

# OPERATIONAL HYGIENE

## HANDBOOK COVID-19



### THIS HANDBOOK AIMS TO::


- \_Help reduce community transmission of SARS-COV-2 in the course of activities undertaken by SGIFR operational crews\*;
- \_Provide a short guide to best practices for preventing and mitigating the impacts of COVID-19;
- \_Contribute to equipment and facility maintenance procedures.



### COVID-19

**WHAT IS IT?** COVID-19 is a viral **respiratory disease** highly transmissible from person to person through droplets.

**SYMPTOMS:** Fever, cough, trouble breathing, headache and flu-like symptoms.  
Less frequently: sore throat, loss of smell, sneezing.

**INCUBATION PERIOD:** Symptoms take **between 1 and 14 days** to manifest, but a large percentage of the population doesn't show any symptoms at all (although  they can infect others).

- \_Self-monitor before leaving home. Stay home if you are sick or have flu-like symptoms, and call the SNS24 health helpline;
- \_In all other situations, **wash your hands** (for approximately 20 seconds) and **arms up to your elbows using soap and water. Do not use alcohol-based solution (70%);**
- \_Where possible, ensure **adequate physical distancing** (at least 2 metres);
- \_Avoid touching your mouth, nose and eyes with your hands.

- If you feel the need to sneeze, sneeze into your elbow;
- \_In all recommended situations, **use personal protective equipment;**
  - \_Put on or take off PPE in a **designated area** (see CHECKLIST 1) with facilities available to wash and disinfect them. If you need to carry PPE, do so using a watertight bag;
  - \_At the end of a shift, and if possible, take a shower and put on clean clothes;

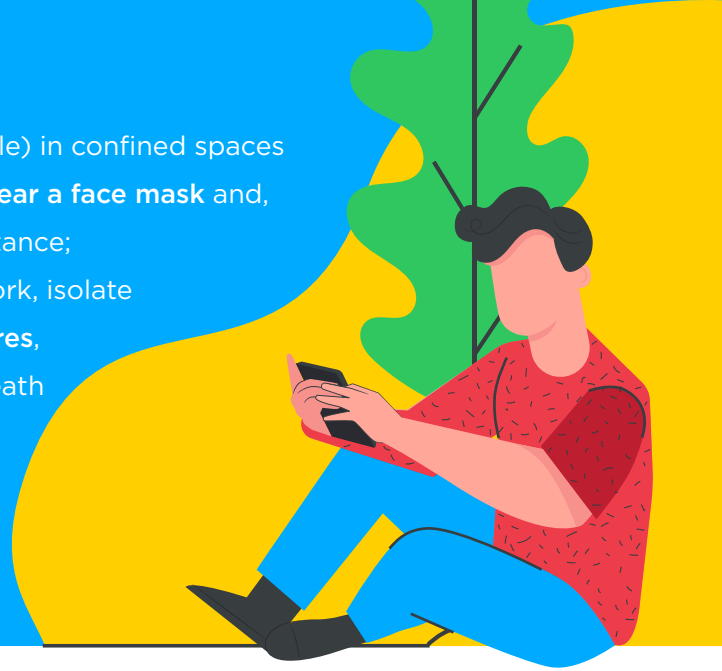
## operational personnel:

### INDIVIDUAL PRECAUTIONS:



\_When you need to work in a crew (with two or more people) in confined spaces such as the Operational Command Post (OCP), you **must wear a face mask** and, to the extent possible, keep the recommended physical distance;

\_If you show symptoms suggestive of COVID-19 while at work, isolate yourself and **take all other preventive and response measures**, namely putting on a surgical face mask, calling the SN24 health helpline, avoiding contact with co-workers and informing your superior.



## COLLECTIVE MEASURES:

- \_Follow the established internal procedures;
- \_**Avoid formations.** If such is not possible, ensure physical distancing;
- \_Where possible, maintain a **safe distance of 2 metres** from co-workers;
- \_**Wear a face mask**, from the moment you enter the facilities, and especially in common areas;

\_**Be sure to disinfect work tools** when you finish using them.

\_Make sure that you do not mix your gear and uniform with that of co-workers;

\_Briefings should preferably be held **outdoors** and with as few people as possible.

In the event an OCP is activated, only gather the people who are strictly necessary. The outdoor area of the OCP must be physically cordoned off and access restricted;

\_**Hands must be wash and disinfected** every 30 minutes;

\_Meal times must be divided into several shifts at different times, observing the 2-metre distancing between each crew member;

\_**Crowds should be avoided** in and outside of facilities;

\_Whenever possible, **use remote communication devices** (e.g. radio, video conferencing, mobile phone) for meetings.

## centres and facilities:

**Barracks, Logistics Support Bases (LSB), Air Support Centre (ASC), Operational Coordination Centres, and other facilities.**



- \_ **Monitor temperatures at entrances and exits**, establish capacity limits (stock replenishment, mechanics, electricians, etc.), and advise against or restrict the access of unauthorised persons;
- \_ If possible, create/implement a **separate entry and exit corridor** so that shift workers do not circulate in the same space;
- \_ **Conduct regular screening**. If someone's temperature is higher than 38° C, activate the isolation protocol immediately;
- \_ **Clean and disinfect facilities**, starting from the cleanest to the dirtiest area;
- \_ All frequently touched surfaces (e.g., door handles, armrests, tables, switches, taps, computer keyboards, etc.), as well as public areas, must be **thoroughly cleaned in accordance with DGS Guideline 014/2020, several times a day**;
- \_ **Ensure regular disinfection of tools used for cleaning common areas** (e.g. mops, brooms, rags);

- \_ When cleaning surfaces, **always protect your hands by wearing disposable waterproof gloves**. Wear a face mask and protective eyewear when using disinfectants in accordance with DGS Guideline 014/2020;
- \_ **Rubbish bags must be easily removable and leak-proof**, and removed when three-quarters full. Bins must be emptied and disinfected daily;
- \_ **Beds in quarters must be arranged in such a way as to ensure physical distancing**, and reduce capacity;
- \_ **Abundant ventilation** (natural or artificial) is highly recommended (never put AC in air recirculation mode);
- \_ Customer service should preferably be provided by **telephone or via intercom**. When such is not possible, use acrylic partitions or face masks (in the absence of partitions);
- \_ **FOLLOW THE PROCEDURES IN CHECKLIST 4.**

## vehicles:

**Combat, logistics, command post, sanitary, pre-hospital care and other vehicles.**

- \_ **Clean and disinfect your hands before entering the vehicle**;
- \_ Equip vehicles with a **hand sanitizer dispenser, gloves and face masks for regular use**;
- \_ Prepare a **back-up isolation kit** for suspected COVID-19 cases, with a bottle of hand sanitizer, two face masks, four pairs of gloves, two face shields or goggles, and two disposable gowns or suits;



- \_ **Disinfect vehicles daily**, or whenever needed;
- \_ **Air out/ventilate the cabin regularly**;
- \_ **FOLLOW THE PROCEDURES IN CHECKLIST 5.**

# VEHICLE CLEANING PROCEDURE:

1\_Always wear gloves and a face mask when using the products;

2\_Remove all objects from inside the vehicle;

3\_Use water and detergent to clean all surfaces, particularly those with dust or grease, and allow to dry for five minutes.

Porous surfaces should be allowed to dry for 10 minutes;

4\_Apply disinfectant solutions to a clean cloth and wipe down the surfaces for about one minute, as indicated in the table below;

5\_Let stand for about ten minutes and air out the vehicle's interior for about two minutes. The outside of the vehicle should be cleaned using a disinfectant spray or high-pressure washer:

6\_Use a dry, clean cloth to remove any excess solution;

7\_Throw away paper and used gloves;

8\_Wash your hands after cleaning.

**Table 1:** Cleaning and alternatives for disinfecting vehicles

	WATER AND SOAP OR DETERGENT	ALCOHOL	BLEACH	HYDROGEN PEROXIDE
Levers, handles, buttons, and drawers	✓	70%	0,5%	7% maximum
Upholstery, seat cushions, cabins	✓ <small>if they can dry</small>	70%	0,5%	1% maximum or using fumigation
Screens, displays, mirrors and windows	✓	70%	0,5%	✗
Computers, mobile phones, radios	✓ <small>and dry immediately</small>	✓ <small>70% isopropanol only</small>	✗	✗
Keyboards, mouses, other plastics	✓	70%	0,5%	✗
Seat belts	✓	70%	0,5%	1% maximum
Exterior and equipment lockboxes	✓	✗	1%	7% maximum

# operations:

- \_Personnel that are part of **risk groups** defined by DGS (diabetes, hypertension, respiratory diseases, among other co-morbidities) **should not be included in operational crews**;
- \_Install mobile equipment for hand washing at various points of the Theatre of Operations (TO);
- \_Adapt rest and hygiene facilities to observe the recommended physical distancing, taking the size of the crew into account;
- \_Clean and disinfect resting and hygiene facilities regularly;
- \_Contact between crews working in separate operational areas should **be limited**;
- \_Provide conditions for the removal and decontamination of PPE from the natural environment at the end of operations, as indicated in **CHECKLIST 1**;
- \_Radios should **always be used by the same crew member** during a shift and disinfected at the end of their shift;
- \_Shared tools/equipment must be **disinfected after each use**.

## RESPONSE TO SUSPECTED

### - ISOLATION PROTOCOL

- \_Isolate a suspected case. The person in question **must put on a surgical face mask**;
- \_The person who will be taking care of the suspected case **must put on a face mask and gloves, as indicated in CHECKLIST 2**;
- \_Report the suspected case (**SNS24 and Security Officer or Commander**);
- \_Maintain ongoing operational activities (e.g. **do not abandon a prescribed fire**);
- \_Identify the people with whom the suspected case had direct contact;
- \_Consider generalised isolation of the crew, after the Health Authority has confirmed the risk;
- \_Activate the Contingency Plan (in facilities) or Mitigation Plan (onsite);
- \_Disinfect all equipment, gear, vehicles and surfaces.

## annexes:

### HAND WASHING

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Wet your hands with warm water and use a mild soap (to cover all surfaces of your hands).



Thoroughly wash all parts of your hands and wrists for about 20 seconds. If you are in short sleeves, wash up to your elbows.



Rinse your hands with plenty of water to remove the soap.



Let your hands air-dry naturally or use a disposable paper towel. Do not use air dryers.

## PPE IN THE NATURAL ENVIRONMENT

There are no special precautions when it comes to using Firefighting PPE in the natural environment. However, you must wash your hands with soap and water (or an ABHS) before putting on PPE and after taking them off.

### PROCEDURE FOR REMOVING FIREFIGHTING PPE IN THE NATURAL ENVIRONMENT:

It is presumed that responders and operational personnel can completely remove their clothing (e.g., dressing room, sleeping area). Adjustments must be made for partial removal during operations, leaving the PPE to air out until the next use.

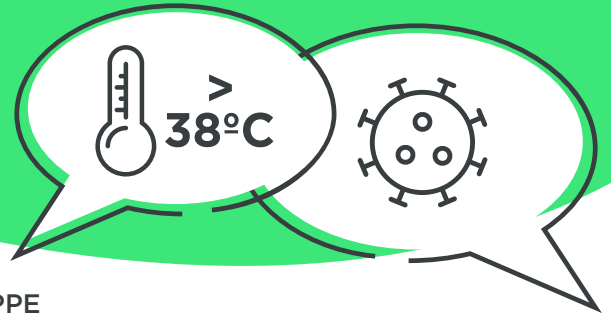
### CHECKLIST 1: REMOVAL OF FIREFIGHTING PPE IN THE NATURAL ENVIRONMENT

No.	ACTION	CHECK
1	Prepare an area for removal of PPE with waterlight bags to store the equipment	<input type="checkbox"/>
2	Remove work gloves	<input type="checkbox"/>
3	Remove any equipment such as safety vests, belts, radios, flashlights	<input type="checkbox"/>
4	Wash your hands with soap and water (or an ABHS)	<input type="checkbox"/>
5	Remove your helmet and safety goggles in a single forward movement	<input type="checkbox"/>
6	Remove your turnout coat/uniform jacket by touching only the outside	<input type="checkbox"/>
7	Remove your boots and pants by touching only the outside, and place your feet in a "clean" area	<input type="checkbox"/>
8	HigWash your hands with soap and water (or ABHS)	<input type="checkbox"/>
9	Remove your jersey by touching only the outside, and simultaneously remove the hood	<input type="checkbox"/>
10	If you remove your underwear, do not place it with the PPE	<input type="checkbox"/>
11	Take a shower after removing PPE, if such is not possible, wash your hands, wrists, forearms, neck, face and hair with soap and water	<input type="checkbox"/>
12	Store all PPE components inside waterlight bags so that they do not come into contact with other clothing or personal items	<input type="checkbox"/>
13	Clean all PPE components in accordance with the manufacturer's recommendations	<input type="checkbox"/>



# PPE FOR SUSPECTED COVID-19 CASES

Another person must be present when putting on and taking off PPE, who must confirm that all steps are followed.



## CHECKLIST 2: PROCEDURE FOR PUTTING ON COVID-19 PPE

(see DGS Standard 007/2020 for more detailed information)

No.	ACTION	CHECK
1	Remove accessories and personal items	<input type="checkbox"/>
2	Wash your hands with soap and water (or ABHS)	<input type="checkbox"/>
3	Put on a surgical face mask and protective eyewear	<input type="checkbox"/>
4	Put on a gown and boot covers, if available	<input type="checkbox"/>
5	Use disposable, non-sterile gloves	<input type="checkbox"/>
6	Put on a cap	<input type="checkbox"/>

## CHECKLIST 3: PROCEDURE FOR TAKING OFF COVID-19 PPE

No.	ACTION	CHECK
1	Prepare an area for removal of PPE with a receptacle to discard PPE	<input type="checkbox"/>
2	Disinfect gloves with 70% ethanol	<input type="checkbox"/>
3	If you are wearing boot covers, remove them one by one and place your feet in a "clean" area	<input type="checkbox"/>
4	Disinfect gloves with 70% ethanol	<input type="checkbox"/>
5	Remove your gown, if applicable, by touching only the outside and ensuring it remains inside out, and also remove gloves	<input type="checkbox"/>
6	Put on a fresh pair of gloves	<input type="checkbox"/>
7	Remove face shield or goggles from back to front	<input type="checkbox"/>
8	Disinfect gloves with 70% ethanol	<input type="checkbox"/>
9	Remove your cap, if applicable, and your face mask in a single forward movement, by touching only the elastic bands	<input type="checkbox"/>
10	Disinfect gloves with 70% ethanol	<input type="checkbox"/>
11	Remove gloves	<input type="checkbox"/>
12	Wash your hands with soap and water (or ABHS)	<input type="checkbox"/>

## CHECKLIST 4: PROCEDURE FOR CLEANING FACILITIES

**Instructions:** To minimise COVID-19 transmission, clean all facilities twice a day. Always wear PPE - face mask, protective eyewear and gloves. Use water and detergent for cleaning, then treat the floor with a 1% bleach solution and objects with a 0.5% bleach solution.

	MORNING	AFTERNOON
<b>Frequently touched surface:</b> Doors   Handrails   Windows	<input type="checkbox"/>	<input type="checkbox"/>
<b>Switches</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Offices:</b> Telephones   Desks and chairs   Computers, keyboards and mice	<input type="checkbox"/>	<input type="checkbox"/>
<b>Commons areas</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Canteens and dining areas:</b> Chairs   Fridges, stoves and microwaves   Drawers   Cutlery and cups	<input type="checkbox"/>	<input type="checkbox"/>
<b>Changing rooms and toilets:</b> Taps   Handles   Showers   Lockers   Sanitary equipment	<input type="checkbox"/>	<input type="checkbox"/>
<b>Rest areas:</b> Bed linen   Bedside tables   Switches	<input type="checkbox"/>	<input type="checkbox"/>
<b>Vacuum and clean the floor</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Ventilate compartments</b>	<input type="checkbox"/>	<input type="checkbox"/>

## CHECKLIST 5: VEHICLE CLEANING PROCEDURE

**Instructions:** To minimise COVID-19 transmission, clean and disinfect vehicles after each use. Always wear PPE - face mask, protective eyewear and gloves. Use water and detergent for cleaning, and disinfect with the products listed in table 1.

	MORNING	AFTERNOON
<b>Frequently touched surfaces:</b> Armrest   Steering wheel   Levers/Handles   Rear-view mirror Glove box	<input type="checkbox"/>	<input type="checkbox"/>
<b>Switches:</b> Control Buttons   Siren/Strobe Lights/Rotating beacons   Radios	<input type="checkbox"/>	<input type="checkbox"/>
<b>Cabin:</b> Windows   Upholstery, carpets and headrests   Discard all paper and accumulated waste   Storage compartments	<input type="checkbox"/>	<input type="checkbox"/>
<b>Exterior:</b> Exterior surfaces   Door handles   Handrails, grips and steps   Compartment doors   Fill covers   Water pumps	<input type="checkbox"/>	<input type="checkbox"/>
<b>Equipment lockboxes and storage boxes:</b> Equipment for use in operations carried on the roof   Equipment used carried in lockboxes   Exterior storage compartments	<input type="checkbox"/>	<input type="checkbox"/>

### Important contact information:

#### INFORMATION:

\_SNS24 healthcare helpline: 808 24 24 24  
\_Official COVID-19 information:  
<https://covid19estamoson.gov.pt/>

#### PSYCHOSOCIAL SUPPORT FOR RESPONDERS:

\_SNS24 psychological support: 808 24 24 24, option 4  
\_INEM Psychological Support and Crisis Intervention Centre: Call 112, for psychological emergencies  
\_ANEPC Psychosocial Support Team:  
[apoio.psicossocial@prociiv.pt](mailto:apoio.psicossocial@prociiv.pt)

This guide has been put together taking into account the guidelines of the Portuguese Directorate-General for Health and the AGIF operational recommendations for the prevention and mitigation of COVID-19.

