, diabetes and chronic obstructive pulmonary disease COPD (especially if smokers), based on advice of the ship’s remote medical care provider, may be disembarked at the soonest available port. A crewmember having difficulty breathing should be medically disembarked at the soonest opportunity as rapid deterioration is possible. If a crewmember gets sick, the ship should consult its contracted medical advisory service (health care provider). Determination by a medical advisory service will require additional information to evaluate the crewmember’s symptoms. An example form for providing this information can be found in Appendix H.

If in the judgement of the medical advisory service the crewmember’s symptoms are not consistent with COVID-19, the illness shall be managed according to normal company protocols. While awaiting guidance from medical advisory service, the crewmember shall:

1) Observe a 6-foot social distance.
2) Don a N95 (or comparable) mask.
3) Wash hands/sanitize regularly.
4) Avoid touching surfaces while being escorted to isolation.

   (NOTE – Other crew to sanitize those immediate areas touched by the patient, as well as areas where the patient was working/standing watch.)

   (NOTE – Even if a crewmember presents with seasonal flu symptoms, self-isolation should be considered. The flu can be every bit as contagious as COVID-19. Crew with the flu should not share galley and messing or lounge areas with other crewmembers until symptoms have subsided.)

If the medical advisory service advises that COVID-19 is suspected, the following procedures will be immediately implemented:

1) If in the judgement of the medical advisory service the crewmember’s symptoms are consistent with COVID-19, and the crewmember does require immediate and/or emergency medical treatment, the Master shall:
   a. If shoreside, call an ambulance by dialing 911 or the host nations emergency assistant number.
   b. In all instances, contact the vessel’s DPA (Designated Person Ashore) notifying of the situation; and,
c. In coordination with the DPA, notify the cognizant Coast Guard captain of the port (COTP) as soon as practicable.

2) If in the judgement of the medical advisory service the crewmember’s symptoms are consistent with COVID-19, and the crewmember does NOT require immediate and/or emergency medical treatment, the Master shall ensure the following:

a. Vessel must report the illness to the USCG COTP for next port of arrival in accordance with guidance found in MSIB 2-20 (Change 4) and 33 CFR 160.216. The CDC form referred to in MSIB 2-20 can be found in Appendix I. For situational updates, please check with the CDC at https://go.usa.gov/xdDsW.

b. Crewmember will be isolated/restricted to private quarters.

c. The door will be closed at all times and a sign will be posted on the door “ISOLATION ROOM – No Entry.”

d. A fully charged radio should be tested and provided to the patient.

e. No visitors will be allowed without the express permission of the Master.

f. If the quarters do not have a private bathroom, then one bathroom will be designated for that person’s use only. When the isolated person has to use the bathroom, they will notify the appropriate person and the path to the bathroom will be cleared of all other crew. Another alternative is to mark the path off with caution tape so that crewmembers have a defined area where COVID-19 sanitizing instructions would need to be utilized more frequently.

g. If possible, the isolation room should also be equipped with a refrigerator.

h. The medical PIC will be the only person allowed entry into the isolation room and will be responsible for patient care. PPE will be worn when entering the isolation room.

i. Mask, goggles, gloves, shoe covers or disinfecting footwear.

ii. After leaving the room, change out of clothes and place in a plastic bag to be immediately washed.

i. Take temperature with a thermometer every day to monitor for fever. Also watch for cough or trouble breathing.

j. Patient will take meals in the isolation room.

i. Room to be stocked with fluids.

ii. Meals will be delivered outside the door.

iii. Persons delivering meals will wear gloves and a mask and avoid touching surfaces in any designated caution areas.

iv. Where possible, plates, glasses, cutlery, napkins should be of a disposable nature (single use) and disposed of separately. If single use paper or plastic items are not available, then all galley wear must be segregated and cleaned independent of other dining wear.

v. Persons will knock on the door or communicate by radio to signify the meal is outside the door.

vi. Upon completion of the meal, the empty tray will be placed outside the door for pickup, placed in a plastic bag for transport to the galley for washing. The patient will communicate by radio with the support team when the tray is being put outside.

vii. Any cutlery, crockery, trays, etc. should be washed at high temperature.
k. Until advised otherwise, all crew to wear masks and gloves.

l. The house will be thoroughly cleansed with disinfectant, especially areas where the affected crewman has been.

m. Any close contacts in days prior to illness presenting should practice social distancing onboard (mask in common areas, 6-foot distance from other crew whenever possible, frequent hand washing and wearing of gloves, separate meals, etc.). This process would be very similar to the onboarding of new crew.

n. U.S. crewmembers traveling outside of the United States should notify shoreside marine personnel coordinators prior to returning to work to receive clearance.

o. Prepare ahead of time the emergency patient information required by USCG in case of need for helicopter evacuation. See Appendix J.

Current CDC Recommendations

1) **Strategy based on no testing available or testing not used** - Persons with COVID-19 who have symptoms and were directed to care for themselves at home may discontinue home isolation under the following conditions:

   a. At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath); and,

   b. At least 7 days have passed since symptoms first appeared.

2) **Test-based strategy** - contingent on the availability of ample testing supplies and laboratory capacity as well as convenient access to testing.

   a. Persons who have COVID-19 and symptoms and were directed to care for themselves at home may discontinue home isolation under the following conditions:

      i. Resolution of fever without the use of fever-reducing medications, and

      ii. Improvement in respiratory symptoms (e.g., cough, shortness of breath), and

      iii. Negative results of an FDA EUA (Emergency Use Authorized) molecular assay for COVID-19 from at least two consecutive nasopharyngeal swab specimens collected ≥24 hours apart (total of two negative specimens).

3) **Asymptomatic**

   a. Individuals with laboratory-confirmed COVID-19 who have not had any symptoms may discontinue home isolation when at least 7 days have passed since the date of their first positive COVID-19 diagnostic test and have had no subsequent illness.

This strategy can be used with crewmembers who test positive or are presumed positive while on board. The crewmember should always be presumed to still have some chance of being infectious for another seven days and wear a facemask when in public.

Operations Under Surveillance

If a crewmember has been removed from the vessel that does not significantly impact the Safe Manning Certificate due to a suspected COVID-19 illness, the vessel may continue to operate
according to the following operational protocols, subject to the approval of the cognizant Coast Guard COTP. These operational protocols shall apply until lifted by the company and the COTP.

1) No visitors or vendors shall be allowed in the interior of the vessel.

2) Crewmembers shall maintain minimum 6 feet distance from anyone not part of the vessel crew complement.

3) Fleets and/or other vessels shall be notified prior to the arrival of the vessel. Crewmembers shall maintain minimum 6 feet distance from fleet and/or other vessel crews. Rigging shall be dropped with each crew working on its own.

4) Essential vendors shall be notified prior to arrival to the vessel. Supplies/groceries shall be landed on the dock and there will be no vendor interaction with crewmembers. All paperwork shall be handled electronically by shoreside personnel.

5) Pilots will be notified in advance so that a coordinated process can be agreed. All personnel interacting with the Pilot will wear masks and gloves. Bridge disinfecting will be carried out in accordance with the pilot procedures established with the pilots.

6) On entering or exiting a COTP Zone, the vessel shall notify the cognizant COTP(s).

7) The Master shall immediately report any adverse changes in crewmember health condition to the DPA and, in coordination with the managing office, to the cognizant COTP.

8) Upon positive COVID-19 test result(s) of the crewmember(s) removed for testing, the rest of the crew shall remain quarantined aboard the vessel and continue to implement the operational protocols for a time period recommended by the medical advisory service and approved by the cognizant COTP. At the end of that time period, if no crewmembers have become ill or exhibited signs or symptoms of illliness, the vessel shall be returned to normal operations without restrictions.

Upon negative COVID-19 test result(s) of the crewmember(s) removed for testing, the rest of the crew shall be released from quarantine and the vessel shall be returned to normal operations without restrictions.

If the Master, Chief Engineer, or other rating that affects the Safe Manning Certificate has been removed from the vessel due to a suspected COVID-19 illness, the vessel shall notify the DPA and cognizant Coast Guard COTP for alternatives. If the Master is not removed and the vessel has the option of safely sailing short until such time a test result can be delivered, then this shall be discussed with the DPA and cognizant Coast Guard COTP.

Upon positive COVID-19 positive test result(s), the rest of the crew shall remain quarantined aboard the vessel and continue to implement operational protocols in items 1-6 for a time period recommended by the medical advisory service and approved by the cognizant COTP. At the end of that time period, if no crewmembers have become ill or exhibited signs or symptoms of illness, a relief crewmember(s) shall be onboarded, and the vessel shall be returned to normal operations without restrictions.

Upon negative COVID-19 test result(s), a relief crewmember(s) shall be onboarded, and the vessel shall be returned to normal operations without restrictions.

Alternatively, the company may decide to completely offboard the crew, decontaminate the vessel, and onboard an entirely new crew, subject to the approval of the cognizant COTP.
Cleaning Versus Sanitation

There are a few ways to kill the COVID-19 virus as it has a flimsy shell. Alcohol-based products disintegrate the protective lipids. Quaternary ammonium disinfectants, commonly used as cleaners in healthcare and food-service industries, attack protein and lipid structures stopping the pathogen's typical mode of infection. Bleach and other potent oxidizers swiftly break down a virus's essential components.

This guidance provides recommendations on the cleaning and disinfection of areas where persons under investigation (PUI) or those with confirmed COVID-19 reside or may be in self-isolation. It is aimed at limiting the survival of the virus. These guidelines are focused on non-healthcare facilities such as offices, and businesses that do, and do not, house persons overnight. These recommendations will be updated if additional information becomes available.

- Cleaning refers to the removal of dirt and impurities, including germs, from surfaces. Cleaning alone does not kill germs. But by removing the germs, it decreases their number and therefore any risk of spreading infection.9
- Disinfecting works by using chemicals, for example EPA-registered disinfectants, to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs. But killing germs remaining on a surface after cleaning further reduces any risk of spreading infection.10

This virus should be easy to kill. However, to obtain the best possible results the standard should be whether the chemical kills norovirus – which is harder to kill – and the recommended wet contact time before you can wipe/dry the surface. In order to sanitize a surface, it must be clean. Any recommended antiviral will do this. Once cleaned, there should be a second step to sanitize. Two steps, not one. While any approved product can be used to clean, including quaternary ammonium compounds or "quats" it is recommended to use products containing sodium hypochlorite to sanitize and watch carefully for the required wet contact time.

The best policy is to clean and wipe after recommended contact time with one product and then use another color rag to apply a second product and allow to air dry. The best thing for soft surfaces is electrostatic spraying and the best thing for carpets is very hot steam cleaning.

A SAMPLE procedure for cleaning infected crew cabins while occupied and after the crew disembarks has been included in Appendix K. The same protocols apply to public areas. Know your high-risk areas:

1) Hard (Non-porous) Surfaces11
   a. If surfaces, especially bathrooms, handrails, are dirty, they should be cleaned using a detergent or soap and water prior to disinfection.
   b. For disinfection, most common EPA-registered household disinfectants should be effective. See List N12 of EPA-approved materials on the EPA website.

9 CDC Cleaning and Disinfection for Community Facilities
10 ibid
11 ibid
12 EPA List N: Disinfectants for Use Against SARS-CoV-2