

## TRANSLATION

### REPORT #2 CA-COVID-19-OMC

#### USE OF MASKS IN THE HEALTHCARE SECTOR

Report 14/05/2020 of the Advisory Commission to the CGCOM (Spanish General Medical Council)

#### **Executive summary and key proposals:**

Masks are a fundamental element in the protection of health personnel against the spread of COVID-19, and it is necessary to guide about their proper use.

The purchase or distribution restrictions occurred are considered unacceptable; and given that they are currently fully avoidable, these recommendations assume that healthcare centres and services have all the necessary models to protect their staff and patients from infection.

We must recall that masks are one more element of the protection strategies and methods; hand hygiene, their proper use, and their use in the indicated conditions and times, maximize their effectiveness.

#### **Proposals:**

- General population must wear surgical masks in public transport and in closed establishments and premises, and whenever the safety distancing cannot be maintained. It should be emphasized that the protection they provide depends on their proper use, as well as being complemented by hand washing, before and after their use. Self-filtering masks (N95, FFP2, FFP3) are not recommended for use by the general population; they are recommended for immunosuppressed patients and when clinically indicated.
- Patients who come to healthcare settings and services must be provided, in general, with a surgical mask from the point of entry and classification.
- Self-filtering masks (FFP2, FFP3, N95, always without valve) will be made available to professionals according to the following criteria:
  - Patients with confirmed or suspected COVID-19 will use unvalved **FFP2** masks in consultations, home care, hospitals, transports, emergencies, surgery and other procedures and interventions. Life-threatening emergencies will always be treated as confirmed COVID-19 cases. As well as in hospitals, community pharmacies with a high transmission rate, in laboratories for the most exposed personnel, or in cleaning and maintenance tasks in areas where droplets or aerosols are breathed out.
  - In interventions and procedures where aerosols may have been produced by COVID-19 or suspected patients, **FFP3** should be used.
- Surgical masks will be used in patients on non-COVID-19 circuits.

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*The COVID-19 Advisory Commission of the Spanish General Medical Council (CGCOM) is a panel of experts from various professions, fields and specializations, which was created on April 21, 2020 to advise CGCOM on various scientific, technical and organizational aspects of the pandemic, to suggest actions, and to draft technical reports to support CGCOM's public positions.*

## Use of masks in the healthcare sector

The CGCOM Advisory Commission for COVID-19 worked on the appropriate use of masks against COVID-19 infection at the request of the Board of the Spanish General Medical Council (CGCOM).

The contributions of the experts and the inputs received in the Advisory Commission's Work and Discussion Forum allow to present this **Report # 2 on the use of masks in the healthcare sector** to CGCOM including scientific, technical and professional criteria on the subject which can be use in future positions of the CGCOM.

### 1- PRELIMINARY REMARKS

#### a) Masks: one more component of the personal protection strategy.

The main infection vehicle for professionals and workers caring for patients are hands, so the main preventive measure is hand hygiene, properly and frequently performed, and especially when touching their faces.

In the clinical activity the circumstances, the “*five moments*” that WHO highlights for hand hygiene, must be considered: before touching a patient, before clean/aseptic procedures, after body fluid exposure/risk, after touching a patient, and after touching patient surroundings.

*WHO infographic on the 5 moments for hand hygiene.*

[https://www.who.int/gpsc/information\\_centre/gpsc\\_5\\_momentos\\_poster\\_es.pdf?ua=1](https://www.who.int/gpsc/information_centre/gpsc_5_momentos_poster_es.pdf?ua=1)

The transmission mechanism is by contact with infected expiratory droplets (Flügge droplets), **both in the symptomatic and the pre-symptomatic phase of the disease**, so that whenever possible a **safety distancing** of 2 meters should be respected.

The mask provides additional protection in these cases. When healthcare professionals approach the patient they must protect themselves with a surgical mask, which must be put on properly.

#### b) The appropriate masks.

##### Surgical masks:

- In cases of COVID-19 infection or possible COVID-19 infection, the use of surgical masks is intended to prevent contamination of the surrounding area when a person coughs or sneezes or speaks. Masks decrease the inhalation of Flügge droplets; however, they do not get complete isolation from inhaled air.

- Therefore, they should only be used by patients or health professionals who do not participate in direct actions with COVID-19 patients or at high risk of suffering it.

#### **FPP2 & FPP3, & N95 masks:**

- The aim of these masks is to protect the person who wears them from inhalation of pathogens such as COVID-19.
- Their use is recommended for all healthcare professionals who directly interact with COVID-19 patients or at high risk of suffering it.
- Health professionals should be trained about how to put them on and take them off.
- They must be placed achieving maximum facial tightness.
- The manufacturer's recommendations for wearing time will be respected.
- No valve masks will be used in healthcare settings.

The persistence of the virus in the air has been demonstrated **in situations where aerosols are generated**, therefore, in these cases, it is necessary to use aerial precautions and use more efficient **unvalved masks (FFP2 and FFP3, and N95)**.

#### **c) Masks for the general population.**

The general population must wear surgical masks in public transport and in commercial establishments, companies, healthcare settings and services, socio-sanitary residences and places where the safety distance cannot be maintained. It is also advisable in meetings of up to 10 people allowed from Phase 1 with non-cohabitants.

It is not necessary in open spaces as long as this distancing is maintained. It should be emphasized that the protection provided by the surgical mask depends on its proper use, and that it must be complemented by hand washing before and after use.

General population is not recommended to use self-filtering masks (N95, FFP2, FFP3) because they are unnecessary, inefficient and can be counterproductive. Some of their drawbacks are: their continued use makes breathing difficult for some people, they can cause fatigue and dizziness in older people, they are more uncomfortable and people touch their faces to rearrange them and can give a false sense of security.

Immunosuppressed patients and others when clinically indicated, should use these self-filtering masks to maximize their protection due to their individual vulnerability.

**Never use self-filtering masks with an exhalation valve, since they put other people at risk.**

*There is a document from the Ministry of Health on April 20 on RECOMMENDATIONS ON THE USE OF MASKS IN THE COMMUNITY IN THE CONTEXT OF COVID-19:*

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov-China/documentos/Recomendaciones\\_uso\\_mascarillas\\_ambito\\_comunitario.pdf](https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov-China/documentos/Recomendaciones_uso_mascarillas_ambito_comunitario.pdf)

## 2- MASKS WHEN MOVING PATIENTS

A mask will always be used, and a surgical mask will be provided to the patient if he/she does not have one. The use of unvalved FFP2 is recommended for healthcare staff **in case of** COVID-19 patients. These rules shall apply to all staff members (orderlies, drivers, cleaning personnel and any healthcare professional or worker).

## 3- HOME, GP PRACTICE, HOSPITAL AND HOSPITAL ISOLATION CARE

### a) Suspected or confirmed COVID-19 patients (COVID care circuits).

- **PROFESSIONALS:** Since keeping the safety distancing is not possible in these circumstances due to the nature of clinical care and interaction, healthcare professionals will use FFP2 unvalved masks.

If they have a direct action on a COVID patient in areas where aerosols or Flüge droplets have been generated by COVID-19 patients, they will preferably use FFP3 masks, or if not available, FFP2 masks.

- **PATIENTS:** Patients with suspected or confirmed COVID-19 will use surgical masks within the health centres and services, and whenever clinically possible, surgical masks. Mask shall be supplied at the entry and classification points of the healthcare centres.
- **EXCEPTIONAL SITUATIONS:**
  - Exceptional situations where the appropriate masks for the healthcare provider or the patient are missing have also been addressed. The situation in the national and international markets for the supply of this equipment is rapidly normalizing, as well as the ability of health authorities and managers to buy and distribute it.
  - For this reason, from a professional point of view, it is considered simply unacceptable that health staff and patients do not have the appropriate masks, and no recommendation is issued regarding this unacceptable exception.

### b) Non-suspected COVID-19 patients (non-COVID healthcare circuits).

- **PROFESSIONALS:** In case of non-COVID patients, a surgical mask will always be used by the healthcare staff.
- **PATIENTS:** As long as the de-escalation will not progress, and in accordance with the instructions given by health authorities at all times, non-suspected nor confirmed COVID patients must also wear surgical masks in the health settings and services.

#### 4- SURGICAL PROCEDURES AND INTERVENTIONS

FFP2 masks will be used with COVID patients and FFP3 masks during the performance of aerosol-producing techniques (detailed in the Annex) or when treating the patient less than a meter from his/her airways, and during laparoscopies.

**Non-COVID patients** will use a surgical mask. Patients with other pathologies that require it, such as tuberculosis, HIV or cytostatic treatment, will use FFP2 masks.

*There is a document dated March 17, 2020, on Surgical management of COVID-19 patients. Recommendations of the Spanish Association of Surgeons, published in Spanish Surgery:*

<https://www.elsevier.es/es-revista-cirugia-espanola-36-avance-resumen-manejo-quirurgico-pacientes-con-infeccion-S0009739X20300695>

#### 5- URGENT AND EMERGENCY CARE

- In hospital emergency, as PCR tests are available, there should be no problem identifying COVID patients, acting with the appropriate protection, and channelling them to the differentiated COVID-circuit.
- In a life-threatening emergency (for example, polytraumatized), patients must be considered positive for the purpose of protecting personnel and channelling them.

#### 6- OTHERS

- **Hospital and community pharmacy:** FFP2 mask in areas of high disease transmission. Taking extreme precautionary measures, in particular respecting safety distancing and hand hygiene.
- **Laboratory:** personnel handling and processing respiratory samples, or any other type (blood, urine, feces ...) from suspected or confirmed cases will use FFP2 masks in addition to the usual security measures.
- **Maintenance and cleaning services:** Surgical mask, unless in areas where aerosols or Flügge droplets have been generated from COVID-19 patients; in that case they will use FFP2 masks.

## ANNEX: Aerosol Generating Procedures and Risk of Transmission of SARS-CoV-2

- Aerosol therapy and nebulization
- High flow nasal glasses
- Manual ventilation with mask
- Non-invasive ventilation
- Mechanical ventilation
- Oro-naso-tracheal intubation
- Surgical or percutaneous tracheostomy
- Bronchoscopy
- Gastroscopy
- Aspiration of secretions
- Cardiopulmonary resuscitation
- Cutting of bones and tendons in trauma surgery
- Collection of respiratory samples
- Bronchoalveolar lavage
- High flow oxygen therapy
- Oral and maxillofacial surgery
- Forced spirometry with or without bronchodilator test
- Specific or non-specific bronchoprovocation tests
- Plethysmography
- All breathing physiotherapy techniques
- In absence of evidence, a possible risk is considered in laparoscopies.

### ***References to documents on masks and procedures on the respiratory system (Spanish Society of Pneumology and Thoracic Surgery, SEPAR)***

1.- *Respiratory physiotherapy in the management of Covid-19 patients: General recommendations.*

[https://drive.google.com/file/d/189f\\_lseyd9\\_4q3hIQFiNe3Rn\\_y39s3n9/view](https://drive.google.com/file/d/189f_lseyd9_4q3hIQFiNe3Rn_y39s3n9/view)

2.- *Correct use of masks.*

[https://drive.google.com/file/d/1o792xMNou0Den1py0xb8W\\_IUbDSVWY\\_T/view](https://drive.google.com/file/d/1o792xMNou0Den1py0xb8W_IUbDSVWY_T/view)

3.- *Recommendations for the prevention of coronavirus infection in the lung function units of the different healthcare settings.*

[https://drive.google.com/file/d/1\\_JX6qfFMbssfQXo4qjAplp4IHSm1Egn-/view](https://drive.google.com/file/d/1_JX6qfFMbssfQXo4qjAplp4IHSm1Egn-/view)

4.- *Recommendations of the Respiratory Physiotherapy Area for the Covid-19 epidemic.*

<https://drive.google.com/file/d/1ScJWMQN3hCl6Xyy7Tmzldwzc2W-pHptl/view>

5.- *Consensus recommendations regarding non-invasive respiratory support in the adult patient with acute respiratory failure secondary to SARS-CoV-2 infection.*

<https://drive.google.com/file/d/1a41PuZ4TDmWMBqMIGPDX8m8QQ7pRVsJK/view>

6.- *SEPAR and AEER consensus recommendations on the use of bronchoscopy and airway sampling in patients with suspected or confirmed Covid-19 infection.*

[https://drive.google.com/file/d/15qEqI3GcwDNy2Wfaot0kC8\\_3O5OTThA5/view](https://drive.google.com/file/d/15qEqI3GcwDNy2Wfaot0kC8_3O5OTThA5/view)