

## ANAVE – Circular de Régimen Interior

Madrid, 4 de marzo de 2020

Ref: SMA 12/2020/AB

### Asunto: Coronavirus: Nueva actualización de las últimas informaciones recibidas

Muy Srs. nuestros:

En el día de hoy, hemos recibido de varias fuentes nueva información sobre el brote del Coronavirus (COVID-19), que por su interés les adjuntamos en varios Anexos y que incluiremos mañana en el repositorio de documentos dedicado a este asunto en la web de ANAVE.

Las últimas novedades a este respecto son las siguientes:

- **La Cámara Naviera Internacional (ICS)** nos ha enviado la primera edición de su **guía** “*Coronavirus (COVID-19): Guidance for Ship Operators for the Protection of the Health of Seafarers*” (ver **Anexo 1**), de 24 páginas, cuya elaboración ha contado con el respaldo y asesoramiento de la OMI y la OMS, entre otras organizaciones. Tienen previsto actualizarla cuando sea conveniente. También, nos han remitido 3 carteles auto explicativos (ver **Anexo 2**) titulados:
  - “COVID-19: Protect yourself and others from getting sick”.
  - “COVID-19: Practise Food Safety”.
  - “Stay healthy while travelling”.

Vamos a preparar versiones en castellano de estos carteles que les enviaremos próximamente, por si les fueran de utilidad.

La siguiente tabla, elaborada igualmente por ICS, resume la situación a fecha de 3 de marzo:

Región	Casos totales confirmados (fallecidos) a 3 marzo
Global	90.870 (3012)
China	80.304 (2946)
Fuera de China	10.566 (166)
<b>Total países afectados</b>	<b>72</b>

- **La Subdirección General de Normativa Marítima y Cooperación Internacional de la DGMM** nos ha enviado 2 Circulares (ver **Anexo 3**), publicadas por la OMI el 21 de febrero y 2 de marzo respectivamente, sobre:
  - Circ. 4204/Add.2: Declaración conjunta de OMI y OMS sobre la respuesta al brote de COVID-19.
  - Circ. 4204/Add.3: en la que la OMI circula una guía de la OMS titulada: Consideraciones operacionales para la gestión de los casos y brotes de COVID-19 a bordo de los buques, de fecha 24 de febrero, que tiene unos contenidos bastante similares en muchos aspectos a los de la guía de ICS.
- **La CEOE** nos ha remitido el documento “Procedimiento de actuación para los servicios de prevención de riesgos laborales frente a la exposición al nuevo Coronavirus (SARS-COV-2)” (ver **Anexo 4**), elaborado por el Ministerio de Sanidad, Consumo y Bienestar Social en colaboración con el Ministerio de Trabajo y Economía Social, organizaciones sindicales, etc.

Muy atentamente,

Manuel Carlier  
Director General



International  
Chamber of Shipping

Shaping the Future of Shipping

# Coronavirus (COVID-19)

## Guidance for Ship Operators for the Protection of the Health of Seafarers



## **Coronavirus (COVID-19)**

### Guidance for Ship Operators for the Protection of the Health of Seafarers

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The International Chamber of Shipping (ICS) is the global trade association representing national shipowners' associations from Asia, the Americas and Europe and more than 80% of the world merchant fleet.

Established in 1921, ICS is concerned with all aspects of maritime affairs particularly maritime safety, environmental protection, maritime law and employment affairs.

ICS enjoys consultative status with the UN International Maritime Organization (IMO).



# **Coronavirus (COVID-19)**

## Guidance for Ship Operators for the Protection of the Health of Seafarers



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# 1 Introduction

In response to the current coronavirus (COVID-19) outbreak, this Guidance has been produced by the International Chamber of Shipping (ICS) to support all types of ships which operate in international waters. The purpose is to help shipping companies follow advice provided by United Nations agencies including the World Health Organization (WHO), the International Maritime Organization (IMO) and the International Labour Organization (ILO), as well as the European Centre for Disease Prevention and Control (ECDC).

COVID-19 – a virus which can lead to respiratory disease and pneumonia – was first reported in December 2019 in Wuhan, China. More than 90,000 cases have been reported at the time of going to print, including several thousand deaths. While most of these have been concentrated in China, the virus now appears to be spreading globally. No vaccine is currently available, and the focus of health authorities worldwide has been containment of the virus through preventative measures to limit and slow down widespread transmission.

The WHO has declared the outbreak a Public Health Emergency of International Concern under the WHO International Health Regulations (IHR).

This severe public health challenge requires close co-operation between governments and shipping companies engaged in maritime trade, in order to protect the health of seafarers (and passengers) as well as the general public.

ICS is grateful for the support of the following organisations in preparing this Guidance: IMO, ILO, WHO, International Maritime Health Association (IMHA), European Centre for Disease Prevention and Control (ECDC), Mediterranean Shipping Company S.A. (MSC) and Wilhelmsen Ships Service.



## 2 Port Entry Restrictions

WHO, as at 3rd March 2020, has not currently recommended any international travel or trade restrictions, and according to the IHR (and other international regulations) ships shall not be refused 'free pratique' by the IHR state parties for public health reasons, i.e. permission to enter a port, embark or disembark discharge or load cargo or stores. The IHR states Parties may subject granting free pratique to inspection, and, if a source of infection or contamination is found on board, conduct necessary, disinfection, decontamination, disinsection or deratting, or other measures necessary to prevent spread of the infection or contamination.

The WHO IHR can be available at [www.who.int/ihr/publications/9789241580496/en/](http://www.who.int/ihr/publications/9789241580496/en/)

Nevertheless, many governments have now introduced national and local restrictions including:

- Delayed port clearance;
- Prevention of crew or passengers from embarking or disembarking (preventing shore leave and crew changes);
- Prevention of discharging or loading cargo or stores, or taking on fuel, water, food and supplies; and
- Imposition of quarantine or refusal of port entry to ships (in extreme cases).

While such measures can severely disrupt maritime traffic – and may well be in breach of the IHR, the Convention on Facilitation of International Maritime Traffic (FAL Convention) and other maritime principles regarding the rights and treatment of seafarers and passengers – the reality is that shipping companies may have little choice but to adhere to these national and local restrictions due to the serious concern about COVID-19 and the potential risk to public health.

However, it is very important for port States to accept all ships (both cargo and passenger), for docking and to disembark suspected cases on board, as it is difficult to treat suspect cases on board and it could endanger others.

If any infection or contamination is found on board visiting ships, port States may take additional measures to prevent spread of the infection or contamination.

Together with flag States, companies and Masters should co-operate with port State authorities to ensure, where appropriate, that:

- Seafarers can be changed;
- Passengers can embark and disembark;
- Shore leave can continue if safe to do so;
- Cargo operations can occur;
- Ships can enter and depart shipyards for repair and survey;
- Stores and supplies can be loaded; and
- Necessary certificates and documentation can be issued.

ILO has advised that during the evolving COVID-19 outbreak, effective protection of the health and safety of seafarers must remain a priority. Under the ILO Maritime Labour Convention (MLC), flag States must ensure all seafarers on ships flying their flag are covered by adequate measures to protect their health and that they have access to prompt and adequate medical care while working on board.

Port States must ensure that any seafarers on board ships in their territory who need immediate medical care are given access to medical facilities on shore.

Wilhelmsen Ships Service has developed an interactive map on current port restrictions which is available at <https://wilhelmsen.com/ships-agency/campaigns/coronavirus/coronavirus-map>



### 3 Protective Measures Against COVID-19 for Seafarers

Human-to-human transmission of COVID-19 is understood to occur primarily through droplets from a person with COVID-19, e.g. from coughing and sneezing, landing on objects and surfaces around the person. Other people then catch COVID-19 by touching these objects or surfaces, then touching their eyes, nose or mouth. People can also catch COVID-19 if they breathe in droplets from a person with COVID-19 who coughs, sneezes or breathes out droplets.

Seafarers (on board ship or on leave) should inform their healthcare providers if they have visited an area where COVID-19 has been reported within the past 14 days, or if they have been in close contact with someone with respiratory symptoms who has been to a place which has COVID-19.

If seafarers have fever, cough or difficulty breathing it is important to seek medical attention promptly.

When someone infected with a respiratory disease, such as COVID-19, coughs or sneezes they project small droplets containing the virus. Sneezing or coughing into hands may contaminate objects, surfaces or people that are touched. Standard Infection Protection and Control (IPC) precautions emphasise the vital importance of **hand** and **respiratory** hygiene. In particular:

- Frequent hand washing by crew (and passengers) using soap and hot water or alcohol-based (at least 65–70%) hand rub for 20 seconds;
- Avoidance of touching the face including mouth, nose and eyes with unwashed hands (in case hands have touched surfaces contaminated with the virus);
- Seafarers (and passengers) should be encouraged to cover their nose and mouth with a disposable tissue when sneezing, coughing, wiping and blowing the nose then dispose of the used tissue immediately;
- If a tissue is not available, crew should cover their nose and mouth and cough or sneeze into a flexed elbow;
- All used tissues should be disposed of promptly into a waste bin;
- Seafarers should aim to keep at least one metre (3 feet) distance from other people, particularly those that cough or sneeze or may have a fever. If they are too close, other crew members can potentially breathe in the virus; and
- Meat, milk or animal products should always be handled with care, to avoid cross-contamination with uncooked foods, consistent with good food safety practices.

It is important that seafarers should be given the time and opportunity to clean their hands after coughing, sneezing, using tissues, or after possible contact with respiratory secretions or objects or surfaces that might be contaminated.

Although face masks may provide some protection – especially if there is a risk of exposure when interacting with persons from outside the ship – the routine use of face masks is not generally recommended as protection against COVID-19. WHO advises that it is appropriate to use a mask when coughing or sneezing. If an individual is healthy, it is only necessary to wear a mask if the person is taking care of a person with the suspected COVID-19 infection.

[www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks](http://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks)

**Hand and respiratory hygiene are considered far more important.**

Safety posters for ships are provided in **Annex A**.



## 4 Outbreak Management Plan for COVID-19

Ships should develop a written outbreak management plan. Seafarers on board should have knowledge of the outbreak management plan and implement it as required.

Passengers and Seafarers should receive information in accordance with the WHO advice for international traffic regarding the outbreak of COVID-19.

Advice is available on the WHO website for COVID-19 at [www.who.int/healthtopics/coronavirus](http://www.who.int/healthtopics/coronavirus)

## 5 Pre-Boarding Information

This Guidance uses information contained in the WHO Operational considerations for managing COVID-19 cases/outbreak on board ships, interim guidance 24 February 2020. It is also recommended to use this alongside the WHO Handbook for Management of Public Health Events on Board Ships.

[www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-\(2019-ncov\)](http://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov))

## 6 Pre-boarding Screening

Until the end of the COVID-19 outbreak, all ships are advised to provide passengers and seafarers with general information on COVID-19 and its preventative measures and implement pre-boarding screening.

A sample pre-boarding Passenger Locator Form (PLF) is provided in **Annex B**. The purpose is to identify passengers who may need to have their boarding deferred or rescheduled and to ensure proper management by competent health authorities.

## 7 Information and Awareness

Ship Operators should provide guidance to crew on how to recognise the signs and symptoms of COVID-19. Crew should be reminded of the plan and procedures to follow if a passenger or crew member on board displays signs and symptoms of acute respiratory disease.

Country-specific guidance about prevention measures may be available, such as at [www.cdc.gov/quarantine/maritime/recommendations-for-ships.html](http://www.cdc.gov/quarantine/maritime/recommendations-for-ships.html)

Medical staff on board ships should be informed and updated about the outbreak of COVID-19 and any new evidence and guidance available. It is recommended to review the WHO website for COVID-19. Information about the use of medical masks can also be found on the website.

The posters provided at **Annex A** can also be used onboard to provide a gentle reminder of best practices for seafarers to adopt. They are also available for download from the ICS website at [www.ics-shipping.org/free-resources](http://www.ics-shipping.org/free-resources)



## 8 Suspected Cases of Infection

If people only have mild respiratory symptoms and have not visited an area where COVID-19 has been reported within the past 14 days, or if they have been in close contact with someone with respiratory symptoms who has been to a place which has COVID-19, they should still carefully practise basic hand and respiratory hygiene and isolate themselves, if possible, until fit.

If the virus spreads more widely this definition may change, but a **suspect case** requiring diagnostic testing is generally considered to be:

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 prior to the onset of the symptoms.

Or

A patient with 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.

Any person on board that may have been in close contact with a suspect case should be:

- Traced immediately after the suspect case is identified;
- Asked to remain on board until laboratory results of the suspect case are available (measures that apply following positive laboratory results are described below); and
- Categorised as either contacts with high risk exposure or with low risk exposure.

Further guidance can be found at

[www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-\(2019-ncov\)](http://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov))

All persons on board that fulfil the definition of a 'close contact' (see below) should be asked to complete a PLF (see **Annex B**) and remain on board the ship in their cabins or preferably at a specially designated facility ashore (if feasible and in case that the ship is at the turnaround port where embarking/disembarking passengers or discharging/loading cargos/stores takes place), in accordance with instructions received by the competent health authorities, until the laboratory result for the suspect case is available. Persons on board who do not fulfil the definition of a 'close contact' will be considered as having low risk exposure and should:

- Be requested to complete PLFs with their contact details and the locations where they will be staying for the following 14 days;
- Be provided with the following information and advice on the details of symptoms and how the disease can be transmitted;
- Be asked to self-monitor for COVID-19 symptoms, including fever of any grade, cough or difficulty breathing, for 14 days from their last exposure; and
- Be asked to immediately self-isolate and contact health services in the event of any symptom appearing within 14 days. If no symptoms appear within 14 days of their last exposure, the contact person is no longer considered likely to develop COVID-19.



## 9 Close Contacts (High Risk Exposure)

A 'close contact' is a person who, for example:

- Has stayed in the same cabin with a suspect/confirmed COVID-19 case;
- Has had close contact within one metre or was in a closed environment with a suspect/confirmed COVID-19 case (for passengers this may include sharing a cabin);
- Participated in common activities on board or ashore;
- Participated in the same immediate travelling group;
- Dined at the same table (for crew members this may include working together in the same ship area);
- Is a cabin steward who cleaned the cabin;
- Is restaurant staff who delivered food to the cabin;
- Is a gym trainer who provided close instruction to a case; or
- Is a medical support worker or other person providing direct care for a COVID-19 suspect or confirmed case.

Close contacts may be difficult to define on board a confined space such as a passenger ship, and if widespread transmission is identified then all persons on board could be considered as 'close contacts' having had high risk exposure.

## 10 Hygiene Measures for Seafarers on Ships

Ship operators should provide specific guidance and training for their seafarers regarding:

- Hand washing (using soap and hot water, rubbing hands for at least 20 seconds; one way to know how long 20 seconds is would be to silently sing "happy birthday to you!" twice);
- When hand washing is essential (e.g. after assisting an ill traveller or after contact with surfaces they may have contaminated, etc);
- When to hand rub with an antiseptic instead of hand washing, and how to do this;
- How to cough and sneeze hygienically (e.g. using disposable tissues or a flexed elbow);
- Appropriate waste disposal;
- When and how to use masks; and
- Avoiding close contact with people suffering from acute respiratory infections.



## 11 Management of Suspect Cases by Medical Support Providers

If someone on board is suspected to have COVID-19, Personal Protective Equipment (PPE) for interview and assessment may be used by medical support providers.

Key outbreak control activities will include supportive treatment, e.g. giving oxygen, antibiotics, hydration and fever/pain relief.

## 12 Precautions at the Ship Medical Facility

The following precautions should be taken:

- Patients must cover their nose and mouth with a tissue when coughing or sneezing; or a flexed elbow if not wearing a mask. This should be followed by performing hand hygiene with an alcohol-based hand rub (at least 65–70%) or soap and hot water for 20 seconds.
- Careful hand washing should occur after contact with respiratory secretions.
- Suspect cases must wear a medical mask once identified and evaluated in a private room with the door closed, ideally an isolation room;
- Any person, including healthcare workers, entering the room should apply appropriate precautions in accordance with the requirements of WHO infection prevention and control during healthcare when COVID-19 is suspected; and
- After preliminary medical examination, if the ship's medical officer or person responsible for the provision of medical care believes a suspect case exists, the patient should be isolated.

If the illness is not considered a suspect case but the person has respiratory symptoms, the person should still not return to any places where they will be in contact with others onboard either seafarers or passengers..

## 13 Laboratory Testing

Laboratory examination of clinical specimens for suspect cases should be made with the competent authorities at the port who will then inform the ship's officers about test results.



## 14 Case Handling

Case handling should:

- Be initiated by the ship's medical care providers in order to detect any new suspect cases;
- Include directly contacting crew and passengers, asking about current and recent illnesses, and checking if any person meets the criteria for a suspect case; and
- Be recorded in the appropriate medical log book.

Medical care providers should:

- Ensure a suspect case is interviewed and provide information about the places they have visited within the last 14 days prior to the onset of symptoms and their contacts, including the period from one day before the onset of symptoms on board the ship or ashore; and
- Keep records regarding:
  - Anyone on board who has visited the medical facility as a suspect case and the isolation and hygiene measures taken;
  - Any close contact or casual contact with low risk exposure to monitor their health;
  - Contact details of casual contacts with low risk exposure who will disembark and the locations where they will be staying in the next 14 days (completed PLFs or Maritime Declarations of Health (MDHs)); and
  - Results of active surveillance.

## 15 Isolation

Isolate suspect cases on board immediately and inform the next port of call of suspect cases:

- With acute respiratory infection, either a cough, sore throat, shortness of breath, whether requiring hospitalisation or not;
- Who in the 14 days before onset of symptoms met the definition of a suspect case as outlined in sections 8 and 9.

Patients should be isolated in either an isolation ward, cabin, room or quarters with precautionary measures. Anyone entering an isolation room should wear gloves, impermeable gowns, goggles and medical masks.



## 16 Reporting to the Next Port of Call

The competent authority of the next port of call must always be informed if there is a suspect case on board.

For ships on an international voyage, if someone has died on board the International Health Regulations (IHR) state that the MDH should be completed and sent to the competent authority in accordance with local requirements.

The Master should immediately alert the competent authority at the next port of call about any suspect case to determine if the necessary capacity to transport, isolate, and care for the individual is available.

The ship may need to proceed, at its own risk, to another nearby port if capacity is not available, or if warranted by the critical medical status of the suspect case.

After measures applied are considered by the port health authority to be completed satisfactorily, the ship should be allowed to continue the voyage. The measures taken should be recorded in the valid ship sanitation certificates. Both embarking and disembarking ports must be notified of contacts on board and any measures taken.

## 17 Disembarkation of a Suspect and a Confirmed Case

The ship should take the following precautions:

- Control disembarkation to avoid any contact with other persons on board;
- The patient should wear a surgical mask; and
- Personnel escorting the patient should wear suitable PPE (gloves, impermeable gown, goggles and medical mask).

The ship may proceed to its next port of call once the health authority has determined that public health measures have been completed satisfactorily in particular the measures as follows:

- Management of the suspect case or cases and close contacts;
- Completion of contact tracing forms, disembarkation of close contacts; until the termination of COVID-19 Public Health Emergency of International Concern is declared. All passengers and crew members should fill in a PLF to be kept on board for at least one month after disembarkation;
- Information in the completed PLF should be provided upon the request of health authorities to facilitate contact tracing if a confirmed case is detected after the disembarkation and after the voyage has ended;
- Information has been provided to everyone on board about the symptoms and signs of the disease and who to contact in case the relevant symptoms develop in the following 14 days; and
- Cleaning and disinfection, and disposal of infectious waste.



## 18 Cleaning, Disinfection and Waste Management

Maintain high level cleaning and disinfection measures during ongoing on board case management.

Patients and ‘close contacts’ cabins and quarters should be cleaned and using cleaning and disinfection protocols for infected cabins (as per Norovirus or other communicable diseases).

Environmental surfaces should be cleaned thoroughly with hot water, detergent and applying common disinfectants (e.g. sodium hypochlorite).

Once a patient has left the ship, the isolation cabin or quarters should be thoroughly cleaned and disinfected by staff using PPE who are trained to clean surfaces contaminated with infectious agents.

Laundry, food service utensils and waste from cabins of suspect cases and contacts should be treated as infectious, in accordance with procedures for handling infectious materials on board.

There should be regular communications between departments in all ships (medical, housekeeping, laundry, room service, etc) about the persons in isolation.

## 19 Management of Contacts of a Suspect Case

Port health authorities will conduct risk assessments to identify all contacts, and issue instructions to follow until laboratory results are available.

All close contacts should either complete PLFs or MDHs and remain in their cabins or at a facility ashore and follow the competent authority’s instructions until laboratory results are available. The forms should contain contact details and locations where the suspect case will stay for the following 14 days.

All close contacts should be informed about the suspect case on board.

If the laboratory examination results are positive:

- All close contacts should be quarantined for 14 days; and
- The patient should disembark and be isolated ashore in accordance with the competent authority’s instructions.

Quarantine measures should follow WHO guidance of considerations for quarantine of individuals in the context of COVID-19 and are also likely to include:

- Active monitoring by the port health authorities for 14 days from last exposure;
- Daily monitoring (including fever of any grade, cough or difficulty breathing);
- Avoiding social contact and travel; and
- Remaining reachable for active monitoring.

Contacts of a confirmed case should immediately self-isolate and contact health services if symptoms appear within 14 days of last exposure. If no symptoms appear, the contact is not considered at risk.

Implementation of specific precautions may be modified following risk assessment of individual cases and advice from port health authorities.



## 20 Supplies and Equipment

Flag States regulate medical supply carriage requirements. Plentiful supplies and equipment should be available to handle an outbreak as described in the International Medical Guide for Ships 3rd edition. Reviewing the latest WHO suggested list of supplies for COVID 19, the International Maritime Health Association (IMHA) has advised that most equipment should already be on board. However, WHO also recommends other equipment that is unlikely to already be on board which IMHA suggest could be provided by a port health authority.

A table is attached at **Annex C** outlining the supplies and equipment required in a situation of COVID-19. This is based on information provided by WHO and the IMHA.

[www.who.int/publications-detail/disease-commodity-package---novel-coronavirus-\(ncov\)](http://www.who.int/publications-detail/disease-commodity-package---novel-coronavirus-(ncov))





## Annex A

# Posters

WHO and ECDC, among others, have provided advice to avoid the spread of COVID-19. To highlight their key messages and to help seafarers know how best to protect themselves and those they meet, ICS has produced the following three posters for ships.

The posters are also available to download from the ICS website at:

<http://www.ics-shipping.org/free-resources>



# COVID-19

## Protect yourself and others from getting sick

When coughing and sneezing, cover your nose and mouth with a tissue or a flexed elbow



Throw the tissue into a closed bin immediately after use

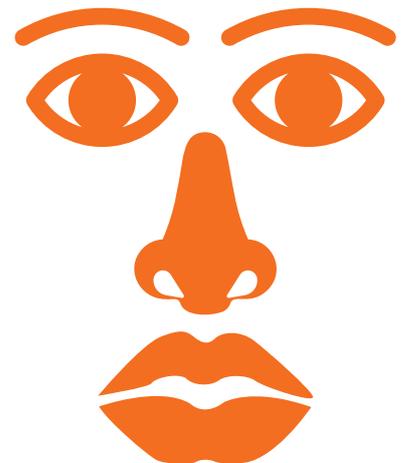


Clean your hands with an alcohol-based hand rub or with soap and hot water for at least 20 seconds:

- After coughing or sneezing
- When caring for the sick
- Before, during and after preparing food
- Before eating
- After toilet use
- When hands are visibly dirty



Avoid touching eyes, nose and mouth



International  
Chamber of Shipping

Shaping the Future of Shipping

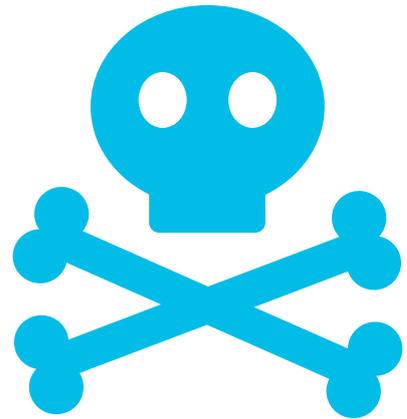
# COVID-19

## Practise Food Safety

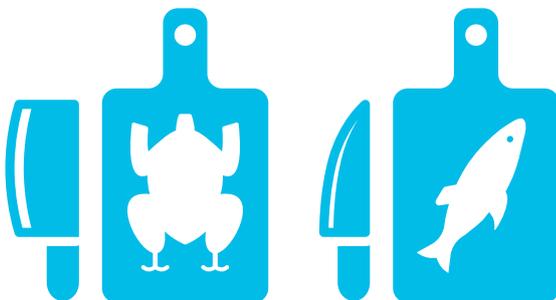
Meat products can be safely consumed if they are cooked thoroughly and properly handled during food preparation



Do not eat sick or diseased animals



Use different chopping boards and knives for raw meat and cooked foods



Wash your hands with soap and hot water for at least 20 seconds between handling raw and cooked food



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# COVID-19

## Stay healthy while travelling

Avoid these modes of travel if you have a fever or a cough



Eat only well-cooked food



Avoid spitting in public



Avoid close contact and travel with sick animals, particularly in wet markets



When coughing and sneezing, cover your mouth and nose with a tissue or flexed elbow. Throw the tissue into a closed bin immediately after use and clean your hands



Frequently clean your hands with an alcohol-based hand rub or with soap and hot water for at least 20 seconds



Avoid touching eyes, nose and mouth



Avoid close contact with people suffering from a fever or a cough



If wearing a face mask, be sure it covers your mouth and nose and do not touch it once on. Immediately discard single-use masks after each use and clean your hands after removing masks



If you become sick while travelling, tell crew or ground staff



Seek medical care early if you become sick, and share your history with your health provider



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# Annex B

## Sample Pre-Boarding Passenger Locator Form (PLF)

To be completed by any adult

Name as shown in the passport or other ID:

Names of all children travelling with you under 18 years old:


Within the past 14 days, have you, or any person listed above:

Yes No

- had close contact with anyone diagnosed as having Coronavirus disease (COVID-19)? .....
- provided direct care for COVID-19 patients, working with healthcare workers infected with novel coronavirus?.....
- visited or stayed in a closed environment with any patient having Coronavirus disease (COVID-19)? .....
- worked together in close proximity, or sharing the same classroom environment, with a COVID-19 patient? .....
- traveled together with COVID-19 patient in any kind of conveyance?.....
- lived in the same household as a COVID-19 patient?.....



# Annex C

## WHO COVID-19 Support and Logistics Supplies List, with availability advice provided by IMHA

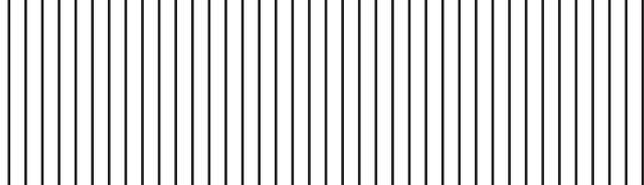
Items	Comment	Already carried on board?
<b>CHEMICALS</b>		
Antibiotics		Yes
Chlorine		Yes
Fever and pain medication		Yes
Sodium lactate solution		Yes
Alcohol-based hand rub	Bottle of 100ml and 500ml	Yes
Chlorine	NaDCC, granules, 1kg, 65 to 70% + dosage information	Yes
Paracetamol	500mg tablets	Yes
Sodium lactate compound solution	Ringer's lactate, injection solution, w/o IV set and needle, 1000ml	Yes
<b>PPE</b>		
Examination Gloves, EU MDD directive 93/42/EEC Category III, EU PPE Regulation 2016/425 Category III, EN 455, EN 374, ANSI/ISEA 105, ASTM D6319, or equivalent standards	Nitrile, powder-free, non-sterile. Cuff length preferably reaching above the wrist (e.g. minimum 230mm total length. Sizes, S, M, L). Plentiful supplies required.	Yes
Surgical Gloves, EU MDD directive 93/42/EEC Category III, EU PPE Regulation 2016/425 Category III, EN 455, EN 374, ANSI/ISEA 105, ASTM D6319, or equivalent standards	Nitrile, powder-free, single use. Gloves should have long cuffs, reaching well above the wrist, ideally to mid-forearm. (Sizes 5.0-9.0)	Yes
Gloves, cleaning	Outer glove should have long cuffs, reaching well above the wrist, ideally to mid-forearm. Cuff length preferably reach mid-forearm (e.g. minimum 280mm total length. Sizes, S, M, L), reusable, puncture resistant, FDA compliant	Yes
Impermeable gowns single use	Disposable, length mid-calf. - EU PPE Regulation 2016/425 and EU MDD directive 93/42/EEC• FDA class I or II medical device, or equivalent, EN 13795 any performance level, or AAMI PB70 all levels acceptable, or equivalent.	Yes, but check supplies are plentiful
Scrubs - Tunic/tops	Woven, scrubs, reusable or single use, short sleeved (tunic/tops), worn underneath the coveralls or gown	Yes, but check supplies are plentiful
Scrubs - Trouser/pants	Woven, scrubs, reusable or single use, short sleeved (tunic/tops), worn underneath the coveralls or gown	Yes, but check supplies are plentiful
Aprons	Heavy duty, straight apron with bib. Fabric: 100% polyester with PVC coating, or 100% PVC, or 100% rubber, or other fluid resistant coated material, Waterproof, sewn strap for neck and back fastening. Minimum basis weight: 300g/m <sup>2</sup> covering size: 70-90 cm (width) X 120-150cm (height). Reusable (if decontamination arrangements exist) EN ISO 13688, EN 14126-B and partial body protection (EN 13034 or EN 14605), EN 343 for water and breathability or equivalent.	Yes, but check supplies are plentiful
Goggles, protective EU PPE Regulation 2016/425, EN 166, ANSI/ISEA Z87.1, or equivalent	Good seal with facial skin, flexible PVC frame to easily fit all face contours with even pressure. Enclose eyes and surrounding areas. Accommodate prescription glasses wearers. Clear plastic lens with fog and scratch resistant treatments. Adjustable band to secure firmly and not become loose during clinical activity. Indirect venting to avoid fogging. May be reused (if decontamination arrangements exist) or disposable.	Yes, but check supplies are plentiful
Surgical masks for medics ASTM F2100 minimum level 1 or equivalent*	Good breathability, clear internal and external faces. EU MDD directive 93/42/EEC Category III, or equivalent, EN 14683 Type II, IR, IIR	Yes, but check supplies are plentiful
Patient masks EN 14683 any type including Type I*	Good breathability, clear internal and external faces	Yes, but check supplies are plentiful
Face shield (PPE)	Should be provided by Port Health Authority	Unlikely

\* Currently in short supply



Items	Comment	Already carried on board?
<b>MEDICAL KIT</b>		
Sample medium and packaging	Plentiful supplies required	Yes
Disinfectants	Plentiful supplies required	Yes
Hand hygiene supplies	Plentiful supplies required	Yes
Containers	For disposable sharps and needles	Yes
Guedel tubes		Yes
Infusion sets		Yes
Nose masks		Yes
Facial oxygen masks		Yes
Oximeter		Yes
Oxygen splitters		Yes
Safety bag and box		Yes
Commercial testing materials for samples	Ideally a third party should take samples for suspected cases. Specific materials needed to transport samples and to minimise infection Should be provided by Port Health Authority"	Unlikely
Fit test kit	Should be provided by Port Health Authority	Unlikely
Laryngoscope, with depressors and tubes	Should be provided by Port Health Authority	Unlikely
Oxygen concentrator	Should be provided by Port Health Authority	Unlikely
Portable ventilators	Should be provided by Port Health Authority	Unlikely
Portable ultrasound scanner	Should be provided by Port Health Authority	Unlikely
Resuscitator, child	Should be provided by Port Health Authority	Unlikely
Viral transport medium – to transport laboratory specimens	Should be provided by Port Health Authority	Unlikely
Viral transport medium with Swab 3 ml	Should be provided by Port Health Authority	Unlikely
Bio-hazardous bag	Disposal bag for bio-hazardous waste, 30 x 50cm, with "Biohazard" print, autoclavable polypropylene. 50 or 70 micron thickness	Yes
Carbon dioxide detector	"Disposable, colorimetric, sizes compatible with adult endotracheal tube (or child if applicable), unlikely to be in medical cabin but usually on board a ship. If not available ask Port Health Authority to provide along with appropriate guidance and accessories"	Unlikely
Endotracheal tube, without cuff	Open distal end and Magill-type point with oral angle of 37.5°, standard connector (ext. Ø 15mm) at the proximal end to connect the tube to the ventilation system, radio opaque mark, Murphy's eye, graduations, size: Ø internal 3mm or 3.5mm, material: polyvinyl chloride (PVC), disposable, sterile, initial sterilisation method: ethylene oxide gas or gamma radiation	Yes
Endotracheal tube with cuff	Same specification as for endotracheal tube, without cuff except size: Ø internal 6.5mm, 7mm, 7.5mm or 8mm	Yes
Hand drying tissue	50–100m roll	Yes
Infusion giving set	With air inlet and needle, sterile, single-use	Yes
Pulse oximeter	Compact portable device measures arterial blood oxygen saturation (SpO <sub>2</sub> ), heart rate and signal strength. Measuring range: SpO <sub>2</sub> 30 - 100% (minimum graduation 1%), heart rate 20–250 bpm (minimum graduation 1bpm). Line-powered, or extra batteries/rechargeable batteries needed at least one year. ISO 80601-2-61:2011 or equivalent	Yes
Resuscitator, adult	To ventilate adult (body weight > 30kg), with compressible self-refilling ventilation bag, capacity: 1475–2000ml. Resuscitator operated by hand, ventilation with ambient air, resuscitator shall be easy to disassemble and reassemble, to clean and disinfect, and be autoclavable. All parts must be of high-strength, long-life materials not requiring special maintenance or storage conditions	Yes
Sample collection triple packaging boxes	For transport as defined by the Guidance on Regulations for the Transport of Infectious Substances 2019–2020	Yes
Safety box	Needles/syringes, 5l - cardboard for incineration, box-25. Biohazard label as per WHO PQS E010/011	Yes
Stainless steel depressor sets Miller	Straight Nr 1, length approx. 100mm	Yes
Stainless steel depressor sets Macintosh	Curved Nr 2, length approx. 110mm	Yes
Stainless steel depressor sets Macintosh	Curved Nr 3, length approx. 135mm	Yes
Stainless steel depressor sets Macintosh	Curved Nr 4, length approx. 155mm	Yes
Soap	Liquid (preferred), powder and bar	Yes





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[www.ics-shipping.org](http://www.ics-shipping.org)

# COVID-19

## Protect yourself and others from getting sick

When coughing and sneezing, cover your nose and mouth with a tissue or a flexed elbow



Throw the tissue into a closed bin immediately after use

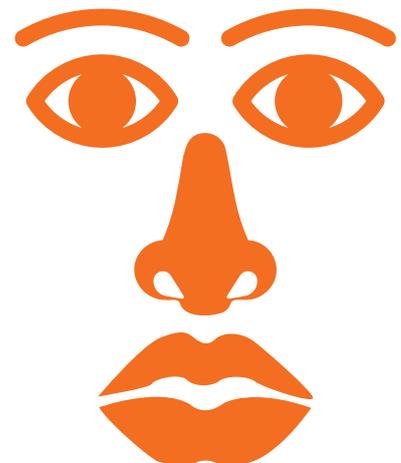


Clean your hands with an alcohol-based hand rub or with soap and hot water for at least 20 seconds:

- After coughing or sneezing
- When caring for the sick
- Before, during and after preparing food
- Before eating
- After toilet use
- When hands are visibly dirty



Avoid touching eyes, nose and mouth



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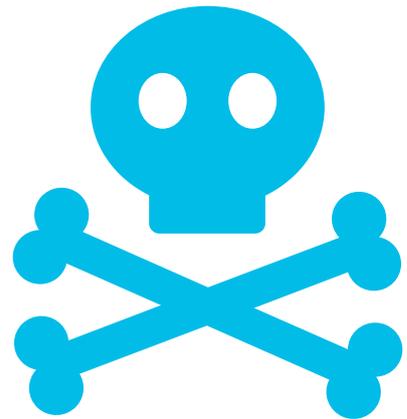
# COVID-19

## Practise Food Safety

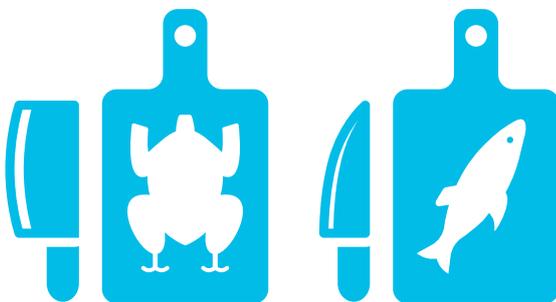
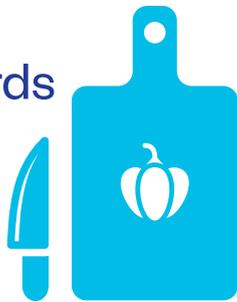
Meat products can be safely consumed if they are cooked thoroughly and properly handled during food preparation



Do not eat sick or diseased animals



Use different chopping boards and knives for raw meat and cooked foods



Wash your hands with soap and hot water for at least 20 seconds between handling raw and cooked food



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# COVID-19

## Stay healthy while travelling

Avoid these modes of travel if you have a fever or a cough



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Avoid spitting in public



Avoid close contact and travel with sick animals, particularly in wet markets



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Seek medical care early if you become sick, and share your history with your health provider



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Circular nº 4204/Add.2  
21 febrero 2020

A: Todos los Estados Miembros de la OMI  
Naciones Unidas y organismos especializados  
Organizaciones intergubernamentales  
Organizaciones no gubernamentales que gozan del carácter consultivo  
ante la OMI

Asunto: **Declaración conjunta de la OMI y la OMS sobre la respuesta al brote de  
COVID-19**

El Director General de la OMS y el Secretario General de la OMI han publicado conjuntamente la declaración adjunta para ayudar a los Estados a garantizar que se implantan las medidas de sanidad de modo que se reduzcan al mínimo las interferencias innecesarias al tráfico y el comercio internacionales.

Se alienta a los Estados Miembros y organizaciones internacionales a que difundan esta declaración conjunta lo más ampliamente posible.

\*\*\*



**Declaración conjunta sobre la respuesta al brote de COVID-19  
– 13 de febrero de 2020 –**

El 31 de diciembre de 2019 se informó de la aparición del brote de lo que se conoce ahora a nivel mundial como el nuevo coronavirus (COVID-19) en la ciudad de Wuhan, provincia de Hubei, en la República Popular de China. El 9 de enero de 2020, las autoridades chinas informaron a los medios de comunicación que la causa de esta neumonía viral se había identificado inicialmente como un nuevo tipo de coronavirus, distinto de cualquier otro coronavirus humano descubierto hasta la fecha.

Siguiendo los consejos proporcionados, el 30 de enero de 2020, por el Comité de Emergencias constituido en virtud del Reglamento Sanitario Internacional (IHR) (2005), el Director General de la Organización Mundial de la Salud (OMS) declaró que el brote de COVID-19 constituía una emergencia de salud pública de importancia internacional y publicó una serie de recomendaciones provisionales.

La OMS está trabajando estrechamente con expertos, gobiernos y socios a nivel mundial para difundir rápidamente los conocimientos científicos sobre el nuevo virus, seguir de cerca la propagación y virulencia del virus y proporcionar consejos a los países y a la comunidad mundial sobre las medidas necesarias para proteger la salud y evitar que se siga propagando este brote. Basándose en las recomendaciones elaboradas por la OMS, la Organización Marítima Internacional (OMI) publicó la circular nº 4204, el 31 de enero de 2020, para proporcionar información y orientaciones sobre las precauciones que deben adoptarse a fin de reducir al mínimo los riesgos del nuevo coronavirus (COVID-19) para la gente de mar, los pasajeros y otras personas a bordo de los buques.

De acuerdo con los consejos del Comité de Emergencias, el Director General de la OMS no recomendó que se impusieran restricciones a los viajes o al comercio. Los países están intensificando sus esfuerzos en consonancia con las recomendaciones de la OMS para la preparación y la respuesta frente a este riesgo para la salud pública. Al mismo tiempo, los países están adoptando medidas adicionales tales como la demora del despacho en los puertos o la denegación de la entrada, lo que puede ocasionar graves trastornos para el tráfico marítimo internacional, en concreto para los buques, sus tripulaciones, pasajeros y cargas.

La OMS está manteniendo estrechas consultas con la OMI y otros socios para ayudar a los Estados a garantizar que las medidas de sanidad se implantan de modo que se reduzcan al mínimo las interferencias innecesarias con el tráfico y el comercio internacionales.

A este respecto, la OMS y la OMI hacen un llamamiento a todos los Estados para que respeten las prescripciones de "libre plática" para los buques (IHR (2005), artículo 28) y los principios de atención adecuada de todos los viajeros y la prevención de demoras innecesarias para los buques, las personas y los bienes a bordo, reconociendo al mismo tiempo la necesidad de evitar la introducción o propagación de la enfermedad.

Los Estados Partes en el IHR se han comprometido a proporcionar una respuesta de salud pública a la propagación internacional de enfermedades "proporcionada y restringida a los riesgos para la salud pública y evitando al mismo tiempo las interferencias innecesarias con el tráfico y el comercio internacionales". Además, en el Convenio para facilitar el tráfico marítimo internacional de la OMI (conocido comúnmente como el "Convenio de facilitación")

se indica que los Estados que no sean Partes en el IHR se esforzarán por aplicar este Reglamento al transporte marítimo internacional.

Por consiguiente, las medidas que interfieren con el tráfico marítimo internacional están sujetas a las disposiciones del IHR (2005), incluidas las prescripciones específicas expuestas en el artículo 43. Además, es esencial que los Estados Partes implanten el IHR con respeto pleno de la dignidad, los derechos humanos y las libertades fundamentales de las personas, según se indica en el artículo 3 1). Los principios destinados a evitar las restricciones o las demoras innecesarias a la entrada en puerto de los buques, las personas y los bienes están consagrados en los artículos I y V y en el capítulo 6 del anexo del Convenio de facilitación. El IHR y las reglas de la OMI han de aplicarse de manera uniforme para garantizar sus objetivos comunes.

En particular, las autoridades del Estado de abanderamiento, las autoridades del Estado rector del puerto y los regímenes de control, las compañías y los capitanes de buque deben cooperar, en el actual contexto del brote, para garantizar que, cuando proceda, los pasajeros pueden embarcar y desembarcar, las operaciones de carga pueden proseguirse, los buques pueden entrar y salir de los astilleros para proceder a reparaciones y reconocimientos, las mercancías y suministros pueden cargarse y las tripulaciones pueden turnarse.

La Organización Mundial de la Salud y la Organización Marítima Internacional están listas para asistir y apoyar a los países y al sector marítimo en la respuesta a los retos que presenta para el transporte marítimo internacional el actual brote del nuevo coronavirus.

Tedros Adhanom Ghebreyesus  
Director General  
Organización Mundial de la Salud

Kitack Lim  
Secretario General  
Organización Marítima Internacional

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Circular nº 4204/Add.3  
2 marzo 2020

- A: Todos los Estados Miembros de la OMI  
Naciones Unidas y organismos especializados  
Organizaciones intergubernamentales  
Organizaciones no gubernamentales que gozan del carácter consultivo  
ante la OMI
- Asunto: **Consideraciones operacionales para la gestión de los casos y brotes  
de COVID-19 a bordo de los buques**

El Secretario General de la OMI ha recibido orientaciones elaboradas por la OMS sobre las "Consideraciones operacionales para la gestión de los casos y brotes de COVID-19 a bordo de los buques", que se adjuntan a la presente circular.

Se alienta a los Estados Miembros y organizaciones internacionales a que difundan estas orientaciones a todas las partes interesadas.



## ANNEX

# Operational considerations for managing COVID-19 cases and outbreaks on board ships

Interim guidance  
24 February 2020



### Introduction

This document has been prepared based on current evidence about the transmission of 2019 coronavirus (previously named 2019-nCoV, now designated COVID-19) disease – that is, human-to-human transmission via respiratory droplets or direct contact with an infected individual.

It is recommended that this guidance be used with the World Health Organization (WHO) [Handbook for management of public health events on board ships \(1\)](#).

The target audience for this document is any authority involved in the public health response to a COVID-19 public health event on board a ship, including International Health Regulations (IHR) National Focal Points (NFPs), port health authorities, and local, provincial and national health surveillance and response systems, as well as port operators and ship operators.

### Outbreak management plan for COVID-19 disease

Passenger ships sailing on an international voyage are advised to develop a written plan for disease outbreak management that covers the definitions of a suspected case of COVID-19 disease, the definition of close contacts and an isolation plan. The outbreak management plan should include descriptions of the following:

- the location or locations where suspected cases will be isolated individually until disembarkation and transfer to a healthcare facility;
- how the necessary communications between departments (for example, medical, housekeeping, laundry, room service) about persons in isolation will be managed;
- the clinical management of suspected cases while they remain on board;
- cleaning and disinfection procedures for potentially contaminated areas, including the isolation cabins or areas;
- how close contacts of the suspected case will be managed;
- procedures to collect Passenger/Crew Locator Forms (PLF);
- how food service and utensils, waste management services and laundry will be provided to the isolated travellers.

Staff on board should have knowledge of the outbreak management plan and should implement it as required.

## Prior to boarding

### Pre-boarding information

Passengers and crew members should receive information in accordance with WHO's advice for international traffic in relation to the outbreak of COVID-19 disease. This advice and guidance is available at <https://www.who.int/health-topics/coronavirus>.

### Pre-disembarkation information

Until the termination of the COVID-19 public health emergency of international concern is declared, it is recommended that all passengers and crew members complete their PLF, and this should be kept on board for at least 1 month after their disembarkation. Information in the completed PLF should be provided upon request to health authorities to facilitate contact tracing if a confirmed case is detected after disembarkation or after the voyage has ended.

### Pre-boarding screening

Until the termination of the COVID-19 outbreak, passenger ships on an international voyage are advised to provide passengers with general information on COVID-19 disease and preventive measures and to implement pre-boarding screening with the purpose of deferring or rescheduling the boarding of any traveller identified through a questionnaire (Annex 1) as being a close contact of someone with COVID-19 disease to ensure proper management by port health authorities.

A contact is a person involved in any of the following:

- providing direct care to a patient with COVID-19 disease, visiting patients or staying in the same environment as a COVID-19 patient;
- working in close proximity to or sharing a cabin or room with a patient with COVID-19 disease;
- traveling with a COVID-19 patient in any kind of conveyance;
- living in the same household as a patient with COVID-19 disease within 14 days after the patient's onset of symptoms (2).

### Education

Ship owners should provide guidance to the crew about how to recognize the signs and symptoms of COVID-19 disease.

Crew should be reminded of the procedures that are to be followed when a passenger or a crew member on board displays signs and symptoms indicative of acute respiratory disease.

Country-specific guidance for crew members about prevention measures may be available, such as that at <https://www.cdc.gov/quarantine/maritime/recommendations-for-ships.html> (3).

Additional guidance is available in WHO's interim guidance about home care for patients with suspected COVID-19 infection who have mild symptoms and how to manage their contacts (4) and about the use of medical masks (5).

Healthcare staff on board ships should be informed and updated about the outbreak of COVID-19 disease and any new evidence and guidance available for healthcare staff.

WHO's updated information is available at <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>.

## Managing a suspected case on board a ship

### Definition of a suspected case

A suspected case is:

- A. a patient with severe acute respiratory infection (that is, fever and cough requiring admission to hospital) AND with no other aetiology that fully explains the clinical presentation AND a history of travel to or residence in China or in another country with established community transmission<sup>1</sup> of COVID-19 disease during the 14 days prior to symptom onset

OR

- B. a patient with any acute respiratory illness AND at least one of the following during the 14 days prior to symptom onset: (a) contact with a confirmed or probable case of COVID-19 disease or (b) working in or visiting a healthcare facility where patients with confirmed or probable COVID-19 disease were being treated.

### Activating the outbreak management plan

If it is determined that there is a suspected case of COVID-19 disease on board, the outbreak management plan should be activated. The suspected case should be immediately instructed to wear a medical mask, follow cough etiquette and practice hand hygiene; the suspected case should be isolated in a predefined isolation ward, cabin, room or quarters, with the door closed. Infection control measures should be applied in accordance with WHO guidance (2, 6). The disembarkation and transfer of the suspected case to an onshore healthcare facility for further assessment and laboratory testing should be arranged as soon as possible in cooperation with the health authorities at the port.

In addition to the medical personnel providing health care, all persons entering the isolation area should be appropriately trained prior to entering that area, should apply standard precautions and contact and droplet precautions as described in WHO's guidance for infection control (6).

### Obligations of ship owners

In accordance with the IHR (2005), the master of the ship must immediately inform the port health authority at the next port of call about any suspected case of COVID-19 disease (7). For ships on an international voyage, the Maritime Declaration of Health should be completed and sent to the port authority in accordance with local requirements at the port of call.

Ship owners must facilitate the use of health measures and provide all relevant public health information requested by the health authority at the port. Ship operators shall provide to the port health authorities all essential information (that is, PLFs, the crew list,<sup>2</sup> and the passenger

---

<sup>1</sup> Widespread community transmission is defined as being "evidenced by the inability to relate confirmed cases through a chain of transmission or by increasing positive tests through routine screening of sentinel samples (i.e., samples unconnected to any known chain of transmission).

<sup>2</sup> See the Convention on Facilitation of International Maritime Traffic FAL form 5 at <http://www.imo.org/en/OurWork/Facilitation/FormsCertificates/Pages/Default.aspx>, accessed 24 February 2020.

list<sup>3</sup>) to conduct contact tracing when a confirmed case of COVID-19 disease has been identified on board or when a traveller who has been on board and possibly was exposed during the voyage is diagnosed as a confirmed case after the end of the voyage.

#### Disembarkation of suspected cases

During the disembarkation of suspected cases, every effort should be made to minimize the exposure of other persons and environmental contamination. Suspected cases should be provided with a surgical mask to minimize the risk of transmission. Staff involved in transporting suspected cases should apply infection control practices by following WHO's guidance (5, 6). These practices are summarized below.

- When loading patients into the ambulance, transport staff, including medical staff, should routinely perform hand hygiene and wear a medical mask, eye protection (goggles or a face shield), a long-sleeved gown and gloves.
- Personal protective equipment (PPE) should be changed after loading each patient and disposed of appropriately in containers with a lid and in accordance with national regulations for disposing of infectious waste.
- The driver of the ambulance must remain separate from the cases (keeping at least 1 m distance). No PPE is required if distance can be maintained or a physical separation exists. If drivers must also help load the patients into the ambulance, they should follow the PPE recommendations in the previous point.
- Transport vehicles must have as high a volume of air exchange as possible (for example, by opening the windows).
- Transport staff should frequently clean their hands with an alcohol-based hand rub or soap and water and ensure that they clean their hands before putting on PPE and after removing it.
- Ambulances and transport vehicles should be cleaned and disinfected, with particular attention paid to the areas in contact with the suspected case. Cleaning should be done with regular household soap or detergent first and then, after rinsing, regular household disinfectant containing 0.5% sodium hypochlorite (that is, equivalent to 5000 ppm or 1 part bleach to 9 parts water) should be applied.

#### Notification and reporting requirements for WHO State Parties

The authority at the port must inform immediately its IHR NFP if a suspected case of COVID-19 disease has been identified. When the laboratory testing has been completed and if the suspected case is positive for the virus that causes COVID-19 disease, then the IHR NFP shall inform WHO.

The IHR NFP will pay attention to IHR Article 43 that concerns additional health measures, which states that State Parties implementing any additional health measure that significantly interferes with international traffic (such as refusal of entry or departure of international travellers and/or ships, or their delay for more than 24 hours) shall provide to WHO the public health rationale for and relevant scientific information about it.

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<sup>3</sup> See the Convention on Facilitation of International Maritime Traffic FAL form 6 at <http://www.imo.org/en/OurWork/Facilitation/FormsCertificates/Pages/Default.aspx>, accessed 24 February 2020.

### Managing contacts

In order to avoid delays in implementing health measures, contact tracing should begin immediately after a suspected case has been identified on board without waiting for laboratory results. Every effort should be made to minimize the exposure of other travellers to and on-board environmental exposures of the suspected case, and close contacts must be separated from other travellers as soon as possible.

All persons on board should be assessed for their risk of exposure and classified either as a close contact with a high risk of exposure or as having a low risk of exposure.

### Definition of close contacts on board a ship (high-risk exposure)

A person is considered to have had a high-risk exposure if they meet one of the following criteria:

- they stayed in the same cabin as a suspected or confirmed COVID-19 case;
- they had close contact (that is, they were within 1 m of) or were in a closed environment with a suspected or confirmed COVID-19 case –
  - for passengers, this may include participating in common activities on board the ship or while ashore, being a member of a group travelling together, dining at the same table;
  - for crew members, this includes the activities described above, as applicable, as well as working in the same area of the ship as the suspected or confirmed COVID-19 case, for example, cabin stewards who cleaned the cabin or restaurant staff who delivered food to the cabin, as well as gym trainers who provided close instruction to the case;
- they are a healthcare worker or another person who provided care for a suspected or confirmed COVID-19 case.

### Follow-up with close contacts

If a large outbreak occurs as a result of ongoing transmission on board the ship, both crew members and passengers should be assessed to determine whether they were exposed to the suspected or confirmed case. If it is difficult to identify the close contacts and if widespread transmission is identified, then all travellers (that is, passengers and crew) on board the ship could be considered close contacts who have had a high-risk exposure.

Until the laboratory result for the suspected case is available, all travellers who fulfil the definition of a close contact should be asked to complete the PLF (Annex 2) and remain on board the ship in their cabins or, preferably, at a specially designated onshore facility (if feasible and when the ship is at the turnaround port where the embarkation or disembarkation of passengers or discharge or loading of cargo and stores takes place), in accordance with instructions received from the port health authorities.

If the laboratory result is positive, then all close contacts should be quarantined in specially designated onshore facilities and not allowed to travel internationally, unless this has been arranged following WHO's advice for repatriation, which also discusses quarantine measures (8). Persons in quarantine who had close contact with a confirmed case should immediately inform health services if they develop any symptom within 14 days of their last contact with the confirmed case. If no symptoms appear within 14 days of their last exposure, the contact is no longer considered to be at risk of developing COVID-19 disease (9). The implementation of these specific precautions may be modified depending on the risk assessments for individual cases and their contacts as conducted by the public health authorities.

If the laboratory result is positive, then all other travellers who do not fulfil the definition of a close contact will be considered as having had a low-risk exposure; they should be requested to complete the PLF with their contact details and the locations where they will be staying for the following 14 days. The implementation of these precautions may be modified depending on the risk assessments conducted by the public health authorities. Further instructions may be given by the health authorities. Travellers considered to have had a low-risk exposure should be provided with information and advice about (9):

- the symptoms of COVID-19 disease and how it can be transmitted;
- the need to self-monitor for COVID-19 symptoms for 14 days from their last exposure to the confirmed case, including fever of any grade, cough or difficulty breathing;
- the need to immediately self-isolate and contact health services if any symptom appears within the 14 days. If no symptoms appear within 14 days of their last exposure, the traveller is no longer considered to be at risk of developing COVID-19 disease.

WHO's guidance about quarantine measures can be found on the web pages about COVID-19 (<https://www.who.int/health-topics/coronavirus>).

### Measures on board the ship

In the event that the affected ship calls at a port other than the turnaround port, the port health authority should conduct a risk assessment and may decide in consultation with the ship's owner to end the cruise. The ship should be inspected according to Article 27 of the IHR (2005), which discusses affected conveyances, and then health measures (such as cleaning and disinfection) should be applied based on the findings of the inspection. Detailed guidance from WHO is available in the *Handbook for inspection of ships and issuance of ship sanitation certificates* (10). For more details about the inspection, see the section on environmental investigation in this document. Infectious waste should be disposed of in accordance with the port authority's procedures. Health measures implemented on the ship should be noted in the Ship Sanitation Certificate.

The next voyage can start after thorough cleaning and disinfection have been completed. Active surveillance should take place on board the ship for the following 14 days. Additionally, the ship's owner could explore the possibility of starting the next voyage with a new crew on board, if this is feasible.

### Cleaning and disinfection

In accordance with WHO's guidance about infection prevention and control during health care when COVID-19 infection is suspected (6), medical facilities, cabins and quarters occupied by patients and close contacts of a confirmed case with COVID-19 disease should be cleaned and disinfected daily, and cleaning and disinfection should be carried out after they have disembarked. The remainder of the ship should also be cleaned and disinfected, particularly when an outbreak occurs.

Detailed information about cleaning and disinfecting cabins can be found in WHO's interim guidance about home care for patients with suspected COVID-19 infection and how to manage their contacts (4).

Laundry, food service utensils and waste from the cabins of suspected cases and their contacts should be handled as if infectious and according to the outbreak management plan provided on board for other infectious diseases (for example, for norovirus gastroenteritis).

It is essential that the ship remains at the port for the time required to thoroughly clean and disinfect it.

A ship that is considered to have been affected shall cease to be regarded as such when the port health authority is satisfied with the health measures undertaken and when there are no conditions on board that could constitute a public health risk (7).

### Outbreak investigation

Efforts to control the COVID-19 epidemic focus on containing the disease and preventing new cases. On board ships it is essential to identify the most likely mode or modes of transmission and the initial source or sources of the outbreak. Because the outbreak may have international ramifications, on large ships, including cruise ships that carry nationals from many countries or areas, the outbreak investigation requires coordinated efforts .

Article 6 of IHR (2005) provides that a State Party shall communicate to WHO all timely, accurate and sufficiently detailed public health information available to it about the notified event (such as case definitions, laboratory results, source and type of the risk, number of cases and deaths, conditions affecting the spread of the disease, and the health measures employed) and report, when necessary, the difficulties faced in responding to the public health emergency of international concern and the support needed (7).

### Epidemiological investigation

The field investigation team should take all necessary precautions and use PPE appropriately to avoid becoming infected.

For close contacts, the analyses should consider the following risk factors, where applicable: who shared cabins, their companions, groups travelling together, and their participation in onshore activities; the restaurants and bars they attended, seating arrangements at meals based on reservation lists, buffet service seating locations (schematics); participation in on-board events or in the ship's public areas (such as the gym, theatre, cinema, casino, spa, recreational water facilities); the deck of the cabin where the cases and contacts stayed; and the fire zone and air handling units. Records to be reviewed and considered in the investigation are the ship manifest, the ship schematics, cabin reservation lists, activities reservation lists, records of vomiting incidence, accidental faecal release records for pools, dining reservation lists, medical logs of passengers and crew with gastrointestinal issues, cabin plans, the cabin stewards assigned to each cabin and their shifts, and any records about the demographic characteristics of the travellers. The minimum data requirements that should be collected are included in the Public Health Passenger/Crew Locator Form (Annex 2).

### Environmental investigation

A focused inspection should be conducted to assess whether the isolation procedures and other measures on board the ship were applied properly, sufficient PPE supplies were available and staff were trained in the use of PPE. Housekeeping, cleaning and disinfection procedures (such as protocols, products, concentrations, contact times, use of PPE, mixing processes) and the frequency of cleaning and disinfection (especially of areas that are frequently touched) should be checked during the inspection. The focused inspection should also determine whether any crew might have been working while symptomatic, including food handlers, housekeeping staff and spa staff.

If feasible, samples from environmental surfaces and materials could be collected and sent to a laboratory for testing both before and after the cleaning and disinfection procedures are completed. Staff should be trained to use PPE to avoid becoming infected. The following

environmental samples could be collected: surface swabs from cabins where cases stayed, frequently touched surfaces in public areas, and food preparation areas, including pantries close to the cabins of affected travellers; air from cabins where cases stayed and medical rooms where cases were isolated; air from the sewage treatment unit exhaust and engine exhaust; air ducts; air filters in the air handling units of the cabin; and sewage and recreational water buffer tanks.

#### Acknowledgements

WHO gratefully acknowledges the contributions of the WHO Collaborating Centre For The International Health Regulations: Points Of Entry at the University of Thessaly, Greece, for its help in developing this document.

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## Annex 1

### Sample pre-boarding questionnaire

The questionnaire is to be completed by all adults prior to embarkation.

Name as shown in the passport:

- \_\_\_\_\_

Names of all children travelling with you who are under 18 years old:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### Questions

#### Within the past 14 days

- have you, or has any person listed above, had close contact with anyone diagnosed as having coronavirus disease (COVID-19)?
- have you, or has any person listed above, provided care for someone with COVID-19 disease or worked with a healthcare worker infected with COVID-19 disease?
- have you, or has any person listed above, visited or stayed in close proximity to anyone with COVID-19 disease?
- have you, or has any person listed above, worked in close proximity to or shared the same classroom environment with someone with COVID-19 disease?
- have you, or has any person listed above, travelled with a patient with COVID-19 disease in any kind of conveyance?
- have you, or has any person listed above, lived in the same household as a patient with COVID-19 disease?

Annex 2  
Public Health Passenger/Crew Locator Form

Date of form completion: (yyyy/mm/dd)																							
2 0																							
<p><b>Public Health Passenger/Crew Locator Form:</b> To protect your health, public health officers need you to complete this form whenever they suspect a communicable disease onboard a cruise. Your information will help public health officers to contact you if you were exposed to a communicable disease. It is important to fill out this form completely and accurately. Your information is intended to be held in accordance with applicable laws and used only for public health purposes. <i>Thank you for helping us to protect your health.</i></p>																							
<p><i>One form should be completed by an adult member of each family/crew member. Print in capital (UPPERCASE) letters. Leave blank boxes for spaces.</i></p>																							
<p><b>CRUISE INFORMATION:</b> 1. Cruise line name &amp; 2. Cruise ship name 3. Cabin Number 4. Date of disembarkation (yyyy/mm/dd)</p>																							
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			2 0																				
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<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black;">9. Mobile</td> <td style="width: 50%; border-bottom: 1px solid black;">10. Business</td> </tr> <tr> <td style="width: 50%; border-bottom: 1px solid black;">11. Home</td> <td style="width: 50%; border-bottom: 1px solid black;">12. Other</td> </tr> </table>				9. Mobile	10. Business	11. Home	12. Other																
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11. Home	12. Other																						
13. Email address																							
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16. City																							
17. State/Province																							
18. Country																							
19. ZIP/Postal code																							
<p><b>TEMPORARY ADDRESS:</b> If in the next 14 days you will not be staying at the permanent address listed above, write the places where you will be staying.</p>																							
<p>20. Hotel name (if any) 21. Number and street (Separate number and street with blank box) 22. Apartment number</p>																							
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<p><b>34. TRAVEL COMPANIONS – FAMILY:</b> Only include age if younger than 18 years</p>																							
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<p><b>35. TRAVEL COMPANIONS – NON-FAMILY:</b> Also include name of group (if any)</p>																							
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WHO reference number: WHO/2019-nCov/IHR\_Ship\_outbreak/2020.1

# PROCEDIMIENTO DE ACTUACIÓN PARA LOS SERVICIOS DE PREVENCIÓN DE RIESGOS LABORALES FRENTE A LA EXPOSICIÓN AL NUEVO CORONAVIRUS (SARS-COV-2)

28 de febrero de 2020



Las recomendaciones incluidas en el presente documento están en continua revisión en función de la evolución y nueva información que se disponga de la infección por el nuevo coronavirus (SARS-COV-2)

## **COORDINACIÓN**

**Subdirección General de Sanidad Ambiental y Salud Laboral. Dirección General de Salud Pública, Calidad e Innovación.**

**Ponencia de Salud Laboral de la Comisión de Salud Pública del CISNS.**

## **HAN PARTICIPADO EN LA REDACCIÓN:**

**Ministerio de Trabajo y Economía Social. Instituto Nacional De Seguridad y Salud en el Trabajo (INSST). Centro Nacional de Medios de Protección (CNMP).**

**Ministerio de Trabajo y Economía Social. Inspección de Trabajo y Seguridad Social (ITSS).**

**Sociedad Española de Medicina y Seguridad en el Trabajo (SEMST).**

**Asociación Española de Especialistas en Medicina del Trabajo (AEEMT).**

**Asociación Nacional de Medicina del Trabajo en el Ámbito Sanitario (ANMTAS).**

**Sociedad Española de Salud Laboral en la Administración Pública (SESLAP).**

**Federación Española de Enfermería del Trabajo (FEDEET).**

**Comisiones Obreras (CCOO).**

**Unión General de Trabajadores (UGT).**

**Asociación Nacional de Servicios de Prevención Ajenos (ASPREN).**

**Servicios de Prevención Ajenos (ASPA-ANEPA).**

## CUESTIONES GENERALES

En el entorno laboral las medidas preventivas se enmarcan en el Real Decreto 664/1997, de 12 de mayo, sobre la protección de los trabajadores contra los riesgos relacionados con la exposición a agentes biológicos durante el trabajo, y el daño, si se produce, puede tener la consideración legal de contingencia profesional.

Los periodos de aislamiento preventivo a que se vean sometidos los trabajadores como consecuencia del virus SARS-CoV-2, serán considerados como situación de incapacidad temporal derivada de enfermedad común (Criterio 2/2020, Dirección General de Ordenación de la Seguridad Social).

El ámbito de aplicación incluye a todos los trabajadores involucrados en trabajos de asistencia sanitaria (comprendidos los desarrollados en aislamiento, traslados, labores de limpieza, eliminación de residuos, etc.), así como los de transportes aéreo, marítimo y ferrocarril de larga distancia o internacional, los colectivos de rescate (bomberos, salvamento marítimo, policía, guardia civil, etc.), atención al público, hostelería, sector servicios, etc. Dado que el contacto con el virus puede afectar a entornos sanitarios y no sanitarios, **corresponde a las empresas evaluar el riesgo de exposición y seguir las recomendaciones que sobre el particular emita el servicio de prevención**, siguiendo las pautas y recomendaciones formuladas por las autoridades sanitarias.

Cualquier medida de protección debe garantizar que proteja adecuadamente al trabajador de aquellos riesgos para su salud o su seguridad que no puedan evitarse o limitarse suficientemente mediante la utilización de medios de protección colectiva o la adopción de medidas de organización del trabajo. La información y la formación son fundamentales en la protección de las personas en contacto con casos en investigación o confirmados y en aquellos que presentan riesgo de exposición al virus (Tabla 1). Hay que tener presente que la dimensión de la protección va más allá del trabajador e incluye al resto de las personas susceptibles de contacto directo o indirecto con el paciente.

Se limitará el número de personas y el tiempo de exposición al mínimo posible y se establecerá un listado de trabajadores expuestos, el tipo de trabajo efectuado, así como un registro de las correspondientes exposiciones, accidentes e incidentes. A su vez, los trabajadores tendrán a su disposición las instrucciones escritas en el lugar de trabajo y, si procede, se colocarán avisos que contengan, como mínimo, el procedimiento que habrá de seguirse ante un accidente.

Debe evitarse la exposición de los trabajadores sanitarios y no sanitarios que, en función de sus características personales o estado biológico conocido, debido a patologías previas, medicación, trastornos inmunitarios o embarazo, sean considerados especialmente sensibles a este riesgo.

Los trabajadores sanitarios no dedicados a la atención de casos confirmados con COVID-19 y no expuestos a entornos probablemente contaminados por el virus deben, asimismo, recibir

información general y consejo sobre la infección. También los trabajadores de empresas subcontratadas que trabajen en los centros sanitarios.

Los niveles y medidas de protección que se establezcan deben ajustarse y aplicarse en función de la naturaleza de las actividades, la evaluación del riesgo para los trabajadores y las características del agente biológico.

En este sentido, hay que tener presente las siguientes premisas:

- a) El coronavirus SARS-CoV-2 es un virus nuevo, desconocido anteriormente en la patología humana, que pertenece a la familia *Coronaviridae*. El reservorio de estos virus es animal y algunos coronavirus tienen la capacidad de transmitirse a las personas. Se piensa que los primeros casos humanos se debieron al contacto con un animal infectado. De persona a persona se transmite por vía respiratoria a través de las gotas respiratorias de más de 5 micras, cuando el enfermo presenta sintomatología respiratoria (tos y estornudos) y contacto con fómites. Hasta al momento, no hay evidencias de que se pueda transmitir desde personas infectadas asintomáticas. La transmisión aérea por núcleo de gotitas o aerosoles (capaz de transmitirse a una distancia de más de 2 metros) no ha sido demostrada para el SARS-CoV-2. Sin embargo, se cree que esta podría ocurrir durante la realización de procedimientos asistenciales invasivos del tracto respiratorio. El periodo de incubación puede variar entre 2 y 14 días.
- b) Es imprescindible reforzar las medidas de higiene personal en todos los ámbitos de trabajo y frente a cualquier escenario de exposición. Se recomienda:
  - La higiene de manos es la medida principal de prevención y control de la infección. Si las manos están visiblemente limpias la higiene de manos se hará con productos de base alcohólica; si estuvieran sucias o manchadas con fluidos se hará con agua y jabón antiséptico
  - Las uñas deben llevarse cortas y cuidadas, evitando el uso de anillos, pulseras, relojes de muñeca u otros adornos
  - Recoger el cabello largo en una coleta o moño bajo, pudiéndose ayudar de un gorro de quirófano
  - Evitar el uso de lentillas. Si se necesitan gafas, éstas deberán estar fijadas con cinta adhesiva desde el puente de la gafa a la frente
  - Se recomienda retirar el maquillaje u otros productos cosméticos que puedan ser fuente de exposición prolongada en caso de resultar contaminados
  - Etiqueta respiratoria:
    - Si tiene síntomas respiratorios debe cubrirse la boca y nariz al toser o estornudar con un pañuelo desechable y tirarlo en un contenedor de basura.

- Si no se tiene pañuelo de papel debe toser o estornudar sobre su brazo en el ángulo interno del codo, con el propósito de no contaminar las manos.
- Si sufre un acceso de tos inesperado y se cubre accidentalmente con la mano, evitar tocarse los ojos, la nariz o la boca.
  - Toda persona con síntomas respiratorios debe lavarse frecuentemente las manos porque accidentalmente puede tener contacto con secreciones o superficies contaminadas con secreciones.
  - Lavarse las manos con agua y jabón, o con solución a base de alcohol, protege de igual forma y debe realizarse después de estar en contacto con secreciones respiratorias y objetos o materiales contaminados.
- c) Las medidas de protección individual (incluyendo el equipo de protección individual (EPI)), deben ser adecuadas y proporcionales al riesgo o riesgos frente a los que debe ofrecerse protección acorde con la actividad laboral o profesional.
- d) Las medidas de aislamiento del caso en investigación constituyen la primera barrera de protección tanto del trabajador como de las restantes personas susceptibles de contacto con el paciente.
- e) El uso apropiado de elementos de protección estructurales, los controles y medidas organizativas de personal, las políticas de limpieza y desinfección de lugares y equipos de trabajo reutilizables, son igualmente importantes medidas preventivas.

## NATURALEZA DE LAS ACTIVIDADES Y EVALUACIÓN DEL RIESGO DE EXPOSICIÓN

En función de la naturaleza de las actividades y los mecanismos de transmisión del nuevo coronavirus SARS-CoV-2, podemos establecer los diferentes escenarios de riesgo en los que se pueden encontrar los trabajadores, que se presentan en la Tabla 1.

**Tabla 1. Escenarios de riesgo de exposición al coronavirus SARS-CoV-2 en el entorno laboral**

EXPOSICIÓN DE RIESGO	EXPOSICIÓN DE BAJO RIESGO	BAJA PROBABILIDAD DE EXPOSICIÓN
<p>Personal sanitario asistencial y no asistencial que atiende un caso confirmado o en investigación sintomático.</p> <p>Conductor de ambulancia, si hay contacto directo con el paciente trasladado.</p> <p>Tripulación medios de transporte (aéreo, marítimo o terrestre) que atiende durante el viaje un caso sintomático procedente de una zona de riesgo.</p> <p>Situaciones en las que no se puede evitar un contacto estrecho en reuniones de trabajo con un caso sintomático.</p>	<p>Personal sanitario cuya actividad laboral no incluye contacto estrecho con el caso confirmado:</p> <ul style="list-style-type: none"> <li>– Acompañantes para traslado.</li> <li>– Celadores, camilleros, trabajadores de limpieza.</li> </ul> <p>Personal de laboratorio responsable de las pruebas de diagnóstico virológico.</p> <p>Personal no sanitario que tenga contacto con material sanitario, fómites o desechos posiblemente contaminados (limpieza, desinfección, eliminación de residuos, atención al público, hostelería, trabajadores de las empresas funerarias).</p> <p>Ayuda a domicilio de contactos asintomáticos.</p>	<p>Trabajadores sin atención directa al público, o a más de 2 metro de distancia, o con medidas de protección colectiva que evitan el contacto:</p> <ul style="list-style-type: none"> <li>– Personal administrativo.</li> <li>– Conductor ambulancia con barrera colectiva, sin contacto directo con el paciente.</li> <li>– Conductores de transportes públicos</li> <li>– Personal de seguridad</li> <li>– Policías/Guardias Civiles</li> <li>– Personal aduanero</li> <li>– Bomberos y personal de salvamento</li> </ul>
REQUERIMIENTOS		
<p>En función de la evaluación específica del riesgo de exposición de cada caso: componentes de EPI de protección biológica y, en ciertas circunstancias, de protección frente a aerosoles y frente a salpicaduras.</p>	<p>En función de la evaluación específica del riesgo de cada caso: componentes de EPI de protección biológica.</p>	<p>No necesario uso de EPI.</p> <p>En ciertas situaciones (falta de cooperación de una persona sintomática):</p> <ul style="list-style-type: none"> <li>– protección respiratoria,</li> <li>– guantes de protección.</li> </ul>

## **EQUIPO DE PROTECCIÓN INDIVIDUAL**

De acuerdo a lo establecido en el Real Decreto 773/1997, el equipo deberá estar certificado en base al Reglamento (UE) 2016/425 relativo a los equipos de protección individual, lo cual queda evidenciado por el marcado CE de conformidad.

Por otra parte, cuando productos como, por ejemplo, guantes o mascarillas, estén destinados a un uso médico con el fin de prevenir una enfermedad en el paciente deben estar certificados como productos sanitarios (PS) de acuerdo a lo establecido en el Real Decreto 1591/2009, por el que se regulan los mismos.

Un mismo producto, para el que se requiera un doble fin, debe cumplir simultáneamente con ambas legislaciones. Es el caso de los guantes o mascarillas de uso dual.

De forma general, la recomendación es utilizar EPI desechables, o si no es así, que puedan desinfectarse después del uso, siguiendo las recomendaciones del fabricante.

Los EPI deben escogerse de tal manera que se garantice la máxima protección con la mínima molestia para el usuario y para ello es crítico escoger la talla, diseño o tamaño que se adapte adecuadamente al mismo.

La correcta colocación los EPI es fundamental para evitar posibles vías de entrada del agente biológico; igualmente importante es la retirada de los mismos para evitar el contacto con zonas contaminadas y/o dispersión del agente infeccioso.

A continuación, se describen los EPI que podrían ser necesarios, así como las características o aspectos de los mismos que pueden ser destacables en el entorno laboral que nos ocupa. No se trata de una descripción de todos los EPI que pudieran proteger frente a un riesgo biológico, sino de los indicados en el caso del personal potencialmente expuesto en el manejo de los pacientes en investigación o confirmados de infección por el coronavirus. La evaluación del riesgo de exposición permitirá precisar la necesidad del tipo de protección más adecuado.

### **1. Protección respiratoria**

Con el fin de evitar contagios, los casos confirmados y en investigación deben llevar mascarillas quirúrgicas. En el caso de que llevasen en lugar de una mascarilla quirúrgica una mascarilla autofiltrante, en ningún caso ésta incluirá válvula de exhalación ya que en este caso el aire es exhalado directamente al ambiente sin ningún tipo de retención y se favorecería, en su caso, la difusión del virus. Las mascarillas quirúrgicas deben cumplir la norma UNE-EN 14683:2019+AC:2019). La colocación de la mascarilla quirúrgica a una persona con sintomatología respiratoria supone la primera medida de protección para el trabajador.

La protección respiratoria generalmente recomendada para el personal sanitario que pueda estar en contacto a menos de 2 metros con casos en investigación o confirmados es una mascarilla autofiltrante tipo FFP2 o media máscara provista con filtro contra partículas P2.

Las mascarillas autofiltrantes (que deben cumplir la norma UNE-EN 149:2001 +A1:2009) o, en su caso, los filtros empleados (que deben cumplir con las normas UNE-EN 143:2001) no deben reutilizarse y por tanto, deben desecharse tras su uso. Las medias máscaras (que deben cumplir con la norma UNE-EN 140:1999) deben limpiarse y desinfectarse después de su uso. Para ello se seguirán estrictamente las recomendaciones del fabricante y en ningún caso, el usuario debe aplicar métodos propios de desinfección ya que la eficacia del equipo puede verse afectada.

Cuando de la evaluación de riesgos se derive que en el desarrollo de la actividad se realizan procedimientos asistenciales en los que se puedan generar bioaerosoles en concentraciones elevadas, se recomienda el uso por el personal sanitario de mascarillas autofiltrantes contra partículas FFP3 o media máscara provista con filtro contra partículas P3.

Los equipos de protección respiratoria deben quitarse en último lugar, tras la retirada de otros componentes como guantes, batas, etc.

## **2. Guantes y ropa de protección**

### **2.1 Guantes de protección**

Los guantes de protección deben cumplir con la norma UNE-EN ISO 374.5:2016.

En actividades de atención al paciente y en laboratorios, los guantes que se utilizan son desechables ya que las tareas asociadas requieren destreza y no admiten otro tipo de guante más grueso.

Sin embargo, es importante destacar que, en toda otra actividad que no requiera tanta destreza, como por ejemplo en tareas de limpieza y desinfección de superficies que hayan estado en contacto con pacientes, puede optarse por guantes más gruesos, más resistentes a la rotura.

### **2.2 Ropa de protección**

En lo relativo a la ropa, es necesaria la protección del uniforme del trabajador de la posible salpicadura de fluidos biológicos o secreciones procedentes del paciente confirmado o en investigación al que examina o trata.

Este tipo de ropa, como EPI, debe cumplir con la norma UNE-EN 14126:2004 que contempla ensayos específicos de resistencia a la penetración de microorganismos. Este tipo de ropa puede ofrecer distintos niveles de hermeticidad tanto en su material como en su diseño, cubriendo parcialmente el cuerpo como batas, delantales, manguitos, polainas, etc., o el cuerpo completo. En la designación, se incluye el Tipo y la letra B (de Biológico).

En caso de que sea necesario protección adicional en alguna zona, como cierta impermeabilidad, también puede recurrirse a delantales de protección química que cumplen con la norma UNE- UNE-EN 14605 :2009, denominados Tipos PB [3] y PB [4] (PB procede de “Partial Body”) que, aunque no sean específicamente de protección biológica, pueden ser adecuados para el uso de protección contra salpicaduras mencionado o para complementar una bata que no sea un EPI.

Se recomienda que la ropa de protección biológica sea desechable ya que presenta la ventaja de que al eliminarse se evitan fuentes de posible contagio que pudieran aparecer en el caso de que la desinfección del equipo no se realizase correctamente.

### 3. Protección ocular y facial

Se debe usar protección ocular cuando haya riesgo de contaminación de los ojos a partir de salpicaduras o gotas (por ejemplo: sangre, fluidos del cuerpo, secreciones y excreciones).

Los protectores oculares certificados en base a la norma UNE-EN 166:2002 para la protección frente a líquidos<sup>1</sup> pueden ser gafas integrales frente a gotas o pantallas faciales frente a salpicaduras (ambos, campo de uso 3), donde lo que se evalúa es la hermeticidad del protector (en el caso de la gafa integral) o la zona de cobertura del mismo (en el caso de la pantalla facial).

Es posible el uso de otro tipo de protector ocular, como sería el caso de gafas de montura universal con protección lateral, para evitar el contacto de la conjuntiva con superficies contaminadas, por ejemplo; contacto con manos o guantes. No obstante, si por el tipo de exposición se precisa garantizar cierta hermeticidad de las cuencas orbitales deberemos recurrir a gafas integrales (campos de uso 3, 4 o 5 según UNE-EN 166:2002, en función de la hermeticidad requerida)<sup>2</sup> y, para la protección conjunta de ojos y cara, a pantallas faciales.

Se recomienda siempre protección ocular durante los procedimientos de generación de aerosoles. Cuando sea necesario el uso conjunto de más de un equipo de protección individual, debe asegurarse la compatibilidad entre ellos, lo cual es particularmente importante en el caso de la protección respiratoria y ocular simultánea, para que la hermeticidad de los mismos y por tanto su capacidad de proteger no se vea mermada.

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<sup>1</sup> No existe norma específica de protectores oculares frente a microorganismos. Los posibles campos de uso a considerar según UNE EN 166 serían: protección frente a impactos (todo tipo de montura), líquidos (montura integral/pantalla facial), polvo grueso > 5 µm (montura integral), gas y polvo fino < 5 µm (montura integral).

<sup>2</sup> Campos de uso: 3 (gotas de líquidos, admite ventilación directa), 4 (polvo grueso, admite ventilación indirecta), 5 (gas y polvo fino, no admite ventilación)

#### **4. Colocación y retirada de los EPI**

Tal y como se ha indicado, los EPI deben seleccionarse para garantizar la protección adecuada en función de la forma y nivel de exposición y que ésta se mantenga durante la realización de la actividad laboral. Esto debe tenerse en cuenta cuando se colocan los distintos EPI de tal manera que no interfieran y alteren las funciones de protección específicas de cada equipo. En este sentido, deben respetarse las instrucciones del fabricante.

Después del uso, debe asumirse que los EPI y cualquier elemento de protección empleado pueden estar contaminados y convertirse en nuevo foco de riesgo. Por lo tanto, un procedimiento inapropiado de retirada puede provocar la exposición del usuario.

Consecuentemente, debe elaborarse e implementarse una secuencia de colocación y retirada de todos los equipos detallada y predefinida, cuyo seguimiento debe controlarse.

Los EPI deben colocarse antes de iniciar cualquier actividad probable de causar exposición y ser retirados únicamente después de estar fuera de la zona de exposición.

Se debe evitar que los EPI sean una fuente de contaminación, por ejemplo, dejándolos sobre superficies del entorno una vez que han sido retirados.

Para acceder a información de la OMS sobre puesta y retirada de EPI puede consultarse el siguiente enlace: [https://www.who.int/csr/resources/publications/PPE\\_EN\\_A1sl.pdf](https://www.who.int/csr/resources/publications/PPE_EN_A1sl.pdf).

#### **5. Desecho o descontaminación**

Después de la retirada, los EPI desechables deben colocarse en los contenedores adecuados de desecho y ser tratados como residuos biosanitarios clase III.

Si no se puede evitar el uso de EPI reutilizables, estos se deben recoger en contenedores o bolsas adecuadas y descontaminarse usando el método indicado por el fabricante antes de guardarlos. El método debe estar validado como efectivo contra el virus y ser compatible con los materiales del EPI, de manera que se garantiza que no se daña y por tanto su efectividad y protección no resulta comprometida.

#### **6. Almacenaje y mantenimiento**

Los EPI deben ser almacenados adecuadamente, siguiendo las instrucciones dadas por el fabricante, de manera que se evite un daño accidental de los mismos o su contaminación.

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8. [Guía Técnica del INSST relativa al uso de equipos de protección individual en el trabajo](#)

**Apéndice 6** de la [Guía Técnica del INSST relativa a la exposición a riesgos biológicos](#)

[NTP 787: Equipos de protección respiratoria: identificación de los filtros según sus tipos y clase](#)

[NTP 938: Guantes de protección contra microorganismos](#)

[NTP 772: Ropa de protección contra agentes biológicos](#)

[NTP 813: Calzado para protección individual: Especificaciones, clasificación y marcado](#)

[Equipos de Protección individual](#)

[Díptico: Equipos de Protección Respiratoria](#)

[Díptico: Guante de uso dual](#)

[Fichas de selección y uso de EPI](#)

#### 7. Normas técnicas:

UNE-EN 149:2001 + A1:2010 Dispositivos de protección respiratoria. Medias máscaras filtrantes de protección contra partículas. Requisitos, ensayos, marcado.

UNE-EN 143:2001+ A1:2006 Equipos de protección respiratoria. Filtros contra partículas. Requisitos, ensayos, marcado.

UNE-EN 140:1999 Equipos de protección respiratoria. Medias máscaras y cuartos de

máscara. Requisitos, ensayos, marcado;

UNE-EN ISO 374-5:2016, Guantes de protección contra productos químicos y los microorganismos peligrosos. Parte 5: Terminología y requisitos de prestaciones para riesgos por microorganismos. (ISO 374-5:2016) (Ratificada por la Asociación Española de Normalización en junio de 2017).

UNE-EN 14126: 2004 y UNE-EN 14126: 2004/AC: 2006 Ropa de protección. Requisitos y métodos de ensayo para la ropa de protección contra agentes biológicos.

UNE-EN 14605:2005 + A1:2009, Ropa de protección contra productos químicos líquidos. Requisitos de prestaciones para la ropa con uniones herméticas a los líquidos (Tipo 3) o con uniones herméticas a las pulverizaciones (Tipo 4), incluyendo las prendas que ofrecen protección únicamente a ciertas partes del cuerpo (Tipos PB [3] y PB [4]).

UNE EN 166:2002, Protección individual de los ojos. Especificaciones.

**Tabla 2. Componentes del equipo de protección individual recomendados para la protección frente al nuevo coronavirus SARS-COV-2**

	Marcado de Conformidad <sup>2</sup>	Marcado relacionado con la protección ofrecida	Normas UNE aplicables <sup>3</sup>	Aspectos a considerar
<b>Protección respiratoria</b>				
<p>Mascarilla autofiltrante</p> <p>Media máscara (mascarilla) + filtro contra partículas</p>	<p><b>CE</b> como EPI + número identificativo del organismo de control</p>	<p><b>Marcado autofiltrantes:</b> FFP2 o FFP3</p> <p><b>Marcado filtros:</b> P2 o P3 (código de color blanco)</p>	<p>UNE-EN 149 (Mascarilla autofiltrante)</p> <p>UNE-EN 143 (Filtros partículas)</p> <p>UNE-EN 140 (Mascarillas)</p>	<p>Bioaerosoles en concentraciones elevadas: Se recomienda FFP3 o media máscara + P3</p> <p>Las mascarillas quirúrgicas (UNE-EN 14683) son PS y no un EPI. No obstante, hay mascarillas quirúrgicas que pueden proteger adicionalmente al personal sanitario frente a posibles salpicaduras de fluidos biológicos. Esta prestación adicional no implica protección frente a la inhalación de un aerosol líquido</p>
<b>Ropa y guantes de protección</b>				
<p>Guantes de protección</p>	<p><b>CE</b> como EPI + número identificativo del organismo de control</p>	<p>EN ISO 374-5</p>	<p>UNE EN ISO 374-5 (Requisitos guantes microorganismos)</p>	<p>Se distingue entre guantes que sólo protegen frente a bacterias y hongos y los que, además, protegen frente a la penetración de virus. En el primer caso va marcado</p>

<sup>2</sup> CE como EPI implica cumplir con el Reglamento (UE) 2016/425 y CE como Producto Sanitario (PS) implica cumplir con el Real Decreto 1591/2009

<sup>3</sup> Las versiones en vigor de las distintas normas pueden consultarse en el siguiente enlace: <http://ec.europa.eu/enterprise/policies/european-standards/harmonised-standards/personal-protective-equipment/>

	Marcado de Conformidad <sup>2</sup>	Marcado relacionado con la protección ofrecida	Normas UNE aplicables <sup>3</sup>	Aspectos a considerar
		 VIRUS		<p>con el pictograma de riesgo biológico y en el segundo, el mismo pictograma con la palabra VIRUS bajo él. Esta diferencia viene otorgada por la realización de un ensayo específico de penetración a virus.</p>
<p><b>Prendas de Protección Parcial del cuerpo (PB):</b>            Bata            delantal            manguitos            etc</p> <p>Cuerpo completo: Mono (con/sin capucha)</p>	<p> como EPI + número identificativo del organismo notificado que hace el control de la producción</p>	<p>EN 14126</p>  Nº deTipo B	<p>UNE-EN 14126 (Ropa de protección biológica)</p>	<p>Este tipo de ropa puede ofrecer distintos niveles de hermeticidad tanto en su material como en su diseño, cubriendo parcialmente el cuerpo como batas, delantales, etc., o el cuerpo completo. En la designación, se incluye el Tipo y la letra B (de Biológico).</p> <p>Para protección adicional en alguna zona, como cierta impermeabilidad, también puede recurrirse a delantales de protección química que cumplen con la norma UNE-EN 14605, denominados Tipos PB [3] y PB [4] de protección biológica, pueden ser adecuados para el uso de protección contra salpicaduras mencionado o para complementar una bata que no sea un EPI.</p>

