



भारत सरकार/ GOVERNMENT OF INDIA  
पोत परिवहन मंत्रालय / MINISTRY OF SHIPPING  
नौवहन महानिदेशालय, मुंबई  
DIRECTORATE GENERAL OF SHIPPING, MUMBAI

**F. No. 7-NT(72)/2014**

**Date: 20.03.2020**

**DGS Order No. 04 of 2020**

**Subject: Instructions to all major and minor ports for dealing with novel coronavirus (COVID-19) pandemic - reg.**

1. The Directorate has issued instructions on dealing with novel coronavirus (COVID-19) vide DGS Order No. 02 of 2020 dated 16.03.2020, DGS Order No. 03 of 2020 & 20.03.2020 and maritime advisories vide M.S. Notice 02 of 2020 dated 28.01.2020, M.S. Notice 03 of 2020 dated 04.02.2020 & M.S. Notice 06 of 2020 dated 03.03.2020 (F. No. 7-NT(72)/2014).

2. The spread of the COVID-19 pandemic across large number of nations is an unprecedented situation in recent times. To slow the spread of the disease and mitigate its impacts, travel advisories have been issued by many jurisdictions including India. However, shipping services are required to continue to be operational so that vital goods and essential commodities like fuel, medical supplies, food grains etc., are delivered and to ensure that the economic activity of the nation is not disrupted. It is, therefore, important that the flow of goods by sea should not be needlessly disrupted without compromising the safety of life and protection of the environment. In view of the same, it has been decided that for the continued operation of vessels and ports, the following shall be complied with by all stakeholders till further orders.

**All Vessels**

3. The master of a vessel, before arrival at its first port of call in India, shall ascertain the state of health of each person on board the vessel and submit the Maritime Declaration of Health to the concerned health authorities of the port and to the port authorities.

4. The format of the Maritime Declaration of Health shall be as per Annex 8 of the International Health Regulations 2005, issued by World Health Organisation which has also been adopted by International Maritime Organisation by the FAL Convention at section A (2.1). Copy of the model Maritime Declaration of Health is enclosed.

5. The Maritime Declaration of Health shall be forwarded at least 72 hours prior arrival of the vessel at the port. If the voyage duration from last port of departure is less than 72 hours, the Maritime Declaration of Health shall be informed to the port immediately on departure from the port. In addition, the information required by the local health authorities of the port like temperature chart, individual health declaration etc. shall also be provided by the master as per the directives of the local health authorities of the port.

6. If the master of the vessel ascertains that a person on board the vessel is exhibiting symptoms of COVID-19, the same shall be explicitly mentioned in the Maritime Declaration of Health being forwarded to the health authorities and to the port.

7. If the maritime declaration of health given by the master is found to be incorrect and not reflecting the factual conditions of health of persons on board the vessel, **the master is liable to be prosecuted as per applicable laws.** All agents of the vessel shall ensure that this information regarding possible prosecution for incorrect declaration is clearly informed to the vessel before its arrival at Indian ports.

8. In case of any suspected person on board the vessel, the master shall ensure that the suspected person is isolated in the ship's hospital, or other suitable location on the vessel. All other persons who may have come in contact with the suspected person shall also be isolated at appropriate locations as decided by the master. The master shall also ensure that all instructions issued by the Ministry of Health and Family Welfare, Govt. of India, as well as the guidance issued on dealing with COVID-19 matters by World Health Organization (WHO), International Maritime Organization (IMO) and other applicable trade bodies are complied with at all times.

9. Vessels having persons suspected of COVID-19 will necessarily be required to be monitored by the health authorities and put in quarantine, if necessary. Samples from the suspected person will be taken and tested as per the instructions of the health authorities. If the samples are tested positive, the vessel will remain in quarantine and the infected person(s) will be dealt with as per the procedures laid down by MoHFW, Govt. of India. Vessels with infected person shall also be sanitized as per the extant protocols for dealing with COVID-19 pandemic.

10. In case of medical emergency, the health authorities shall supervise transport of the patient to the designated hospital as per the procedures laid down by MoHFW, Govt. of India.

11. In the unfortunate incident for a vessel to deal with deceased person suspected of having COVID-19, the guidelines on dead body management issued by MoHFW, Govt. of India, will apply.

12. Vessels arriving from ports of infected countries identified for mandatory quarantine and travel ban by MoHFW, Govt. of India before 14 days of departure from the infected port, or having seafarers embarked on the vessel who have been in infected regions within 14 days of arrival at any Indian port shall need to comply with additional measures as given in the Annex 1. The updated list of infected countries may be obtained from the website of MoHFW, Govt. of India.

13. Vessels arriving from any port in China to have the necessary quarantine period of 14 days.

14. Stoppages of a vessel at any port of infected countries only for bunkering purposes shall not be counted for the calculation of 14 days from port of departure.

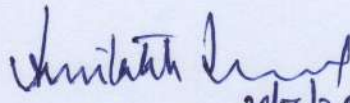
15. Vessels that have arrived at Indian port after 14 days of departure from an infected port need not comply with the additional requirements specified in Annex 1.

16. Ports which are not able not comply with the additional requirements specified in Annex 1 shall not allow the vessels to berth for vessels which have arrived within 14 days from the infected countries.

17. Pilot shall normally not be assigned to any vessel unless pratique is granted to the vessel. Prior boarding the vessel, the master of the vessel shall reconfirm to the pilot that all persons on board the vessel are healthy and there are no suspected cases of persons infected by COVID-19 on board the vessel. The master of the vessel shall also ensure that all the areas through which the pilot is likely to pass are appropriately disinfected and sanitized as per the required protocol and shall further confirm about the same to the pilot before the pilot boards the vessel.

18. All ships personnel who are likely to interact with the pilot should be wearing appropriate Personal Protective Equipment (PPE). In addition, the bridge team shall be wearing appropriate PPE at all times while the pilot is on the vessel. Pilot shall also be wearing appropriate Personal Protection Equipment (PPE).

19. If after boarding the vessel, the pilot observes any deviation regarding health aspects declared by the master, he shall forthwith inform the port and initiate appropriate action as instructed by the authorities. Such pilots may need to self quarantine, if required by the health authorities.
20. Food or water consumption shall normally be avoided by the pilot on board the vessel. However, if any food items are required to be consumed by the pilots, the master shall ensure that such items are provided in hygienic packages/ utensils.
21. It shall be ensured that the number of persons required to board the vessel is kept to the bare minimum. Personnel who may be required to board the vessel such as ship agents, cargo personnel, custom and immigration authorities etc. shall always be aware of the pandemic and have appropriate PPE while on board the vessel
22. All crafts and vehicles carrying pilot and other persons required to board the vessels shall be sanitized at appropriate intervals. Also the used PPE shall be disposed as per the appropriate protocols.
23. There is no restriction of sign on and sign off of Indian seafarers in ports in India.
24. Vessels operating solely between ports in India are to exercise due diligence and are not required to be fully bound by the aforesaid instructions.
25. All vessels and all major and minor ports are instructed to comply with the guidance given in attached Annex 2.
26. This order is issued with the approval of the Ministry of Shipping, Government of India.

  
Amitabh Kumar 20/03/2020  
Director General of Shipping

## Annex 1

Vessels arriving from ports of infected countries within 14 days of departure from the infected port, or having seafarers embarked on the vessel who have been in infected regions within 14 days of arrival at any Indian port shall comply with the following additional measures:

1. Health authorities shall grant pratique prior berthing as per necessary health protocols.
2. The mooring ropes and pilot ladders of such vessels shall be sanitized.
3. The pilot shall be provided full body protection suit.
4. Mooring boat and mooring gang to be provided with adequate PPE, if applicable.
5. Gangway to be kept in raised condition at all times.
6. No person to be permitted on board without specific permission from port authorities.
7. All personnel's boarding the vessel for cargo operations shall wear full body protection suit. Also the used PPE shall be disposed off as per the appropriate protocols.
8. Vessel staff assisting in cargo operations to also wear full body protection suit and maintain safe distance of at least 6 feet.
9. Vessel to sanitize and disinfect after the completion of cargo operations.

ANNEX 2

# Coronavirus Disease 2019 (COVID-19)

## Instructions for ports & shipping for prevention & managing outbreak of COVID-19

(Provisionally valid till 31.03.2020)

## **DISCLAIMER**

1. The content provided in this document is for information and educational purposes only and is not a substitute for professional advice or guarantee of outcome. Information is gathered and shared from reputable sources; however, DG Shipping is not responsible for errors or omissions in reporting or explanation.
2. No individuals, should use the information, resources or tools contained within to self-diagnosis or self-treat any health related condition. DG Shipping gives no assurance or warrant regarding accuracy, timelines or applicability of the content.
3. All pictures / photos used in the guidance document are taken from the internet.

The content of this document has been derived and compiled from Ministry of Health and Family Welfare (MoHFW), Ministry of Shipping (MoS), International Maritime Organization (IMO), World Health Organisation (WHO), International Chamber of Shipping (ICS) & Centre of Disease Control (CDC).

## 1. INTRODUCTION

### 1.1 OVERVIEW

World Health Organisation (WHO) China country office on 31.12.2019 has informed of cases of pneumonia of unknown cause detected in Wuhan City, Hubei Province of China.

The Chinese authorities identified a new type of coronavirus, which was isolated on 07.01.2020 by laboratory testing. It is a new strain that had not previously been detected in humans before the outbreak was reported in Wuhan, China.

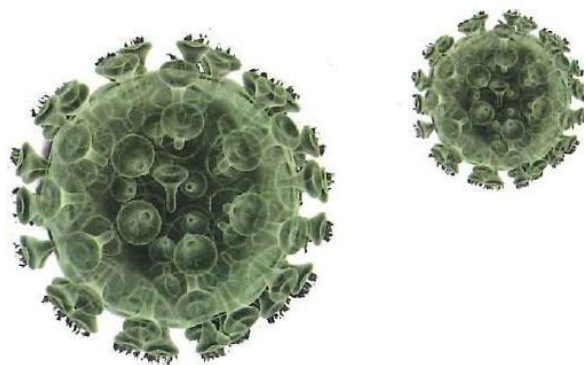
This “novel” coronavirus is now officially named as Coronavirus Disease 2019 (COVID-19). It is from the family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS - CoV) and Severe Acute Respiratory Syndrome (SARS - CoV).

WHO has been assessing this outbreak around the clock. The Novel Coronavirus (COVID-19) cases have been confirmed in large number of countries due to which the World Health Organisation (WHO) on 11.03.2020 has characterized COVID-19 as pandemic.

## 2. CORONAVIRUS

### 2.1 WHAT ARE CORONAVIRUS

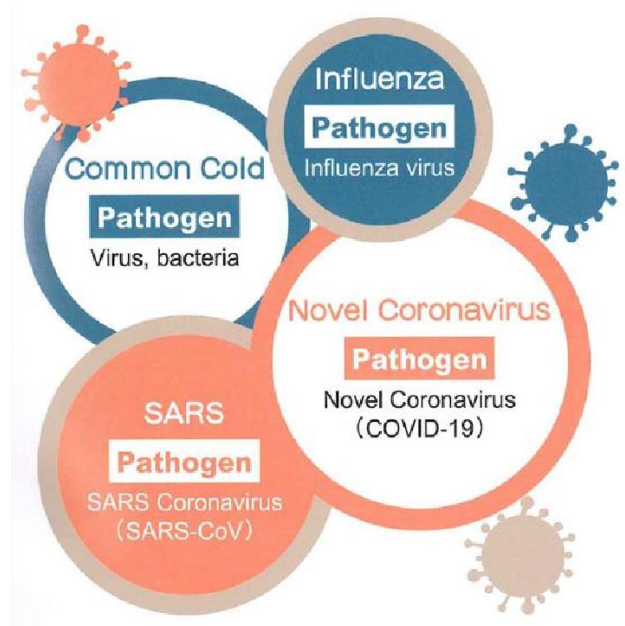
Coronaviruses (CoV) derive their name from the fact that under electron microscopic examination, each virion is surrounded by the corona. Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS - CoV) and Severe Acute Respiratory Syndrome (SARS -CoV). So far, seven types of coronavirus are infecting people.





## 2.2 WHAT IS NOVEL CORONAVIRUS

Novel coronavirus (nCoV) is a new strain that has not been previously identified in humans. This “novel” coronavirus is now officially named as Coronavirus Disease 2019 (COVID-19). COVID-19 belongs to the same big family. Evolution analysis shows that they are under different subgroup branches with different genetic sequences.



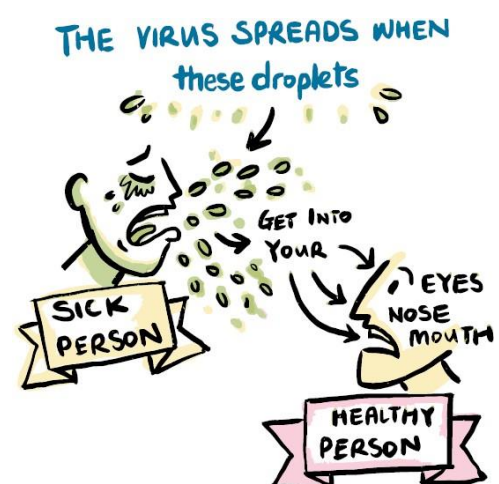
## 3. TRANSMISSION

### 3.1 DIRECT TRANSMISSION

#### Person-to-Person

COVID-19 causes respiratory disease and is mainly transmitted in person-to-person. It can happen in the following circumstances:

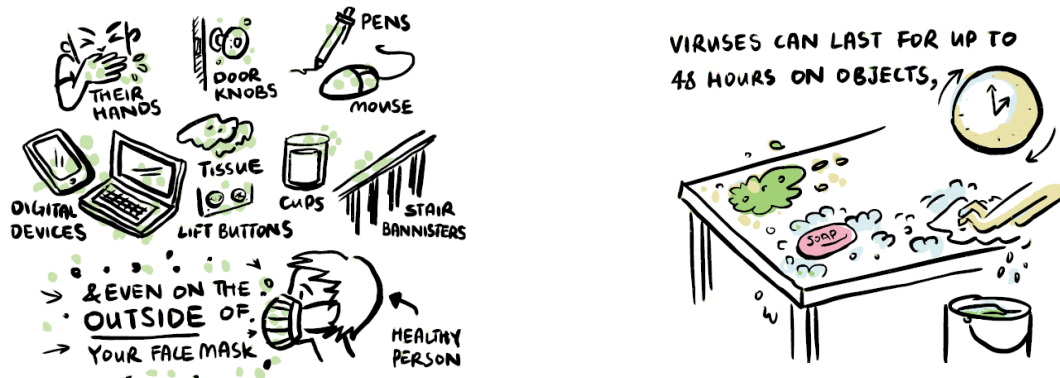
- Between people who are in close contact with one another (within about 6 feet)
- Through respiratory droplets produced when an infected person coughs or sneezes
- These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs



## 3.2 INDIRECT TRANSMISSION

### Contact with Infected Surfaces or Objects

A person can possibly get COVID-19 by touching a surface or an object (e.g. doorknobs and table) that has the virus on it and then touching his own mouth, nose, or eyes.



## 4. SIGNS & SYMPTOMS

The signs and symptoms of COVID-19 are similar to the symptoms of ordinary flu. A study of where a patient has been or whom the patient has had contact with will give clues as to whether the patient may have been exposed to COVID-19.

### 4.1 PHYSICAL SIGNS & SYMPTOMS FOR COVID-19

Reported illnesses have ranged from mild symptoms to severe illness and death for confirmed coronavirus disease 2019 (COVID-19) cases.

The following symptoms may appear 2-14 days after exposure:

- Fever
- Cough
- Shortness of breath



<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

## 4.2 VULNERABILITY

According to WHO, people of all ages can be infected by COVID-19. The following groups of people appear to be more vulnerable to becoming severely ill with the virus.



The elderly



People with pre-existing medical conditions such as asthma, diabetes and heart disease

## 4.3 PEOPLE AT HIGH RISK



Close Contacts



Health care professional

Close contact is a person who, for example, has stayed in the same cabin, participated in common activities, dined together, a cabin steward, or someone who has a contact within 1 meter or was in the closed environment with the suspect/confirmed COVID-19 case.

#### 4.4 INCUBATION PERIOD

Transmission may occur during the incubation period before a person shows signs of sickness. The incubation period of the virus is the time between the exposure and the display of symptoms. Current information suggests that the incubation period ranges from 1 to 12.5 days (with median estimates of 5 to 6 days), but can be as long as 14 days.

#### 4.5 SYMPTOMS FOR CORONAVIRUS FAMILY

	COVID-19	SARS	Influenza	Common Cough
<b>Clinical Manifestations</b>	Excessive fatigue; coughs; shortness of breaths; coughing up yellow or green mucus; chest X-ray shows scattered opacities in the lung	Coughs; breathing difficulties; fatigue; headache and diarrhea; fever	Running nose; sneezing; coughs; high temperature; muscle pain; diarrhea; vomiting	Nasal congestion; coughs; sore throat; throat discomfort; sneezing
<b>Incubation Period</b>	7-14 days	2-7 days	1-4 days	1 day
<b>Ways of Transmission</b>	Short distance droplets spread; close contact; contacts with animals	Short distance droplets spread; close contact	Coughs; sneezing and droplets spread; contact with secretions of an infected person	Droplets spread; contact with infected nasal secretions
<b>Preventive Measures</b>	Regular and frequent hand washing; check body temperature; use alcohol-based disinfectant; wear a surgical mask; enhance airflow; avoid contacts with animals or eat game meat	Cover mouth and nose when sneezing and coughing; regular and frequent hand washing; do not touch nose and mouth; wear a surgical mask; enhance airflow	Vaccination (flu shot); keep hands clean; wear a surgical mask; improve airflow	Regular hand wash, wear a surgical mask, boost your immune system

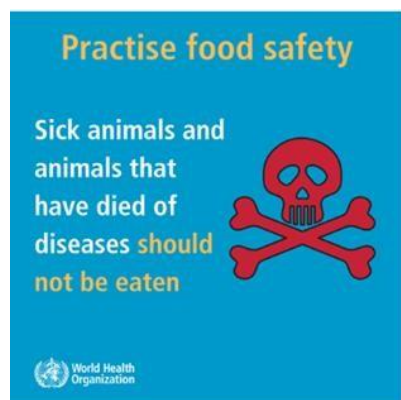
## 5. PREVENTIVE MEASURES

### 5.1 GENERAL

The best way to prevent illness is to avoid being exposed to it. WHO recommends the following actions to prevent the spread of respiratory diseases:



- Wash hand frequently
- Maintain Social Distance of at least 1 meter (3 feet) distance between yourself and anyone who is coughing or sneezing
- Avoid touching eyes, nose, and mouth
- Practice respiratory hygiene
- Seek medical care early if you have a fever, cough, and difficulty breathing
- Practice food safety



### 5.2 GUIDANCE FOR WASHING HANDS

Hand hygiene is the most important measure of reducing the spread of COVID-19. Crew members should perform hand hygiene properly and frequently, especially before touching eyes, nose, and mouth. When hands are visibly soiled or likely

**COVID-19 (Ver. 1)**

contaminated with blood and body fluid or after the contact with infected persons, it is advised to clean hands with liquid soap and water.



Follow five easy steps below –



Step 1 – Wet your hands with clean, running water



Step 2 – Lather your hands by rubbing them together with the soap. Be sure to lather the backs of your hands, between your fingers, and under your nails.



Step 3 – Scrub your hands for at least 20 seconds.



Step 4 – Rinse your hands well under clean, running water



Step 5 – Dry your hands using a clean towel.

### 5.3 GUIDANCE FOR SANITIZING HANDS

Hand sanitizer is a liquid generally used to decrease infectious agents on the hands. If hand washing facilities are not available, or when hands are not visibly soiled, perform hand hygiene with 70% to 80% alcohol-based hand sanitizer (e.g., isopropyl alcohol and ethyl alcohol). It is an effective alternative to prevent cross-transmission of infectious diseases via hands.

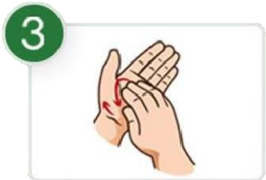
The hand-rubbing technique of using alcohol-based hand sanitizers is similar to hand washing.



Step 1 – Use a sufficient amount, around 3 to 5 ml of alcohol-based hand sanitizer to cover all surfaces of your hands.



Step 2 – Rub your palms, then back of hands, finger webs, back of fingers, thumbs, fingertips, and then wrists.



Step 3 – Rub for at least 20 seconds until your hands are dry.



Step 4 – Let the alcohol dry on your hands; do not wipe it off with a paper towel.

**Point to note:**

- Check the expiry date of alcohol-based hand sanitizer before using
- Hand sanitizers are flammable



## 6. PERSONAL PROTECTIVE EQUIPMENT

### 6.1 GENERAL

The vessel must maintain below Personal Protective Equipment (PPE) when calling infected areas.

- Disposable surgical masks
- Disposable gloves
- Eye Protection
- Face Shields
- Medical Gown
- Ray Thermometer

### 6.2 DISPOSABLE SURGICAL MASKS

Face mask provides a physical barrier to fluids and large particle droplets. Surgical mask is a type of face mask commonly used. When used properly, surgical masks can prevent infections transmitted by respiratory droplets.



Most surgical masks adopt a three-layer design which includes an outer fluid- repelling layer, a middle layer serves as a barrier to germs, and an inner moisture- absorbing layer. Mask without the above functions is not recommended as it cannot provide adequate protection against infectious diseases transmitted by respiratory droplets.

Crew members should wear surgical masks when they have respiratory infection; when taking care of persons with respiratory infection in order to reduce the spread of infection. Please note the following points when wearing a mask.

- Choose the appropriate mask size
- Perform hand hygiene before putting on a surgical mask
- The surgical mask should fit snugly over the face



### 6.3 DISPOSABLE GLOVES

Disposable safety gloves are worn to prevent cross-contamination between the infected person(s) / object(s) and people who perform cleaning/people who enter the medical care area. Change gloves if they are torn or contaminated.

When finished, place used gloves in a biohazard trash bag. Wash your hands immediately after handling these items.



### 6.4 GOGGLES



Goggles are forms of protective eyewear that usually enclose or protect the area surrounding the eye to prevent particulates, water, or chemicals from striking the eyes.

Disinfect used goggles according to the manufacturer's instructions after use.

This is required when handling sick persons or cleaning where infected people were residing.

### 6.5 FACE SHIELD

Face shield that covers the front and sides of the face provides adequate protection against the droplets

This is required when handling sick persons or cleaning where infected people were residing.



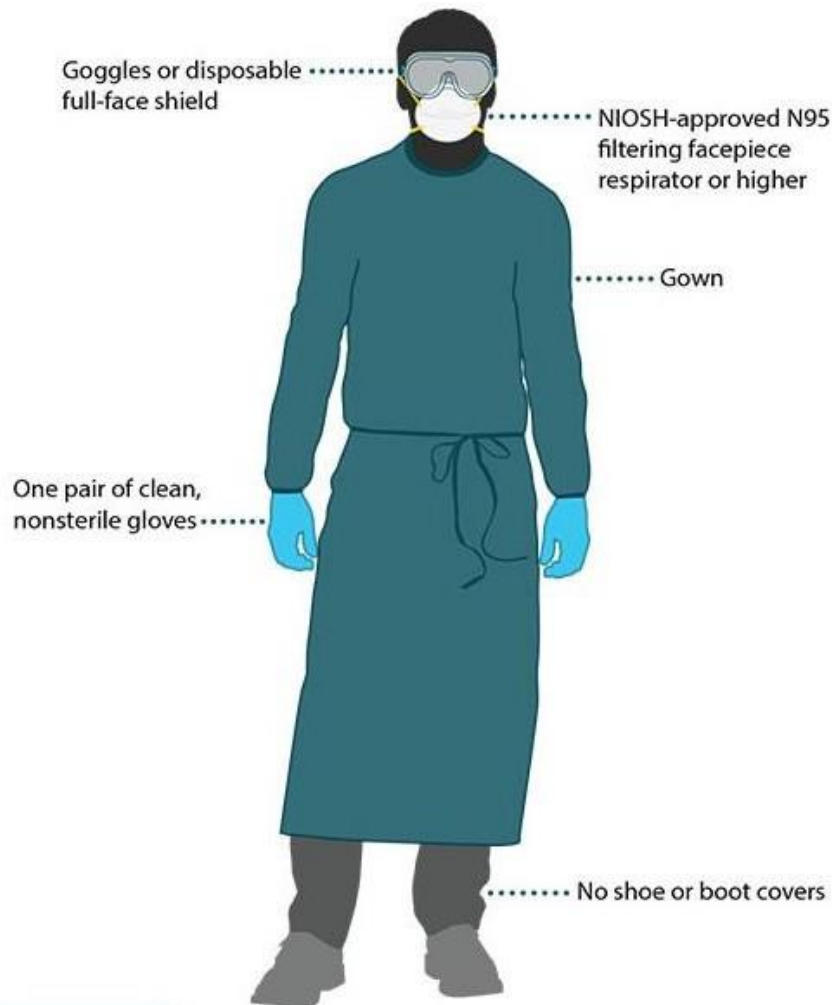
### 6.6 RAY THERMOMETER



An infrared thermometer is a thermometer that infers temperature from a portion of the thermal radiation, sometimes called black-body radiation emitted by the object being measured. This is required to measure the body temperature of the visitors and crew members.

## 6.7 MEDICAL GOWN

Nonsterile, disposable patient isolation gowns, which are used for routine patient care in healthcare settings, are appropriate for use by patients and medical care providers with suspected or confirmed COVID-19 cases. For gowns, it is essential to have sufficient overlap of the fabric so that it wraps around the body to cover the back (ensuring that if the wearer squats or sits down, the gown still protects the back area of the body).



**Note: The PPE, as depicted in the picture, is minimum PPE required for health care professionals when handling sick persons or cleaning areas where infected people were residing.**

## 7. CLEANING AGENTS & DISINFECTANTS

### 7.1 GENERAL

- Hand wash
- Hand sanitizers
- Cleaning disinfectant (bleach)
- Rubbing alcohol
- Other disinfectants

### 7.2 HAND WASH

Hand hygiene is the most important measure of reducing the spread of COVID-19. Crew members should perform hand hygiene properly and frequently, especially before touching eyes, nose and mouth. When hands are visibly soiled or likely contaminated with blood and body fluid or after the contact with infected persons, it is advised to clean hands with liquid soap and water.



### 7.3 HAND SANITIZERS



Hand sanitizer is a liquid generally used to decrease infectious agents on the hands. If hand washing facilities are not available, or when hands are not visibly soiled, performing hand hygiene with 70% to 80% alcohol-based hand sanitizer (e.g. isopropyl alcohol and ethyl alcohol) is an effective alternative to prevent cross transmission of infectious diseases via hands.

## 7.4 BLEACH

Bleach is a strong and effective disinfectant. Its active ingredient, sodium hypochlorite, denatures protein in micro-organisms and is therefore effective in killing bacteria, fungi, and viruses. Household bleach works quickly and is widely available at a low cost. Diluted household bleach is thus recommended for the disinfection of the environment.



### Application

- Dilute and use bleach in a well-ventilated area.
- Put on appropriate Personal Protective Equipment (e.g., mask, gloves, safety goggles, and plastic apron) when diluting or using bleach as it irritates mucous membranes, the skin, and the airway.
- Mix bleach with cold water as hot water decomposes the active ingredient of bleach and renders it ineffective.
- Bleach containing 5.25% sodium hypochlorite. Properly dilute the bleach to achieve appropriate concentration as follows:
  - 1:99 diluted household bleach (mixing 1 part of 5.25% bleach with 99 pieces of water) is used for general household cleaning and disinfection.
  - 1:49 diluted household bleach (mixing 1 part of 5.25% bleach with 49 parts of water) is used for surfaces or articles contaminated with vomitus, excreta and secretions.
  - 1:4 diluted household bleach (mixing 1 part of 5.25% bleach with 4 parts of water) is used for surfaces or articles contaminated with blood spillage.
- Make adjustments to the amount of bleach added if its concentration of sodium hypochlorite is above or below 5.25%.
  - Calculation: Multiplier of the amount of bleach added =  $5.25$  concentration of sodium hypochlorite in bleach
  - For example, when diluting a bleach containing only 5% sodium hypochlorite, the multiplier is  $5.25 / 5 = 1.05$ . That means  $10\text{ml} \times 1.05 = 10.5\text{ml}$  of bleach should be used when preparing a bleach solution.
- Use a tablespoon or measuring cup for accurate measurement of the amount of bleach added.
- Clean all surfaces, frequently touched surfaces and floors with bleach.
- Leaving the bleach solution for a contact time of at least 10 minutes is recommended.

### Point to note:

- ❑ Avoid using bleach on metals, wool, nylon, silk, dyed fabric and painted surfaces.
- ❑ Avoid touching the eyes. If bleach gets into the eyes, immediately rinse with water for at least 15 minutes and consult a doctor.
- ❑ Do not use bleach together with other household detergents as this reduces its effectiveness in disinfection and causes dangerous chemical reactions. For example, a toxic gas is produced when bleach is mixed with acidic detergents such as those used for toilet cleaning. This can result in accidents and injuries. If necessary, use detergents first and rinse thoroughly with water before using bleach for disinfection.
- ❑ Undiluted bleach liberates a toxic gas when exposed to sunlight, thus store in a cool, shaded place and out of reach of children.
- ❑ Sodium hypochlorite decomposes with time. To ensure its effectiveness, purchase recently produced bleach and avoid over-stocking.
- ❑ For effective disinfection, use diluted bleach within 24 hours after preparation as decomposition increases with time if left unused.

## 7.5 RUBBING ALCOHOL

- ❑ Alcohol (e.g., isopropyl 70% and ethyl alcohol 60%) can be used to wipe down surfaces where the use of bleach is not suitable e.g. metal.



## 7.6 THE USE OF OTHER DISINFECTANTS

- ❑ Check with the manufacturer that they are active against coronaviruses.
- ❑ Disinfectants should be prepared and applied in accordance with the manufacturer's guidelines. Ensure that appropriate contact time is given before removing any disinfected materials.



### BEFORE CLEANING

- Where possible, seal off the areas where the suspected/confirmed case has visited before carrying out cleaning and disinfection of the contaminated environmental surfaces. This is to prevent unsuspecting persons from being exposed to those surfaces
- Keep windows open for ventilation as disinfectants/bleach will be used for cleaning
- Cleaning crew member(s) should be attired in suitable Personal Protective Equipment (PPE)

### DURING CLEANING

- Mop floor with bleach (dilute 1 part bleach in 50 parts water, or 1000 ppm)
- Wipe all frequently touched areas at least daily with chemical disinfectants according to manufacturer's instructions, bleach solution or alcohol (e.g., isopropyl 70% or ethyl alcohol 70%) for areas where the use of bleach is not suitable. Allow air to dry as well
  - Light controls
  - Armrests
  - Doorknobs / handrails
  - Keyboards / lavatory surfaces
  - Lift buttons
  - Seatbacks
  - Tables
- Wipe down walls up to 3 meters in height as well as blinds with bleach
- Remove curtains/fabrics/quilts for washing with the preferably hot water cycle. For hot-water laundry cycles, wash with detergent or disinfectant in the water at 70°C for at least 25 minutes. If low-temperature (i.e., < 70°C) laundry cycles are used, choose a chemical that is suitable for low-temperature washing when used at the proper concentration
- Disinfectants should be applied to surfaces using a damp cloth. They should not be applied to surfaces using a spray pack, as coverage is uncertain, and spraying may promote the production of aerosols. The creation of aerosols caused by splashing liquid during cleaning should be avoided. A steady sweeping motion should be used when cleaning either floors or horizontal surfaces to prevent the creation of aerosols or splashing. Cleaning methods that might aerosolize infectious material, such as the use of compressed air, must not be used
- Leave the disinfected area and avoid using the area the next day
- Gloves should be removed and discarded if they become soiled or damaged. A new pair of gloves should be worn to continue cleaning.

## AFTER CLEANING

- ❑ Disinfect non-porous cleaning equipment used in one room before using for other rooms. If possible, keep the disinfecting equipment separated from other routine equipment
- ❑ Disinfect used goggles according to manufacturer's instructions after use
- ❑ Disinfect buckets by soaking in bleach (dilute 1 part bleach in 50 parts water, or 1000 ppm, at least 10 minutes), disinfectant solution or rinse in hot water before filling
- ❑ Discard equipment made of cloths / absorbent materials into biohazard bags after cleaning each area to prevent cross contamination
  - Mop head
  - Wiping cloths
- ❑ Discard all used PPEs in a double-bagged biohazard bag securely sealed and labeled
- ❑ Wear a new pair of gloves and fasten the double-bagged biohazard bag with a cable tie
- ❑ Wash hands with alcohol-based gels or liquids rather than soap to disinfect the hands immediately
  - Before / after every contact with an infected person
  - After the removal of PPE
  - Upon the completion of cleaning



## 8. GUIDANCE FOR SHIPS

### 8.1 REQUEST FOR INFORMATION PRIOR ARRIVAL

- Request the agents / terminal to get the latest information in port concerning COVID-19
- Ensure a copy of WHO publication - “Handbook for the management of public health events” is available on the vessel



### 8.2 PREPARATION BEFORE ARRIVAL

#### RISK ASSESSMENT

- Carry out a risk assessment to check if any unidentified hazards may occur, and all controls are in place

#### STORES / SPARES / PROVISIONS

- The procurement of stores and provisions in high-risk areas is prohibited. Procure all stores, including the cleaning agents and PPE required for COVID-19 before arriving high-risk areas
- In case of any emergency spares or stores, please liaise with the vessel manager for procurement
- Considering the present situation of the pandemic at high-risk ports, the vessel might have an extended stay. Procure sufficient provisions and freshwater before calling high-risk ports

#### CREW CHANGE

- Crew change is prohibited from infected areas (as per MoHFW & MEA advisory on travel restrictions)
- Considering the emergency situation, flag states would issue necessary dispensation for the crew relief

#### SHORE LEAVE

- All seafarers need to avoid availing shore leave in infected regions and consider the risks involved before desiring to go ashore in other regions. Availing shore leave during the pandemic may need to be avoided and used only in exigencies with necessary precautions.



### 8.3 SHIP SHORE INTERFACE

- The crew members must don all PPE as required, including mask before the first interface with the port is made
- Pilot: Check the temperature of the pilot with a ray gun when he boards. If the pilot is not wearing any PPE, offer the same to the pilot. The access to the bridge, if possible, should be provided from outside the accommodation
- Ensure the social distance is maintained from the pilot. In case of any food or beverage is given to pilot, the same should preferably be provided in disposable utensils if feasible
- Establish a sanitation station at the gangway. Provide alternative arrangements for handwash, sanitizers if possible. Check the temperature of all visitors boarding the vessel. In case any visitor shows symptoms of the disease, prohibit boarding
- The vessel can use a Pre-boarding questionnaire for suspected visitors
- Designated one room for ship/shore to interface with agent, authorities, stevedores, or any other shore personnel. Do not allow access to different areas on the vessel
- Clean the above-designated spaces at regular intervals (e.g., every 4 hours) as per the cleaning guidelines
- Do not allow shore personnel to bring food items on board.



### 8.4 GALLEY HYGIENE & SAFETY

- Maintain a high level of cleanliness in the galley
- Increase the frequency of cleaning the galley and stores
- Chief Cook and Messman must not interact with shore personnel unless absolutely necessary
- Do not allow shipboard or shore personnel to enter galley if not required
- Follow hygiene and food safety guidelines in the galley as per health and safety manual
- If possible, keep the utensils for each crew member separate. Do not allow the sharing of food, utensils. In case it is required to provide food for shore personnel, use disposable utensils

## 8.5 GARBAGE AREA

- Ensure all garbage bins in the galley and accommodation area are well covered
- Wear PPE as required when handling garbage
- Clean and disinfect garbage spaces daily

## 8.6 ACCOMMODATION & ENGINE ROOM

- Maintain a log of all crew members on board twice daily as per the below format.

Record of Symptoms for CORONAVIRUS					
Vessel Name				Date	
S.no	Name	Rank	Body Temperature	Look for below symptoms. If the crew member show any symptoms, write comments , else write no symptoms )	
				Fever / Headache	Cough / Sore Throat

- Increase the frequency of cleaning in accommodation and engine room
- Disinfect the accommodation as per the cleaning guidelines frequently.
- Do not allow entry of visitors in the engine room
- Do not carry out maintenance on the sewage and grey water system.
- Wear PPE when dosing the sewage treatment plant.

## 8.7 AFTER DEPARTURE

- Carry out a thorough cleaning and disinfection of all areas onboard.
- Continue maintaining the coronavirus symptom log for all crew members for at least 21 days or as per specified by the requirements of next port of call

## 8.8 ACTION TO BE TAKEN IN CASE OF SUSPECTED INFECTION ON BOARD DEPARTURE

Early detection, prevention, and control of COVID-19 on the ship is important to protect the health of other crewmembers and to avoid transmission of the virus. Arrangements must be made to disembark the infected crew member as soon as possible who are suspected of having COVID-19.

Following cases represents a suspect

A patient with acute respiratory illness (fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness of breath), and with no other set of causes that fully explains the clinical presentation and a history of travel to or residence in a country/ area or territory reporting local transmission of (COVID-19) during the 14 days prior to the onset of the symptoms.

Or

A patient with any acute respiratory illness and having been in contact with a confirmed or suspected COVID-19 case during the 14 days before the onset of the symptoms.

Or

A patient with a severe acute respiratory infection (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath, and requiring hospitalization and with no other set of causes that fully explain the symptoms.

Once the suspect case has been identified,

- Establish contact with CIRM / Medical Service Provider as soon as possible
- Isolate the crew member in the hospital with possible symptoms of COVID-19 to minimize the transmission of this virus. The sick patient must not leave the hospital or the confined area
- Put air condition on fresh air mode (though it has not been established that COVID-19 can spread through air)
- Ask the sick person to wear a facemask (a surgical mask, not N95) as soon as they are identified
- Maintain a distance of 6 feet from the sick person while interviewing, escorting, or providing other assistance
- Keep interactions with sick people as brief as possible. Limit the number of people who interact with sick people. A single person must give care and meals to an infected person
- Respiratory hygiene should be practiced by all, especially ill persons, at all times. Respiratory health refers to covering the mouth and nose during coughing or sneezing using medical masks, cloth masks, tissues, or flexed elbow, followed by hand hygiene. Discard materials used to cover the mouth or nose or clean them appropriately after use (e.g., wash handkerchiefs using regular soap or detergent and water)
- Wear a medical mask fitted tightly to the face when in the same room with the ill person. Do not touch masks during use. If the mask gets wet or dirty with secretions, change it immediately. Discard the mask after use and perform hand hygiene after removal of the mask
- Wear all other PPE when providing care for the sick person or when cleaning the areas where the sick person has resided
- Perform hand hygiene following all contact with ill persons or their immediate environment. Hand hygiene should also be performed before and after preparing food, before eating, after

using the toilet, and whenever hands look dirty. If hands are not visibly soiled, alcohol-based hand rub can be used. Perform hand hygiene using soap and water when hands are visibly soiled. Avoid direct contact with body fluids, particularly oral or respiratory secretions, and stool. Use disposable gloves to provide oral or respiratory care and when handling stool, urine, and waste

- ❑ Avoid other types of possible exposure to ill persons or contaminated items in their immediate environment (e.g., avoid sharing toothbrushes, cigarettes, eating utensils, dishes, drinks, towels, washcloths, or bed linen). Eating utensils and meals should be cleaned with either soap or detergent and water after use and may be reused instead of being discarded
- ❑ Clean and disinfect bathroom and toilet surfaces at least once daily with a regular household disinfectant containing a diluted bleach solution (1-part bleach to 99 parts water)
- ❑ Clean and disinfect frequently touched surfaces such as bedside tables, bed frames, and other bedroom furniture daily with a regular household disinfectant containing a diluted bleach solution (1-part bleach to 99 parts water)
- ❑ Clean clothes, bedclothes, bath and hand towels, etc. of ill persons using regular laundry soap and water or machine wash at 60 – 90°C with common household detergent. Dry it thoroughly. Place contaminated linen into a laundry bag. Do not shake soiled laundry and avoid direct contact with the skin and clothes with the contaminated materials
- ❑ Gloves, tissues, masks, and other waste generated by ill persons or in the care of ill persons should be placed in a lined container in the ill person’s room before disposal with other household waste
- ❑ All crewmembers should be considered close contact after a case on board. Their health should be monitored for 14 days from the last day of possible contact Seek immediate medical attention if they develop any symptoms, particularly fever, respiratory symptoms such as coughing or shortness of breath, or diarrhea
- ❑ During disembarkation, ensure minimize exposure to other crew members
- ❑ The vessel must make a detailed report to the competent authority at the next port of call
- ❑ The vessel needs to be thoroughly cleaned after the disembarkation of the suspected case

## **9. ROLES AND RESPONSIBILITIES OF PORT STAKEHOLDERS**

### **9.1 PORT HEALTH OFFICER (PHO)**

1. Pre arrival documents verifications for all foreign vessels calling at port, 72 hours prior to arrival
2. First boarding Authority for ships originating and transiting in and through (infected countries as per the travel advisory issued by MEA & MoHFW) in the last 14 days
3. Issuing of advisories to coordinating authorities and stake holders
4. Sounding alert to coordinating officers in case of suspected case aboard the vessel
5. Issuing guidelines for and ensuring disinfection of vessel with suspected case to the designated hospitals for provision of medical care & isolation
6. Demonstration of correct use and disposal of Personal Protective Equipment’s
7. Shore medical assistance (non-infectious) for the crew members will be notified for issuance of shore pass
8. To assist Deputy Conservator (DC) & Traffic Manager (TM) by way of specific instructions, if any

9. To collect self-reporting form for sign off Indian crew from Covid-19 affected countries in last 14 days & submit it to district Integrated Disease Surveillance Programme (IDSP) for follow up upto 28 days
10. To submit daily reporting to Directorate General Of Health Services (DGHS), New Delhi and district IDSP
11. To review and update PHECP (Public Health Emergency Contingency Plan) Committee periodically

### **9.2 CHIEF MEDICAL OFFICER (CMO)**

1. To arrange adequate stock of PPE's, hand sanitizers, masks and disinfectants solution for use in the ports
2. To keep the ambulance and team with PPE's ready for transport of sick crew / passengers / any reported sick pilots / port staff to designated referral hospital for treatment
3. To keep a record of the such cases and monitor their status
4. To ensure that the staff of medical department for daily supervision
5. Ensure that the duty roster of the drivers is maintained and communicated to PHO
6. Monitors the ambulance is in good working condition
7. To ensure that the ambulance used for transfer of suspect case is disinfected after each transfer
8. To ensure that as per Bio Medical Waste (BMW) guidelines of the safe disposal of used PPE's is set in place

### **9.3 TRAFFIC MANAGER (TM)**

In the event of suspect cases of novel coronavirus (COVID-19) on board, Traffic Manager shall:

1. Ensure that the department staffs have personal protection equipment (PPE's) on them which includes
  - a) Disposable gowns
  - b) Gloves
  - c) Face masks triple layered
2. Discard the used PPE's when done in specially earmarked disposable bags and given to hospital for safe disposal
3. Ensure that the PPE's are made available to all the staffs when they board the ship which has suspect case of novel corona virus (COVID-19) or coming from affected countries
4. Inform PHO if crew member / passengers are showing signs and symptoms of novel corona virus (COVID-19)
5. Co-ordinate with PHO in screening of vessels coming from COVID-19 affected countries

### **9.4 DEPUTY CONSERVATOR (DC) / HARBOUR MASTER (HM)**

1. Since pilots are the first person to come in contact with ships while they berth, the Deputy Conservator / Harbour Master should ensure that no pilot shall board the ship without proper PPE's.
2. Pilots to be provided with necessary PPE's such as mask, disposable gloves and hand sanitizer etc.
3. Pilots to be instructed to keep safe distance and stay at least 1 meter away from the ships staff,

avoid close contact with people suffering from acute respiratory infections, frequent hand-washing or use hand sanitizer especially after direct contact with ill people or their environment, practice cough etiquette (maintain distance, cover mouth and sneeze on disposable tissues or clothing, and wash hands)

4. Ensure that Tugboat staffs are not allowed to board the vessel during pilotage operations
5. Maintain record of the names of the pilot and other staff who board the ships coming from affected countries while berthing and sailing out
6. Report to PHO if any suspected crew members are showing COVID-19 disease symptoms
7. Report to PHO if any pilots, port staff are showing COVID-19 disease symptoms
8. Ensure that pilots with COVID-19 disease symptoms are not sent for pilotage operations
9. Ensure sewage and garbage disposals are restricted for the vessels coming from Covid-19 affected countries in last 14 days and allowed only after they are properly dis-infected

## 9.5 SHIP AGENTS

1. Inform the PHO about ships coming from Covid-19 affected countries
2. Following documents should be submitted 72 hours prior to arrival of ships:
  - a. Maritime declaration of health with attached scheduled showing the health details of the persons on board
  - b. Port of call list with arrival and departure dates
  - c. The crew list with port and date of embarkation
  - d. Medical log copy for the last 1 month
  - e. Any shore medical visit or Radio medical advice or medical evacuation or sign off done in last 1 month
  - f. Ship sanitation exemption certificate/medicine chest certificate
  - g. IHR 2005 Covid-19 form (Annexure-6)
3. To inform master of ship and ensure all shore visits (medical & non medical) except emergency for the crew are to be planned before arrival through email
4. To ensure procedures for sign on, sign off, shore pass & visitors pass for ships are followed
5. Provide all information regarding suspect case of Covid-19 to DC / HM and PHO, so that arrangements can be made for evacuation of the suspected crew to hospital if required
6. To inform master of ship and ensure the availability of adequate number of PPE's on board for all crew and disinfectants, hand sanitizers, if not available, then provisions of the same to be made upon berthing
7. Inform PHO, about any ships visiting minor ports and also submit the documents asked for, clearance at minor ports by customs authorities / port officers of minor ports
8. Provide all logistics support to PHO by way of arrangements of port entry passes to additional staffs and their vehicles.
9. Ensure that field agents are provided with PPE's i.e disposable gowns, gloves, face masks before boarding a suspected ship and disposed off properly as per BMW guidelines
10. Agents to keep safe distance and stay at least 1 meter away from the ships staff, avoid close contact with people suffering from acute respiratory infections, frequent hand-washing or use hand sanitizer especially after direct contact with ill people or their environment, practice cough etiquette

(maintain distance, cover mouth and sneeze on disposable tissues or clothing, and wash hands)

## 9.6 SHIP MASTER

D

1. To Submit the following documents as per the instructions of PHO and submit by email 3 days before arrival through shipping agents:
  - a. Maritime Declaration of Health with attached scheduled showing the health details of the persons on board
  - b. Port of call list with arrival and departure dates
  - c. The crew list with port and date of Embarkation
  - d. Medical log copy for the last 1 month
  - e. Any shore medical visit or Radio-Medical Advice or Medical evacuation or sign off done in last 1 month
  - f. Ship Sanitation Exemption Certificate / Medicine Chest Certificate
  - g. IHR-2005 Covid-19 Form
2. All ships calling from affected regions are to maintain temperature chart report as such twice daily 2 days prior to their arrival, on arrival, upon berthing, during ports stay and at the time of sail out through shipping agent to PHO by email
3. All newly joined crew from Covid-19 affected countries are to be monitored on board for 14 days
4. If the crew develop any signs and symptoms of COVID-2019, the crew are to be isolated on board in their cabin and ensure radio medical advice is taken and report to nearest PHO for evacuation, if required
5. Ensure all shore visitors are restricted to ships conference / meeting room only
6. Restrict non-essential visitors to the ship
7. Maintain record of all the visitors and port officials who have boarded the ship
8. The ship must have adequate stock of 3 layered surgical masks, hand sanitizer chemical disinfectants, PPE's kit, Bio hazard bags for safe disposal of masks, PPE's kits and bio-medical wastes
9. All ship staffs to keep safe distance and stay at least 1 meter away from the ships staff, avoid close contact with people suffering from acute respiratory infections, frequent hand-washing or use hand sanitizer especially after direct contact with ill people or their environment, practice cough etiquette (maintain distance, cover mouth and sneeze on disposable tissues or clothing, and wash hands)

## 9.7 CUSTOM OFFICIALS

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1. In the event of suspect cases of novel coronavirus (COVID-19) on board, custom officials shall: Ensure that the department staffs have personal protection equipment (PPE's) on them which includes
  - a) Disposable gowns
  - b) Gloves
  - c) Face masks triple layered
2. Discard the used PPE's when done in specially earmarked disposable bags and given to hospital for safe disposal
3. Ensure that the PPE's are made available to all the custom officials / staffs when they board the ship which has suspect case of novel corona virus (COVID-19) or coming from affected countries

4. Inform PHO if crew member / passengers are showing signs and symptoms of novel corona virus (COVID-19)
5. Assist the PHO in clearance crew and the baggage's, if the suspected case is to be quarantined or shifted to the designated hospital
6. At minor ports, the customs officials along with port officer shall clear the ship for berthing based on health clearance message / Email by PHO
7. All custom officials to keep safe distance and stay at least 1 meter away from the ships staff, avoid close contact with people suffering from acute respiratory infections, frequent hand-washing or use hand sanitizer especially after direct contact with ill people or their environment, practice cough etiquette (maintain distance, cover mouth and sneeze on disposable tissues or clothing, and wash hands)

## 9.8 IMMIGRATION

1. In the event of suspect cases of novel coronavirus (COVID-19) on board, immigration officials shall:

Ensure that the department staffs have personal protection equipment (PPE's) on them which includes

d) Disposable gowns

e) Gloves

f) Face masks triple layered

2. Discard the used PPE's when done in specially earmarked disposable bags and given to hospital for safe disposal

3. Ensure that the PPE's are made available to all the immigration officials / staffs when they board the ship which has suspect case of novel corona virus (COVID-19) or coming from affected countries

4. Inform PHO if crew member / passengers are showing signs and symptoms of novel corona virus (COVID-19)

5. Sick crew (Non-infectious case) must be cleared for shore treatment after clearance from the PHO

6. Restrict permissions to non-essential visitors

7. For ships coming from affected regions, shore permit shall not be issued

8. Assist the PHO in clearance of the crew if the suspected case is to be quarantined and shifted to designated hospitals

9. At minor ports, the customs officials along with port officer shall clear the ship for berthing based on health clearance message / Email by PHO

10.

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11 custom officials to keep safe distance and stay at least 1 meter away from the ships staff, avoid close contact with people suffering from acute respiratory infections, frequent hand-washing or use hand sanitizer especially after direct contact with ill people or their environment, practice cough etiquette (maintain distance, cover mouth and sneeze on disposable tissues or clothing, and wash hands)

## 9.9 SECURITY AGENCIES / CISF

1. In the event of suspect cases of novel coronavirus (COVID-19) on board, immigration officials shall:



- Ensure that the department staffs have personal protection equipment (PPE's) on them which includes
- g) Disposable gowns
  - h) Gloves
  - i) Face masks triple layered
2. Discard the used PPE's when done in specially earmarked disposable bags and given to hospital for safe disposal
  3. Ensure that the PPE's are made available to all the immigration officials / staffs when they board the ship which has suspect case of novel corona virus (COVID-19) or coming from affected countries
  4. Inform PHO if crew member / passengers are showing signs and symptoms of novel corona virus (COVID-19)
  5. Sick crew (Non-infectious case) must be cleared for shore treatment after clearance from the PHO
  6. Restrict permissions to non-essential visitors
  7. For ships coming from affected regions, shore permit shall not be issued
  8. Assist the PHO in clearance of the crew if the suspected case is to be quarantined and shifted to designated hospitals
  9. At minor ports, the customs officials along with port officer shall clear the ship for berthing based on health clearance message / Email by PHO
  10. All custom officials to keep safe distance and stay at least 1 meter away from the ships staff, avoid close contact with people suffering from acute respiratory infections, frequent hand-washing or use hand sanitizer especially after direct contact with ill people or their environment, practice cough etiquette (maintain distance, cover mouth and sneeze on disposable tissues or clothing, and wash hands)

## 9.10 TERMINAL OPERATORS

1. In the event of suspect cases of novel coronavirus (COVID-19) on board, immigration officials shall:  
Ensure that the department staffs have personal protection equipment (PPE's) on them which includes
  - j) Disposable gowns
  - k) Gloves
  - l) Face masks triple layered
2. Discard the used PPE's when done in specially earmarked disposable bags and given to hospital for safe disposal
3. Ensure that the PPE's are made available to all the immigration officials / staffs when they board the ship which has suspect case of novel corona virus (COVID-19) or coming from affected countries
4. Inform PHO if crew member / passengers are showing signs and symptoms of novel corona virus (COVID-19)
5. Sick crew (Non-infectious case) must be cleared for shore treatment after clearance from the PHO
6. Restrict permissions to non-essential visitors
7. For ships coming from affected regions, shore permit shall not be issued
8. Assist the PHO in clearance of the crew if the suspected case is to be quarantined and shifted to designated hospitals
9. At minor ports, the customs officials along with port officer shall clear the ship for berthing based

on health clearance message / Email by PHO

10. All custom officials to keep safe distance and stay at least 1 meter away from the ships staff, avoid close contact with people suffering from acute respiratory infections, frequent hand-washing or use hand sanitizer especially after direct contact with ill people or their environment, practice cough etiquette (maintain distance, cover mouth and sneeze on disposable tissues or clothing, and wash hands)

## 9.11 SHIP SUPPLIERS / SHIP CHNDLERS

1. In the event of suspect cases of novel coronavirus (COVID-19) on board, immigration officials shall:

Ensure that the department staffs have personal protection equipment (PPE's) on them which includes  
m) Disposable gowns

n) Gloves

o) Face masks triple layered

2. Discard the used PPE's when done in specially earmarked disposable bags and given to hospital for safe disposal

3. Ensure that the PPE's are made available to all the immigration officials / staffs when they board the ship which has suspect case of novel corona virus (COVID-19) or coming from affected countries

4. Inform PHO if crew member / passengers are showing signs and symptoms of novel corona virus (COVID-19)

5. Sick crew (Non-infectious case) must be cleared for shore treatment after clearance from the PHO

6. Restrict permissions to non-essential visitors

7. For ships coming from affected regions, shore permit shall not be issued

8. Assist the PHO in clearance of the crew if the suspected case is to be quarantined and shifted to designated hospitals

9. At minor ports, the customs officials along with port officer shall clear the ship for berthing based on health clearance message / Email by PHO

10. All custom officials to keep safe distance and stay at least 1 meter away from the ships staff, avoid close contact with people suffering from acute respiratory infections, frequent hand-washing or use hand sanitizer especially after direct contact with ill people or their environment, practice cough etiquette (maintain distance, cover mouth and sneeze on disposable tissues or clothing, and wash hands)