

Recommendations on the use of MASKS In the context of COVID-19

8 June 2020



Introduction

According to the current evidence, COVID-19 virus is primarily transmitted between people via respiratory droplets and contact routes. Droplet transmission occurs when a person is in close contact (within 1 metre) with an infected person and being exposed to potentially infective respiratory droplets occurs. Therefore, the use of masks is considered one of the important preventive tools with a combination of additional protective measures.

SFDA aims to provide recommendations and advice on the use of masks in health care settings, for the general public, and during home care. Moreover, advice and information have adapted from WHO guidance and aligned with other global recommendations.

Advice on the use of masks in health care settings (including long-term care and residential facilities)

Health care practitioners have strong preferences regarding highest perceived protection possible to prevent COVID-19 infection and, therefore, place high value on the potential benefits of respirators in settings without aerosol generating procedures (AGPs), despite demonstration of equivalence of effectiveness compared to medical masks in some studies and low certainty of the evidence suggesting their greater risk reduction in others.

This section considers the continuous use of medical masks by health care practitioners and caregivers in areas of known or suspected community transmission regardless of whether direct care to COVID-19 patients is being provided.



In locations/areas with known or suspected community transmission or intense outbreaks of COVID-19, the following advice should be considered:

- Health care practitioners, including community health caregivers, who work in clinical areas should continuously wear a medical mask during their routine activities throughout the entire shift; apart from when eating and drinking and changing their medical mask after caring for a patient who requires droplet/contact precautions for other reasons;
- It is particularly important to adopt the continuous use of masks in potential higher transmission risk areas including triage, family physician/GP practices, outpatient departments, emergency rooms, COVID-19 specified units, haematological, cancer, transplant units, long-term health and residential facilities;
- When using medical masks throughout the entire shift, health care practitioners should make sure that:
 - o The medical mask is changed when wet, soiled, or damaged;
 - The medical mask is not touched to adjust it or displaced from the face for any reason; if this happens, the mask should be safely removed and replaced; and hand hygiene performed;
 - The medical mask (as well as other personal protective equipment) is discarded and changed after caring for any patient on contact/droplet precautions for other pathogens;
- Staff who do not work in clinical areas do not need to use a medical mask during routine activities (e.g., administrative staff);
- Masks should not be shared between health care practitioners and should be appropriately disposed of whenever removed and not reused;



Table: Type of mask for use by health care practitioners depending on transmission scenario, setting and activity*

COVID-19 Transmission scenario	Who	Setting	Activity	What type of mask*
Known or suspected community transmission	Health care practitioners or caregiver	Health facility (including primary, secondary, tertiary care levels, outpatient care)	In patient care area – irrespective if patients are COVID-19 suspect/confirmed	Use a Medical mask (targeted continuous medical masking)
	Personnel (working in health care facilities but not providing care for patients, e.g. administrative staff)	Health care facility (including primary, secondary, tertiary care levels, outpatient care)	No routine activities in patient areas	Medical mask not needed. Medical mask should be considered only if in contact or within 1m of patients
	Health care practitioners	Home visit (for example, for antenatal or postnatal care, or for a chronic condition)	When in direct contact or when a distance of at least 1m cannot be maintained.	Use a medical mask
	Health care practitioners	Community	Community outreach programs	Use a medical mask
Sporadic transmission or clusters of COVID- 19 cases	Health care practitioners or caregiver	Health care facility (including primary, secondary, tertiary care levels, outpatient care, and LTCF)	Providing any patient care	Use a Medical mask use according to standard and transmission-based precautions (risk assessment)
	Health care practitioners	Community	Community outreach programs	No mask needed
Any transmission scenario	Health care practitioners or caregiver	Health care facility (including primary, secondary, tertiary care levels, outpatient care, and LTCF)	When in contact with suspect or confirmed COVID-19 patient	Medical mask
	Health care practitioners	Health care facility (including LTCF), in settings where aerosol generating procedures (AGP) are performed	Performing an AGP on a suspected or confirmed COVID- 19 patient	Use a Respirator (N95 or N99 or equivalents)
	Health care practitioners or caregiver	Home care	When in close contact or when a distance of at least 1 m cannot be maintained from a suspect or confirmed COVID-19 patient	Medical mask

^{*}This table refers only to the use of medical masks and respirators. The use of medical masks and respirators may need to be combined with other personal protective equipment and other measures as appropriate, and always with hand hygiene.



Potential harms and risks that should be taken into account when adopting of targeted continuous medical mask use, including:

- Self-contamination due to the manipulation of the mask by contaminated hands;
- Potential self-contamination that can occur if medical masks are not changed when wet, soiled or damaged;
- Possible development of facial skin lesions, irritant dermatitis or worsening acne, when used frequently for long hours
- Masks may be uncomfortable to wear;
- False sense of security, leading to potentially less adherence to well recognized preventive measures such as physical distancing and hand hygiene;
- Risk of droplet transmission and of splashes to the eyes, if mask wearing is not combined with eye protection;
- Disadvantages for or difficulty wearing them by specific vulnerable populations such as those with mental health disorders, developmental disabilities, the deaf and hard of hearing community, and children;
- Difficulty wearing them in hot and humid environments.

Alternatives to medical masks in health facilities:

- In the context of severe medical mask shortage, face shields may be considered as an alternative.
- The use of cloth masks (referred to as fabric masks in this document) as an alternative to medical masks is not considered appropriate for protection of health care practitioners based on limited available evidence.

Additional considerations for community care settings:

Community health care practitioners should use standard precautions for all patients at all times, with particular emphasis regarding hand and respiratory hygiene, surface and environmental cleaning and disinfection, and the appropriate use of personal protective equipment.

When conducting screening activities (e.g., conducting interviews), no mask is needed if a distance of at least 1 metre can be maintained and there is no direct contact with patients. In the context of known or suspected community transmission, consider additional precautions, including the wearing of a medical mask, when community health care practitioners provide essential routine services.

When a patient is suspected or confirmed to have COVID-19 infection, community health care practitioners should use contact and droplet precautions. Contact and droplet precautions include the use of a medical mask, gown, gloves and eye protection.



Advice on the use of medical masks for the care of COVID-19 patients at home

Persons with suspected COVID-19 or mild COVID-19 symptoms and no risk factors should:

- Be isolated in a medical facility if confirmed, or self-isolate at home if isolation in a medical or other designated facility is not indicated or not possible;
- Perform hand and respiratory hygiene frequently;
- Keep a distance of at least 1 metre (3.3 feet) from other people;
- Wear a medical mask as much as possible; the mask should be changed at least once daily. Persons who cannot tolerate a medical mask should rigorously apply respiratory hygiene (i.e. cover mouth and nose with a disposable paper tissue when coughing or sneezing and dispose of it immediately after use or use a bent elbow procedure and then perform hand hygiene);
- Limit movement and minimize shared space.

Caregivers or those sharing living space with people with suspected COVID-19 or with mild COVID-19 symptoms should:

- Perform hand hygiene
- Keep a distance of at least 1 m from the affected person when possible;
- Wear a medical mask when in the same room as the affected person;
- Dispose of any material contaminated with respiratory secretions (disposable tissues) immediately after use and then perform hand hygiene;
- Improve airflow and ventilation in the living space by opening windows as much as possible;
- Ensure adequate cleaning and disinfection of touch surfaces in the patient's room, such as bedside tables, bedframes and other bedroom furniture; electronic touchscreens, keyboards.



Advice on the use of masks for the general public

Recommendation for persons with any symptoms suggestive of COVID-19:

- Wear a medical mask, self-isolate, and seek medical advice as soon as they start to feel unwell with potential symptoms of COVID-19, even if symptoms are mild. Symptoms can include: fever, cough, fatigue, loss of appetite, shortness of breath and muscle pain.
- Follow instructions on how to put on, take off, and dispose of medical masks and perform hand hygiene;
- Follow all additional measures, in particular respiratory hygiene, frequent hand hygiene and maintaining physical distance of at least 1 meter from other persons

Potential advantages

The likely advantages of the use of masks by healthy people in the general public include:

- Reduced potential exposure risk from infected persons before they develop symptoms;
- Reduced potential stigmatization of individuals wearing masks to prevent infecting others (source control) or of people caring for COVID-19 patients in non-clinical settings;
- Making people feel they can play a role in contributing to stopping the spread of the virus;
- Reminding people to be compliant with other measures (e.g., hand hygiene, not touching nose and mouth). However, this can also have the reverse effect (see below);

Potential disadvantages

The likely disadvantages of the use of mask by healthy people in the general public include:

- Potential increased risk of self-contamination due to the manipulation of a face mask and subsequently touching eyes with contaminated hands;
- Potential self-contamination that can occur if non-medical masks are not changed when wet or soiled. This can create favorable conditions for microorganism to amplify;
- Potential headache and/or breathing difficulties, depending on type of mask used;
- Potential development of facial skin lesions, irritant dermatitis or worsening acne, when used frequently for long hours;
- A false sense of security, leading to potentially lower adherence to other critical preventive measures such as physical distancing and hand hygiene;
- Waste management issues; improper mask disposal leading to increased litter in public places, risk of contamination to street cleaners and environment hazard.



Advice on mask management

Advice on the correct use of masks in health care settings to avoid any increase in transmission:

- Perform hand hygiene before putting on the mask;
- Place the mask carefully, ensuring it covers the mouth and nose, and tie it securely to minimize any gaps between the face and the mask;
- Avoid touching the mask while wearing it;
- After removal or whenever a used mask is inadvertently touched, clean hands with an alcohol-based handrub, or soap and water if hands are visibly dirty;
- Replace masks as soon as they become damp with a new clean, dry mask;
- do not re-use single-use masks;
- Discard single-use masks after each use and dispose of them immediately upon removal.

Definitions

Medical masks are defined as surgical or procedure masks that are flat or pleated; they are affixed to the head with straps that go around the ears or head or both. Their performance characteristics are tested according to a set of standardized test methods (ASTM F2100, EN 14683, or equivalent) that aim to balance high filtration, adequate breathability and optionally, fluid penetration resistance. (2, 3)

Targeted continuous medical mask use is defined here as the practice of wearing a medical mask by all health workers and caregivers working in clinical areas during all routine activities throughout the entire shift. In this context, masks are only changed if they become soiled, wet or damaged, or if the health worker/caregiver removes the mask (e.g. for eating or drinking or caring for a patient who requires droplet/contact precautions for other reasons). (4)

Healthcare settings: in include but are not limited to acute-care hospitals; long-term care facilities, such as nursing homes and skilled nursing facilities; physicians' offices; urgent-care centers; outpatient clinics; home healthcare (i.e., care provided at home by professional healthcare providers), and emergency medical services. Settings include specific sites within non-healthcare settings where healthcare is routinely delivered (e.g., a medical clinic embedded within a workplace or school). (5)

References:

- 1. WHO, Interim guidance: Advice on use of masks in the context of COVID-19. June2020
- 2. European Standards. UNE EN 14683:2019+AC:2019. Medical Face Masks -Requirements and Test Methods. 2019;
- 3. F23 Committee, n.d. Specification for Performance of Materials Used in Medical Face Masks. ASTM International.
- 4. The World Health Report 2006 working together for health. Geneva: World Health Organization; 2006.
- USA Center for Dieses Control & prevention: Interim Guidance for Infection Control Within Healthcare Settings When Caring for Confirmed Cases, Probable Cases, and Cases Under Investigation for Infection with Novel Influenza A Viruses Associated with Severe Disease