

Annex 4 - Guide to the use of PPEs and good practices for the containment of the risk of COVID-19 infection

Coronaviruses are a large family of viruses known to cause diseases ranging from the common cold to more severe diseases such as Severe Acute Respiratory Syndrome (SARS).

The new Coronavirus, called SARS-CoV-2 (previously 2019-nCoV), is a new coronavirus never identified before in humans.

The disease caused by the new SARS-CoV-2 is called "**Covid-19**" (where "CO" stands for corona, "VI" for virus, "D" for disease, and "19" indicates the year in which it occurred).

Appropriate precautionary measures must be adopted to prevent the spread of the virus and COVID-19 disease.



The **main anti-coronavirus measures** are:

- interpersonal distancing, in terms of repetitiveness/length of contacts and distance between individuals;
- personal hygiene, especially hand hygiene;
- cleaning of objects and surfaces.

Concerning the minimum distance between people, it is recommended to keep at least **1 meter in the event of co-presence at work, together with the obligation to wear a surgical mask or a higher-level PPE (FFP2).**

Masks for the prevention of infection from respiratory viruses

Both protective filtering masks such as FFP2 (in fig. 1) or FFP3 and surgical masks (fig. 2), considered protective devices against the SARS-CoV-2 virus, are allowed. The former is a PPE strictly speaking, i.e., personal protective equipment. It helps protect the individual who wears them from danger, in this case, the coronavirus infection. The latter is born as an MD, i.e., medical devices, which prevent the wearer from infecting nearby people. More generally, they contain the spread of any infectious agent in the surrounding environment. In summary: the filtering mask protects the wearer from others, while the surgical mask protects others from the wearer.



Fig. 1



Fig. 2

Containment of COVID-19: the use of masks, whether surgical or of a higher level (such as an FFP2 or FFP3 filtering mask), was established as mandatory.

Masks retain much of the so-called droplets (nebulized saliva) of the person wearing them, that is, the droplets of saliva that inevitably spread into the air when breathing, talking, coughing, and sneezing, which may contain the infectious agent if the person is positive for COVID-19. Therefore, they perform an effective function of "collective protection."

During work/research activities where it is impossible to respect the interpersonal distance for longer than 15 minutes, the use of FFP2 or FFP3 masks is required; in this case, masks without a filter are preferable. A visor is also recommended for eye protection, as the virus can enter the body through the conjunctiva and the respiratory tract.

Correct use of masks

The use of masks poses some issues that must be known to avoid errors or improper use that can reduce or even invalidate their effectiveness.

- 1) **Even if worn by everyone, masks do not guarantee absolute protection:** the risk of contagion is drastically reduced but not eliminated.
- 2) Masks must be intact and worn correctly; otherwise, their protective efficacy is compromised: the colored part is on the outside; the elastic loops must be placed around each ear; the mask must completely cover the mouth and nose; the underwire must be tight on the nose (Fig. 3).
- 3) It is good practice to limit speaking when wearing a mask, especially if worn for several hours. When the mask becomes damp (due to coughing, repeated sneezing, excessive talking), its filtering capacity decreases and must be replaced.
- 4) When temporarily removing the mask, hold it by the elastic loops, avoiding touching the internal surface, which must be considered a potential contagion source. For the same reason, the mask must never be lowered around the neck.
- 5) Face masks come as disposable devices and must be discarded if used for several hours straight (surgical masks up to 4 hours, FFP2 up to 8 hours). They can be reused only if used for a limited



Fig. 3

time, as shown below. Disposal must be performed as described in the "Protocol for resuming in-person activities at the IMT School for Advanced Studies Lucca."

- 6) When putting on or removing the mask, please wash hands thoroughly with soap and water or sanitize them with a suitable disinfectant before touching any other object, garment, or surface.

Reuse of masks

Surgical masks offer protection from contamination for four (4) hours of continuous use, after which they must be discarded.

Masks named with the initials FFP2 and FFP3 are also of the disposable type and can be used for eight (8) hours of continuous use.

Masks are designed for single use: they cannot be sanitized with alcohol and are not washable.

However, if they have not been used continuously for 4/8 hours and as long as they are intact, they can be reused.

To this end, after each use, they must be stored in a dry place, preferably in a paper bag, taking care to handle them with the rubber bands to avoid touching them with your hands.

BE CAREFUL

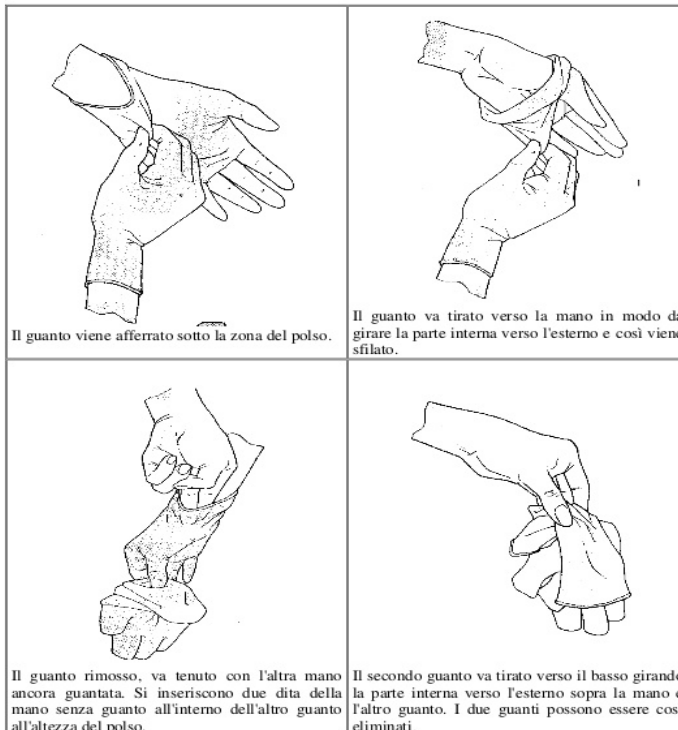
Surgical masks represent very useful tools but are not the only measure available to contain the spread of SARS-CoV-2. In fact, observance of physical spacing, frequent hand washing, sanitation of the surfaces in environments with promiscuous contacts are priority measures to focus our efforts and attention.

Gloves: How to wear and remove them

If the Employer prescribes the use of gloves, follow the instructions below. Use **disposable nitrile or vinyl gloves** that comply with **EN 374** regulations. Please wash your hands thoroughly before putting them on. Latex gloves are not recommended as they can cause allergic reactions.

Regarding the risk of contagion from Covid-19, please remember that viruses are transmitted through human-to-human contagion, but they can resist on surfaces even for a few hours or days. Therefore, we must be careful to use gloves while respecting the correct procedures when wearing and removing them (see Figure 4).

It is crucial to remove the gloves properly without touching the external surface with bare hands, to avoid jeopardizing everything.



Other PPEs

During work/research activities where it is impossible to respect the minimum interpersonal distance, wearing eye protection devices such as glasses or visors is necessary.



Surface sanitation

For sanitation, the provisions of the national and regional authorities are observed.

Currently, we refer to the "ISS COVID-19 Report n. 12/2021 - Interim recommendations on the sanitation of non-health facilities in the current COVID-19 emergency: environments/surfaces"- Version of May 20, 2021, unless otherwise regulated.

It is necessary to frequently clean all surfaces that can be contaminated, such as doors, handles, windows, glass, tables, light switches, toilets, taps, sinks, desks, chairs, passenger handles, keys, keyboards, remote controls, printers.

In the offices, surfaces can be disinfected with a special spray or wipes.

In laboratories, 70% ethanol or 0.1% hypochlorite or specially licensed virucidal products are recommended.

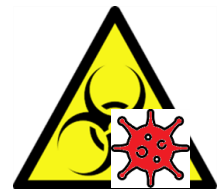
Cleaning must be performed at the beginning and the end of each employee shift/work session at a given workstation.

Waste

In regular work environments, such as **offices**, there are open baskets for unsorted waste, in which a plastic bag is placed and periodically replaced.

At the end of the working day, each employee must close the plastic bag containing the waste produced. Closing the bag reduces the exposure of the cleaning staff who will replace it every day to the risk of COVID-19.

For **laboratories** where there is already a biological risk, as indicated in the Risk Assessment Document, and where there are plastic containers for potentially infected biohazardous waste (preferably with a non-re-opening cap) (Fig. 10), these containers can be used for the disposal of disposable gloves, masks and other PPEs used by all personnel during the COVID-19 emergency.



Containers for the disposal of such waste must display a visible adhesive label with the information related to the waste:

- Type of waste: Waste that must be collected and disposed of by applying particular precautions to avoid infections;
- EWC Code: 180103*
- Hazard Class HP9 - infectious;

Obligations and sanctions

The IMT School monitors compliance with the precautionary measures and good practices for the containment of the COVID-19 risk of contagion through individuals appointed explicitly for this purpose and, in the event of transgression, identifies appropriate sanctions to be inflicted on the offender.