IFRC guidance on the use of face masks during the COVID-19 pandemic

Background

The use of medical masks\(^1\), respirators\(^2\), cloth masks and other face coverings is a widely discussed intervention in response to COVID-19. The World Health Organization recommends that, in contexts with known or suspected sustained community transmission of COVID-19, medical masks should be used by anyone who works in a clinical setting or is involved in the care of suspected or confirmed COVID-19 cases, and by vulnerable people in circumstances when they are not able to maintain physical distancing. WHO also advises that governments encourage the general public to use non-medical masks (i.e. cloth masks) in public spaces where it is not possible to maintain physical distancing, in contexts where the virus is suspected or known to be circulating.

Current evidence suggests that the virus that causes COVID-19 is most often transmitted through droplets and contact. Transmission is possible when a person is in close contact (within one to two metres) of an infected person, whether or not that person is experiencing COVID-19 symptoms. The risk of infection is higher indoors and in poorly ventilated areas. There is a higher risk of transmission of the virus from symptomatic people to others when both people are not wearing appropriate personal protective equipment (PPE). Pre- or asymptomatic cases may also represent a significant source of infection in communities. Therefore, the appropriate use of masks by people—whether they have symptoms or not—may help to prevent transmission of the virus. A person infected with the virus may be less likely to transmit the virus to others if they consistently wear a mask, and a person not infected with the virus may limit their risk of becoming infected if they also wear a mask.

During periods of community transmission or local clusters of COVID-19, wearing a cloth mask that covers the mouth, nose and chin may contribute to reducing the spread of the virus from infected individuals, and may protect others from getting infected. Any person who is in contact with an infected person, with or without visible symptoms, may be exposed to respiratory droplets containing viral particles. Use of cloth face masks may reduce the number of virus-containing droplets produced by an infected person, thereby decreasing risk of transmission to others.

These recommendations are based on the WHO guidelines on epidemic and pandemic-prone acute respiratory infections in health care, updated systematic review of randomized controlled trials, and evaluation of current evidence by WHO adhoc COVID-19 IPC Guidance Development Group. WHO reviewed its mask guidance on \textit{June 5 2020} and maintains the above recommendations.

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\(^1\) Medical masks and surgical masks are the same thing, for the purpose of this guidance. Both refer to face masks intended for use in clinical settings.

\(^2\) E.g. N95, N99, FFP2 or FFP3 respirators
The use of masks is discussed as one prevention method that may limit the spread of respiratory diseases but must be used in conjunction with other PPE necessary for contact and droplet precautions and public health measures including handwashing and physical distancing.

Some governments have asked National Societies to support the production of cloth masks in countries where their use in public is mandated. It is critical that this production results in a supply of masks that are meet minimum standards. See the end of the document for specifications.

**Adult members of the general public**

The World Health Organisation advises that governments should encourage the general public to wear masks where there is widespread transmission and physical distancing is difficult, such as on public transport, in shops or in other indoor, confined or crowded environments. Some governments are recommending or requiring the use of masks for activities in public spaces. It is important that people use high quality masks, either medical or cloth, that fit over the mouth and nose, and that meet minimum standards. The incorrect use of medical masks or the use of substandard masks may increase the risk to individuals, who may experience a false sense of security and reduce other behaviours that reduce risk of transmission.

Members of the general public should wear a **cloth mask**:

- Anywhere in public spaces where it is not possible to maintain physical distancing, in contexts where the virus is suspected or known to be circulating.

- Where cloth face masks are unavailable, a face shield can be considered. Face shields may be better for those unable to comply with mask use (e.g. those with mental or physical disabilities).

Members of the general public should wear a **medical mask** if / when:

- They are interacting with vulnerable populations where physical distancing cannot be achieved and / or in any community setting where they are exposed to persons with symptoms of COVID-19.

- They have any **underlying illness** that may make them more vulnerable to COVID-19, regardless of their age, in circumstances where they not are to maintain physical distance of 1-2 metres from other people. Underlying health conditions include high blood pressure, obesity, heart disease, tuberculosis, cancer, or other immune-suppressed condition.

- They are **aged 60 or older**, in circumstances where they not able to maintain physical distance of 1-2 metres from other people.

**Children**

*WHO and Unicef have issued guidance* for mask use by children. They recommend that the benefits of wearing masks in children for COVID-19 control should be weighed against potential harm associated with wearing masks, including feasibility and discomfort, as well as social and communication concerns. Factors to consider also include age groups, sociocultural and contextual considerations, availability of adult supervision, and other resources to prevent transmission. Consult the linked guidance above for guidance on mask use in schools, adaptations for age groups, and considerations for policy-makers.
For children aged 0-5 years:

- WHO recommends that children five years old and younger should not be required to wear cloth masks for source control.
- Some countries recommend a younger cut-off for children. If children younger than 5 years old wear masks, they should do so under appropriate and consistent supervision (direct line of sight by a responsible adult).
- Other IPC, public health and social measures should be prioritised to reduce the risk of transmission to and by young children, including maintaining physical distancing, hand hygiene, and limiting group sizes.

For children aged 6-11 years:

- WHO recommends a risk-based approach. See the WHO guidance for further details on this risk analysis.

For children aged 12 and older:

- WHO recommends that children 12 years and older should follow the same mask recommendations as adults.

**Medical masks** are generally recommended, in consultation with a child’s medical provider, for:

- Children who are immunocompromised, or
- Pediatric patients with cystic fibrosis, cancer, or other diseases.

**Cloth masks** should not be required or adaptations should be made for:

- Children of any age with developmental disorders, disabilities or other specific health conditions that might interfere with mask wearing. For these children, mask use should not be mandatory and should be assessed on a case by case basis by the child’s educator and/or medical provider.

- Children with severe cognitive or respiratory impairments who have difficulties tolerating a mask should never be required to wear masks.

- Children with developmental disorders or disabilities may face additional barriers, limitations and risks and therefore should be given alternative options to mask wearing, such as face shields. Policies on masks should be adapted for children with disabilities based on social, cultural and environmental considerations.

- Children with disabilities who require close physical contact with therapists, educators or social workers should not be required to use masks. In this context, it is critical that all care providers adopt key IPC measures, including wearing masks, and that settings are adapted to strengthen IPC.
• Children with hearing loss or auditory problems may present learning barriers and further challenges, exacerbated by the need to adhere to the recommended physical distancing. Adapted masks to allow lipreading (e.g. clear masks) or face shields may be explored as an alternative to fabric masks.

Other IPC, public health and social measures should be prioritized to minimize the risk of SARS-CoV-2 transmission for children five years of age and under; specifically maintaining physical distance of at least 1 meter where feasible, educating children to perform frequent hand hygiene and limiting the size of school classes. It is also noted that there may be other specific considerations, such as the presence of vulnerable persons or other local medical and public health advice that should be considered when determining if children five years of age and under need to wear a mask.

People with respiratory illness, COVID-19 symptoms, or confirmed COVID-19 infection

Anyone with symptoms of respiratory illness or any other symptoms that may indicate COVID-19 should wear a medical mask, even if symptoms are mild. The mask should be replaced at least once daily. Standard precautions should be used at all times but where the patient cannot wear a medical mask, rigorous respiratory hygiene should be followed.

Mask use by community health works and RCRC volunteers

In community care settings, community health workers should always use standard IPC precautions conducting community outreach activities (i.e. respiratory hygiene, physical distancing of at least 1-2 metres, etc.).

Additionally, the following is recommended for community health workers:

• When conducting any activity where physical distancing can’t be maintained, a cloth mask is recommended.

• In the context of known or suspected community transmission of COVID-19, cloth masks should be considered during routine activities.

• Medical masks should be used for any contact with anyone with respiratory symptoms or any other possible symptoms of COVID-19

Mask use in health facilities

In health facilities, the virus can be aerosolised during certain procedures, e.g. intubation and ventilation, therefore presenting a higher risk of transmission. Respirators are needed for high-risk
healthcare activities (i.e. aerosol-generating procedures\(^3\)), and medical masks are required at all times as a general precaution in healthcare settings.

In clinical settings, the transmission of the virus in the absence of aerosol generating procedures is an area of ongoing research, with some evidence indicating the presence of viable virus in the air where aerosol generating procedures have not been performed. There is also the potential for both pre-symptomatic transmission (transmission of the virus by people who have not yet developed symptoms) and asymptomatic transmission (transmission of the virus by people who are infected but never develop symptoms).

In contexts where there is known or suspected sustained community transmission of COVID-19, all who work in a clinical setting, namely healthcare workers and deathcare workers (临床、ambulance, pharmacy, homecare, community health workers, forensic/burial, and cleaners in these settings) should continually wear a medical mask during all activities for the duration of their shift, even when not performing aerosol generating procedures. In contexts where there is sporadic/clustered transmission, all those who work in a clinical setting should wear a medical mask. In healthcare settings where aerosol generating procedures are performed, health workers should wear a respirator.

**Guidelines for the use of reusable cloth masks**

- Appropriate use and washing/drying of textile facial masks are essential to avoid any increase in virus transmission.
- After washing hands, place a clean and dry mask carefully on the face, ensuring it covers the mouth, nose and chin. Tie it securely to minimize any gap between the skin and the mask
- Avoid touching the mask while wearing it
- To remove the mask, do not touch the front part of the mask but untie it from behind
- Before and after removal or whenever touching a mask, wash hands with soap and water or an alcohol-based hand rub
- Facial masks are not meant to be worn all day, every day. Replace the mask with a clean dry mask as soon as it becomes damp, or at least once a day, or more often for prolonged use.
- Dispose of damaged masks immediately
- If planning to provide cloth masks, count at least 3 masks per person
- As early as possible after the mask is removed, wash the mask and the protective bag with hot water and soap and dry it before using it again. If possible masks and bags should be dried in the sun or under UV light.
- Do not discard/leave the mask without washing or closing it into a protective bag (mentioned in the specifications under packing section)

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\(^3\) The WHO list of aerosol generating procedures includes tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, bronchoscopy, sputum induction induced by using nebulized hypertonic saline, and autopsy procedures.
## Specifications

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<tr>
<td><strong>Standard</strong></td>
<td>The mask should meet the EN14683+AC type I, or be tested according to the simplified test procedure as per AFNOR S76-001 published on 2020-03-27.</td>
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<td><strong>Material</strong></td>
<td>Cloth, woven or knitted, fine and tight weaves, soft touch, 100% cotton (not knitted, not felted, not coated nor waxed), yarn count: minimum 50 to maximum 60 threads/cm²</td>
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| **Grammage** | 115 g/m² +/- 10% for each layer  
For home-made masks, one can use bedsheets, kikoi, pagne, kitengé, sarong, and most of the soft cotton cloths used for shirts, dresses etc; do not use cloth where holes are visible between the yarns, use only fine and tight cloth. |
| **Make** | Stitched only on the edges. No stitching in front of mouth and nose. The type of hemming and of stitching yarn should reduce the risk of skin irritation.  
All seams to be knot lock. |
| **Number of layers** | 2 or 3 layers |
| **Shape** | Flat rectangular mask, with 5cm pleat |
| **Dimension for tailor shops and industries** | Finished dimensions 21cm width x 11cm height, pleated with two opposite pleats of 2,5cm each.  
Cutting dimensions to be calculated by the maker according to good practice. |
| **Dimension for home-made masks, or for special sizes (e.g. children)** | Take the face dimension of the user:  
Vertical unfolded dimension: distance from the bridge of the nose along the nose and over the chin to the back of the chin (plus hemming as per practice)  
Horizontal dimension: 2/3 of the distance from one ear centre to the other ear centre passing over the chin (plus hemming as per practice) |
| **Colour** | Other than plain blue and plain green, to avoid confusion with medical masks.  
Use two different colours to differentiate the inside and the outside of the mask. Use preferably a white colour cloth for the inside layer. |
| **Ties** | Soft touch elastic ties behind the ears or behind the head, or  
When no elastic ties are available, ties can be made of the same cloth as the mask (pieces of 90cm x 3cm hemmed and folded once)  
No staples for fixing the ties, only stitched  
Ties must withstand a traction of 5kg each. |
| **Durability** | Able to withstand regular washing at 60°C without any damage. Expected lifespan is two months with daily washing. |
| **Contaminants** | Wash and dry the masks before packing and delivery. |
| **Packing** | According to purchase contract.  
On request, masks will be packed in a durable plastic bag that can be used as a protective container for used masks. |
| **Instruction sheet** | On request, the masks will be supplied with the instruction Sheet presented below or translated in other languages as required. |
WASH HANDS with WATER and SOAP
- BEFORE putting on mask
- After REMOVING mask
- If mask is TOUCHED while worn

PLACE CLEAN DRY MASK CAREFULLY OVER MOUTH, NOSE AND CHIN
Tie securely in place to avoid gaps
TO REMOVE, untie FROM BEHIND

NOT INTENDED FOR MEDICAL STAFF AT PLACE OF WORK

DO NOT TOUCH MOUTH AND NOSE
DO NOT TOUCH MASK WHILE WEARING

DO NOT PUT MASK ON FOREHEAD OR UNDER THE CHIN WHILE IN USE OR AFTER USE

REPLACE MASK if DAMP, or at least ONCE A DAY
Or more often for prolonged use

WASH DAILY with HOT WATER AND SOAP

DISPOSE OF DAMAGED MASK IMMEDIATELY
DO NOT DISCARD WITHOUT PRIOR WASHING
Or CLOSING in PLASTIC BAG

ALWAYS CONSULT AND APPLY HEALTH AUTHORITIES RECOMMENDATIONS
Elastic visible length 18 cm
Longueur visible de l'élastique 18 cm
Largo visible del elastico 18cm

Elastic ties behind the ears (sliding in the hems)
Attaches élastiques derrière les oreilles
(coulissantes dans les ourlets)
Lazos elásticos tras los oídos
(conteniendo en los dobadiños)

Elastic length 35cm
Elastique de 35cm
Largo elástico de 35cm

Cloth ties to attach behind the head
(Stitched on all length upper and lower sides)
Attaches en tissu derrière la tête
(cousues sur toute la longueur haute et basse)
Lazos de tela adjuntos detrás de la cabeza
(cosidos en todo lo ancho arriba y abajo)
Home made mask example: