



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de la Santé

Direction de la santé

Strategies for the use of personal protective equipment (PPE) during the SARS-CoV-2 epidemic

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1. Principles and context

Personal protective measures in care facilities are usually used to prevent contamination by germs in different care circumstances. These measures prevent staff from getting colonized or infected, but also prevent the direct or indirect transmission of germs via the environment to patients or residents of the facility.

In all care situations, special precautions are taken with regard to hand hygiene, hands being the most important vector for the transmission of germs.

In the event of respiratory infections, especially viral infections, protection is taken to avoid contamination by droplets emitted when coughing or sneezing, or even from exhaled air.

The new SARS-CoV-2 virus is mainly transmitted by droplets. Aerial transmission is not considered significant unless aerosols are produced. However, the absence of aerial transmission has not been proven.² Transmission is also facilitated by the contagiousness of carriers with few or no symptoms and the lack of immunity in the population.

The scale of the pandemic caused by this virus the demand for personal protective equipment increased quickly while production was no longer assured in countries, which were in confinement. All countries in the world had to take into account material supply shortages in order to best adapt the recommendations in terms of personal protection.

In a health crisis situation like this, we believe it is essential that we continue to ensure the quality of care and the safety of both the patient and the staff. The recommendations must be adapted to the realities of supply, while ensuring the best protection of patients, residents in care establishments and their staff. Some equipment, such as surgical and respiratory masks, will therefore be reserved, for example, for the most exposed carers at risk in the crisis phase.

We recommend a strategy in phases for the use of equipment, depending on their availability and the need to protect everyone. As soon as the supply situation can be normalised, and the capacities are optimal, the usual recommendations apply.

This applies to

- Surgical masks
- Respiratory masks
- Protective gowns
- Eye protection
- Gloves

¹ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>

² <https://www.nature.com/articles/d41586-020-00974-w>

1.1 Three stages

A. Optimal capacities

The health system operates normally and PPE (personal protective equipment) is used as recommended by the hygiene procedures and according to the manufacturer's recommendations.

B. Limited supply capacities

Protective measures may vary from standard procedures, but this does not have a significant impact on care and safety for patients and staff. Such measures may be put in place on a temporary basis during a period of supply shortages.

C. Crisis capacities

Protective measures do not meet the usual quality standards. These measures may be considered in the event of a proven stock shortage.

Regardless of the stage, it is essential that staff is trained in PPE measures to understand their rational use and the different stages. The implementation of these phases must be preceded by organisation of care (cohorting, teleconsultation, etc.) in order to limit the need to use PPEs. Stages B and C should be based on a needs assessment and a logistical organisation capable of meeting these needs.

Each sector (intensive care, emergency care, acute hospital care, advanced care centres, home care, elderly care establishments) does not necessarily follow the same strategy and is not in the same stage at the same time. Individual items of equipment may be in different stages depending on supply. **The Crisis Cell determines the transition from one phase to another.**

1.2 Some important equipment

In general, staff must wear a dedicated uniform while working in the establishment or while carrying out their professional activity involving contact with patients. This uniform must be removed before leaving and washed on a daily basis in compliance to the recommendations. It is recommended that all staff take a shower before returning home, subject to the availability at their workplace.

Every symptomatic person should wear a surgical mask to limit the dispersal of viral particles. Every COVID-19 patient therefore has to wear a mask during any close interaction with other persons who could become infected. Furthermore, strict hand hygiene is recommended.

1.2.1 Surgical masks

Optimal capacities

- Surgical masks that are resistant to fluids protect against droplets and secretions. They are worn when this type of exposure is anticipated, including during surgery. This is a medical device covered by Directive 93/42/EEC. Conformity is attested by the CE marking on the package.
Standard EN 14683 IIR
- Medical masks are not subject to checks on medical devices and standards. They are used by patients as an isolation measure but do not necessarily protect against droplets and secretions.

D. Limited supply capacities

1. *Public*

- No masks in public places
- Only provided to symptomatic patients at the entry points of emergencies, advanced care centre
- Inspection of stocks by the Crisis Cell

2. *Reduce the number of masks used*

- Use of non-fluid-resistant surgical II or medical I masks for working in infectious zones but without splashing of secretions
- No change between individual patients
- Must be changed if dirty or wet
- When touched by the carer, immediate hand hygiene required
- If necessity to remove it, care area should be left

3. *Limit the use of masks by patients*

Possibly wear a mask made of fabric

E. Crisis capacities

1. Use of masks with expired storage time (dispose of if torn or damaged)
2. Limited re-use (up to 8 hours)
 - Make sure not to touch the outside of the mask
 - Be cautious when removing and replacing the mask
 - Must be changed if dirty, damaged or wet
 - Masks with elastic bands are more suitable for re-use
3. Use restricted to surgery, care of infected patients with close and prolonged contact and to aerosolising procedures if respiratory masks are not available.
4. When masks are not available :
 - Exclude health care professionals belonging to the risk group from the care of infected patients
 - Prioritise carers who have recovered from COVID-19 (evidence of protective immunity however still needs to be proven)

- Use face protection without a mask
- If possible, use mobile HEPA filters to increase air filtration
- Ensure that ventilation maximises air extraction and, that, in the absence of negative pressure chambers with filtered air, the air extraction is properly adjusted and ventilation with a maximum of fresh air is provided.
- Washable fabric masks to be washed every day at 60°: see procedure AFNOR³

1.2.2 Respiratory masks ((K)N95, FFP2)

A. Optimal capacities

- In compliance with EU directive 89/686/EEC
- Standard filter masks (K)N95, EN 149, type FFP2 or FFP3
- Worn for protection against germs with proven or suspected aerial transmission
- Protect health carer personnel more effectively in case of aerosol production by an infected patient (intubation procedures, coughing with high viral load especially in case of inadequate ventilation in confined spaces)
(Aerosolising acts: e.g. intubation, administration of aerosols, naso- or oropharyngeal smears, respiratory physiotherapy, dental care, opening of the ventilation circuit, endotracheal suctioning)
- Limited re-use (up to 4 hours)

B. Limited supply capacities

- Keep the FFP2 mask longer than recommended by the manufacturer (up to 8 hours)
- Keep the mask between the examination/contact with several patients without removing it
- Limited re-use (up to 8 hours)

C. Crisis capacities

1. Use of masks with expired storage time (dispose of if torn or damaged)
2. Prioritise the use of FFP2 for high-risk aerosol production activities such as intubations and put on a surgical mask for the rest.

When masks are not available:

- Exclude health care personnel belonging to the risk group from the care of infected patients
- Prioritise carers who have recovered from COVID-19 (evidence of protective immunity however still needs to be proven)
- Use face protection without a mask
- If possible, use mobile HEPA filters to increase air filtration

³ <https://www.ifth.org/2020/03/27/covid-19-recommandations-afnor-pour-les-masques-barrieres/>

1.2.3 Gowns

A. Optimal capacities

- Non-sterile single-use long-sleeved gowns are appropriate for the management of COVID-19 patients. Non-waterproof gowns can be used with the addition of a plastic apron for procedures and care where there is a risk of soiling and splashing of secretions; alternatively, non-sterile waterproof gowns can be used.
- Sterile surgical gowns are reserved for surgery and for acts requiring a maximum of antisepsis
- Gowns are to be changed between each patient

B. Limited supply capacities

1. Use non-sterile washable fabric gowns.
2. A maintenance procedure (washing of washable gowns) must be put in place (washing in an outsourced facility):
3. Limit the use of long-sleeved gowns for high-risk activities
 - In the event of splashing of secretions: use a plastic apron
 - Close contacts such as toileting, patient mobilisation, sheets, care of wounds

C. Crisis capacities

- a. Reduce the number of gowns used
 - i. Keep the same gown for a number of COVID-19+ patients
 - ii. Provided that the patients are not infected or infested by other transmissible germs
- b. Re-use of the same fabric gown with a same patient
 - i. By a number of carers
 - ii. Making sure not to touch the outside of the gown
 - iii. Using caution when removing and returning the gown
 - iv. Must be changed if dirty or wet

1.2.4 Eye protection:

A. Optimal capacities

- The use of eye protection is done according to the usual hygiene recommendations and as recommended by the producer.

B. Limited supply capacities

1. Recommendation of re-usable equipment: safety goggles or face shields :
 - Ensure appropriate cleansing and disinfection between uses of safety goggles or re-usable face shields
2. Implementing the re-use of eye protection equipment :

The aim is to wear the same eye protection (goggles or face shield) in several contacts with different patients without removing it between the various contacts. This practice may be applied with single-use or re-usable eye protection equipment.

- Eye protection must be changed and replaced if it is visibly soiled or if visibility is reduced.
When single-use eye protection is re-used, it must be reserved for the person wearing it and changed and replaced if visibly soiled.
- The eye protection must be removed if damaged (e.g. face shield with faulty attachment or poor visibility)
- Health care personnel must be careful not to handle the eye protection. If the eye protection needs to be adjusted while wearing it, hand hygiene should be applied immediately.
- Health care personnel must leave the care area if the eye protection needs to be changed or taken off.

C. Crisis capacities

1. Use eye protection for patient care beyond the expiry dates specified by the manufacturer
2. Prioritise eye protection for treatments such as:
 - Treatments generating aerosols
 - Care with prolonged close contact (e.g. toileting)
3. Exclude healthcare personnel with risk factors from care of COVID-19 positive or suspected patients:
4. Designate healthcare personnel with previous SARS-CoV 2 infection for COVID-19 patient care
 - Personnel who have already contracted SARS-CoV 2 may have developed immunity, although this has yet to be confirmed by studies.

1.2.5 Disposable gloves and hand hygiene

Disposable gloves used for care are non-sterile gloves.

It is recommended to use a simple pair of gloves, preferring latex-free, non-powdered gloves with cuffs.

Changing gloves:

- Between two patients
- For the same patient when moving from a contaminated site to a clean site

At the time of treatment and before any hand hygiene:

- have clear forearms
- have short nails, free of varnish, false nails or resin
- Do not wear jewellery (bracelet, ring, watch)

Carrying out hand hygiene:

1. Before contact with the patient
2. Before an aseptic procedure
3. After a risk of exposure to a biological product of human origin
4. After contact with the patient
5. After contact with the patient's environment

Friction disinfection with a hydro-alcoholic product is the recommended technique in health care facilities for all indications of hand hygiene if there is no visible soiling. In the case of visibly soiled hands, simple hand washing with mild soap and water is recommended.

If gloves are not available, strict hand hygiene is essential and sufficient, on condition that no area of the hands is missed during disinfection.

2. Home care networks/ Medical home visits

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
Confirmed or suspected COVID-19 patients	<ul style="list-style-type: none"> -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (single pair) 	<ul style="list-style-type: none"> - -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -Surgical mask IIR (except risk of aerosolisation: FFP2 respiratory mask) - -Eye protection -Non-sterile single-use gloves (single pair) 	<ul style="list-style-type: none"> -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -Surgical mask IIR (except risk of aerosolisation: FFP2 respiratory mask) -eye protection only in case of aerosol treatment -Non-sterile single-use gloves (single pair)
Management of others patients, non-suspected COVID-19	<ul style="list-style-type: none"> -Hand hygiene -Surgical mask type IIR <p>If a relative of the patient present at home is positive of COVID-19:</p> <ul style="list-style-type: none"> - Demand the relative to stay in a separate room -Surgical mask type IIR 	<ul style="list-style-type: none"> -Hand hygiene <p>If a relative of the patient present at home is positive of COVID-19:</p> <ul style="list-style-type: none"> - Demand the relative to stay in a separate room - Hand hygiene 	<ul style="list-style-type: none"> -Hand hygiene <p>If a relative of the patient present at home is positive of COVID-19:</p> <ul style="list-style-type: none"> -Hand hygiene

3. Physiotherapy and osteopathy practices

- Usual precautions already applied in physiotherapy practices (hand washing, surface disinfection, etc.)
- Patients should be informed that physiotherapy care cannot be provided in case of acute respiratory infection or in case the anamnesis could raise suspicions in the sense of a "possible case", for their own comfort and their own safety but also in the interest of the health care staff. Cancellation of an appointment in the described cases must be made without penalty to the patient.
- Upon entering the practice, the patient is given a surgical mask if he is symptomatic (and according to the recommendation for masks under B and C if necessary) that must be worn during the entire waiting and treatment period. Make sure that the patient washes his or her hands after putting on the mask.

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
COVID-19 patients confirmed or suspected or emergency physiotherapy/osteopathy care	If respiratory physiotherapy: -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns Other physiotherapy treatments: -Surgical mask type IIR -Eye protection -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns	If respiratory physiotherapy: -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns Other physiotherapy treatments: -Surgical mask type IIR -Eye protection -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns	If respiratory physiotherapy: -FFP2 respiratory mask -Eye protection -non-sterile gloves -Non-sterile single-use long-sleeved isolation gowns Other physiotherapy treatments: -Surgical mask type IIR -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns
Management of a non-suspected COVID-19 patient	-Surgical mask type IIR -Hand hygiene	-Hand hygiene -Fabric mask*	-Hand hygiene -Fabric mask*

*Patient protection only due to age-related risk or co-morbidity

4. Dental practices

- Spatial and organisational separation of COVID-19 patients from other patients. If a patient is COVID-19 positive, put him a mask on in the waiting room, except capacity situation B and C, see mask recommendations above.
- Before starting the treatment it is recommended to rinse the mouth with a 1% concentrated hydrogen peroxide solution (the virus is vulnerable to oxidation). Caution: Chlorhexidine does not effectively destroy the SARS-CoV-2 virus.
- The use of a dental dam (Kofferdam) is highly recommended.

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
Confirmed or suspected COVID-19 patients requiring dental care	-Safety glasses with side shields -FFP2 respiratory mask -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns -Surgical cap or headwear	-Safety glasses with side shields -FFP2 respiratory mask -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns -Surgical cap or headwear	-Safety glasses with side shields -FFP2 respiratory mask -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns -Surgical cap or headwear
Management of others, non-suspected COVID-19 patients	-Safety glasses with side shields -Surgical mask type IIR -Non-sterile single-use gloves (single pair)	-Safety glasses with side shields -Surgical mask type IIR -Non-sterile single-use gloves (single pair)	-Surgical mask type IIR -Non-sterile single-use gloves (single pair)

5. Advanced care centres (CSA)

Personal belongings (mobile phones, jewellery, etc.) must remain in the cloakroom and must under no circumstances enter the COVID area.

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
Staff in the rest area	-Surgical mask type IIR	-Hand hygiene	-Hand hygiene
Staff in the area of suspected COVID-19 patients	-Surgical cap or headwear -Non-sterile single-use gloves (single pair) -Eye protection -FFP2 respiratory mask -Non-sterile single-use long-sleeved isolation gowns	-Surgical cap or headwear -Non-sterile single-use gloves (single pair) -Eye protection -Surgical mask type IIR (except aerosolising gesture: FFP2 respiratory mask) -Non-sterile single-use long-sleeved isolation gowns	-Surgical cap or headwear -Non-sterile single-use gloves (single pair) -Eye protection -Surgical mask type IIR (except aerosolising gesture: FFP2 respiratory mask) -Non-sterile single-use long-sleeved isolation gowns
Staff outside area of suspected COVID-19 patients COVID-19	-Surgical mask type IIR -Hand hygiene	-Hand hygiene	-Hand hygiene

6. Accommodation facilities for the elderly and homes for disabled adults

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
Confirmed or suspected COVID-19 cases among residents	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (single pair) 	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -Surgical mask type IIR (except aerosolising procedure: FFP2) -Eye protection only in case of aerosol treatment -Non-sterile single-use gloves (single pair) 	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -Surgical mask type IIR (except aerosolising procedure: FFP2) -Eye protection only in case of aerosol treatment -Non-sterile single-use gloves (single pair)
Non-suspected COVID-19 residents	<ul style="list-style-type: none"> -Surgical mask type IIR -Hand hygiene 	<ul style="list-style-type: none"> -Hand hygiene -Fabric mask* 	<ul style="list-style-type: none"> -Hand hygiene -Fabric mask*
Return from hospital stay or resident contact (quarantine)	<ul style="list-style-type: none"> -Surgical mask type IIR -Non-sterile single-use long-sleeved isolation gowns 	<ul style="list-style-type: none"> -Hand hygiene 	<ul style="list-style-type: none"> -Hand hygiene
Transfer of the resident to a care facility	<ul style="list-style-type: none"> -Surgical mask type IIR -Hand hygiene 	<ul style="list-style-type: none"> -Hand hygiene 	<ul style="list-style-type: none"> -Hand hygiene

*Patient protection only due to age related risk or other risk factors

7. Transport of patients

Transport of unconfirmed or unsuspected COVID-19 patients	-Surgical mask type IIR -Hand hygiene	-Hand hygiene	-Hand hygiene
Transfer of suspected or confirmed COVID-19 patients, staff in contact	-Non-sterile single-use long-sleeved isolation gowns -Surgical mask type IIR -Non-sterile single-use gloves (single pair) to be changed between each patient	-Non-sterile single-use long-sleeved isolation gowns -Surgical mask type IIR -Non-sterile single-use gloves (single pair)	-Non-sterile single-use long-sleeved isolation gowns -Surgical mask type IIR -Non-sterile single-use gloves (single pair)
Intervention of the fire brigade for suspected or confirmed COVID-19 patients: staff in contact with the patient	-Non-sterile single-use long-sleeved isolation gowns -FFP2 respiratory mask -Non-sterile single-use gloves (single pair) to be changed between each patient	-Non-sterile single-use long-sleeved isolation gowns -Surgical mask type IIR (except aerosolising gesture: FFP2 respiratory mask) -Non-sterile single-use gloves (single pair) to be changed between each patient	-Non-sterile single-use long-sleeved isolation gowns -Surgical mask type IIR (except aerosolising gesture: FFP2 respiratory mask) -Non-sterile single-use gloves (single pair) to be changed between each patient

8. Hospital

8.1 Hospital unit without COVID-19 infected patients

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
Management of confirmed or suspected COVID-19 patients	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (single pair) 	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -Surgical mask type IIR (except risk of aerosolisation: FFP2) -Eye protection -Non-sterile single-use gloves (single pair) 	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -Surgical mask type IIR (except risk of aerosolisation: FFP2) -Eye protection only if risk of aerosolisation -Non-sterile single-use gloves (single pair)
Nasopharyngeal swabs (Confirmed or suspected COVID-19 cases)	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (single pair) 		
Management of patients non-suspected COVID-19	<ul style="list-style-type: none"> -Surgical mask type IIR -Standard precautions 	<ul style="list-style-type: none"> -Standard precautions -Fabric mask if patients at risk* 	<ul style="list-style-type: none"> -Standard precautions -Fabric mask if patients at risk*

*Patient protection only due to age related risk or other risk factors

8.2 Non-infected hospital circuit

Maintenance staff, delivery staff	<ul style="list-style-type: none"> -Surgical mask type IIR -Hand hygiene 	<ul style="list-style-type: none"> -Surgical mask type IIR Hand hygiene 	Hand hygiene
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8.3 Hospital unit with COVID-19 infected patients

A hospital unit with patients infected with COVID-19 is to be considered infected as a whole. Staff must dress at the entrance to the area and can care for the different patients. A disposable gown should be worn if a patient is colonized or infected with germs that require additional protection.

The rest room and the taking of breaks/meals must be done outside this zone, after undressing.

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
All types of staff	Before entering the room, to be changed between each patient: -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -FFP2 respiratory mask -Eye protection -Plastic apron -Non-sterile single-use gloves (single pair)	Before entering the containment zone: -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -FFP2 respiratory mask -Eye protection Before entering the room: -Plastic apron only if there is a risk of soiling To be changed between each patient: -Non-sterile single-use gloves (single pair)	Before entering the containment zone: -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -FFP2 respiratory mask -Eye protection only in case of aerosol treatment Before entering the room: -Plastic apron only if there is a risk of soiling To be changed between each patient: -Non-sterile single-use gloves (single pair)

8.4 Non-caregiving hospital staff

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
Security staff	-Surgical mask type IIR -Hand hygiene	-Hand hygiene	-Hand hygiene
Stretcher-bearers	-Non-sterile single-use long-sleeved isolation gowns -Surgical mask type IIR -Non-sterile single-use gloves (to be changed between each patient)	-Non-sterile single-use long-sleeved isolation gowns -Surgical mask type IIR -Non-sterile single-use gloves (to be changed between each patient)	-Surgical mask type IIR -Non-sterile single-use gloves (to be changed between each patient)
Non-COVID-19 zone Maintenance staff, Delivery staff	-Surgical mask type IIR -Hand hygiene	-Hand hygiene	-Hand hygiene
Administrative staff	-Surgical mask type IIR -Hand hygiene	-Hand hygiene	-Hand hygiene

8.5 Laboratory

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
During the coronavirus pandemic: Analysis of an influenza screening test for patients with suspected COVID-19	-Non-sterile single-use gloves (single pair) -Plastic gown In the absence of a laboratory hood: -Surgical cap or headwear -Eye protection -FFP2 respiratory mask in the absence of a laboratory headwear	-Non-sterile single-use gloves (single pair) -Plastic gown In the absence of a laboratory hood: -Surgical cap or headwear -Eye protection -FFP2 respiratory mask in the absence of a laboratory headwear	-Non-sterile single-use gloves (single pair) -Plastic gown In the absence of a laboratory hood: -Surgical cap or headwear -Eye protection -FFP2 respiratory mask in the absence of a laboratory headwear

8.6 Emergencies

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
Staff in the sorting area	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns (if there is a risk of splashing or manipulation of the patient and to be changed between each patient) -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (to be changed between each patient) 	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns (if there is a risk of splashing or manipulation of the patient and to be changed between each patient) -Surgical mask type IIR -Eye protection -Non-sterile single-use gloves (to be changed between each patient) 	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns (if there is a risk of splashing or manipulation of the patient and to be changed between each patient) -Surgical mask type IIR -Eye protection -Non-sterile single-use gloves (to be changed between each patient)
COVID+ area	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (single pair) to be changed between each patient 	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (single pair) 	<ul style="list-style-type: none"> -Surgical cap or headwear -Non-sterile single-use long-sleeved isolation gowns -Plastic apron (if risk of splashing) -FFP2 respiratory mask -Eye protection -Non-sterile single-use gloves (single pair)
COVID- area	<ul style="list-style-type: none"> -Surgical mask type IIR -Hand hygiene 	<ul style="list-style-type: none"> -Surgical mask type IIR -Hand hygiene 	<ul style="list-style-type: none"> -Surgical mask type IIR -Hand hygiene

8.7 Reanimation - Intensive care

The COVID+ reanimation area is to be considered infected as a whole. Staff must dress at the entrance to the area and can care for the different patients. A disposable gown should be worn if a patient is colonized or infected with germs that require additional protection.

The rest room and the taking of breaks/meals must be done outside the area, after undressing.

If a NIV session is indicated, it should be performed in a negative pressure chamber and/or with a mobile HEPA filter in the room.

The recovery rooms are under positive pressure. Thus, the entire unit should be considered infected if COVID-19 patients are present.

Personal belongings (mobile phones, jewellery etc...) must remain in the cloakroom/rest area and must under no circumstances enter the COVID zone.

For the proper wearing of the FFP2 mask, male staff must be shaved the same day.

Staff and/or situation	Optimal capacities	Limited supply capacities	Crisis capacities
COVID+ area	-Before entering the containment zone: Disposable waterproof protection suit of the Tyvec type -FFP2 respiratory mask -Eye protection -Visor for invasive care To be changed between each patient: -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns for the care of patients -Plastic apron for soiling or wetting care	-Before entering the containment zone: Disposable waterproof protection suit of the Tyvec type -FFP2 respiratory mask -Eye protection -Visor for invasive care To be changed between each patient: -Non-sterile single-use gloves (single pair) -Non-sterile single-use long-sleeved isolation gowns for the care of patients	-Before entering the containment zone: -Single-use protective gown -Surgical headwear -FFP2 respiratory mask -Eye protection -Visor for invasive care To be changed between each patient: -Non-sterile single-use gloves (single pair)
COVID- area	-Surgical mask type IIR -Usual individual protection according to the pathologies of the patients treated	Usual individual protection according to the pathologies of the patients treated	Usual individual protection according to the pathologies of the patients treated