

Advice on the use of masks in the community, during home care and in health care settings in the context of the novel coronavirus (2019-nCoV) outbreak

Interim guidance
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Introduction

This document provides rapid advice on the use of medical masks in communities, at home and at health care facilities in areas that have reported outbreaks caused by the 2019 novel coronavirus (2019-nCoV). It is intended for public health and infection prevention and control (IPC) professionals, health care managers, health care workers and community health workers. It will be revised as more data become available.

With the current information available, it is suggested that the route of human-to-human transmission of 2019-nCoV is either via respiratory droplets or contact. Any person who is in close contact (within 1 meter) with someone who has respiratory symptoms (e.g., sneezing, coughing, etc.) is at risk of being exposed to potentially infective respiratory droplets.

Medical masks are surgical or procedure masks that are flat or pleated (some are like cups); they are affixed to the head with straps^a.

General Advice

Wearing a medical mask is one of the prevention measures to limit spread of certain respiratory diseases, including 2019-nCoV, in affected areas. However, the use of a mask **alone** is insufficient to provide the adequate level of protection and other equally relevant measures should be adopted. If masks are to be used, this measure must be combined with hand hygiene and other IPC measures to prevent the human-to-human transmission of 2019-nCoV. WHO has developed guidance for home care^b and health care settings^c on infection prevention and control (IPC) strategies for use when infection with 2019-nCoV is suspected.

Wearing medical masks when not indicated may cause unnecessary cost, procurement burden and create a false sense of security that can lead to neglecting other essential measures such as hand hygiene practices. Furthermore, using

a mask incorrectly may hamper its effectiveness to reduce the risk of transmission.

Community setting

Individuals without respiratory symptoms should:

- avoid agglomerations and frequency of closed crowded spaces;
- maintain distance of at least 1 meter from any individual with 2019-nCoV respiratory symptoms (e.g., coughing, sneezing);
- perform hand hygiene frequently, using alcohol-based hand rub if hands are not visibly soiled or soap and water when hands are visibly soiled;
- if coughing or sneezing cover nose and mouth with flexed elbow or paper tissue, dispose of tissue immediately after use and perform hand hygiene;
- refrain from touching mouth and nose;
- a medical mask is not required, as no evidence is available on its usefulness to protect non-sick persons. However, masks might be worn in some countries according to local cultural habits. If masks are used, best practices should be followed on how to wear, remove, and dispose of them and on hand hygiene action after removal (see below advice regarding appropriate mask management).

Individuals with respiratory symptoms should:

- wear a medical mask and seek medical care if experiencing fever, cough and difficulty breathing, as soon as possible or in accordance with local protocols;
- follow the below advice regarding appropriate mask management.

Home Care

In view of the currently available data on the disease and its transmission, WHO recommends that suspected cases of 2019-nCoV infection be cared for using isolation precautions and monitored in a hospital setting. This would ensure both

^a Infection prevention and control of epidemic- and pandemic-prone acute respiratory infections in health care. World Health Organization. (2014). Available at <https://apps.who.int/iris/handle/10665/174652>

^b Home care for patients with suspected novel coronavirus (nCoV) infection presenting with mild symptoms and management of contacts. Available at <https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus->

<https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus->

^c Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected. Available at [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125)

safety and quality of health care (in case patients' symptoms worsen) and public health security.

However, for several possible reasons, including situations when inpatient care is unavailable or unsafe (i.e. limited capacity and resources unable to meet demand for health care services), or in a case of informed refusal of hospitalization, home settings for health care provision may need to be considered. Specific IPC guidance for home care should be followed^b.

Individuals with suspected 2019-nCoV infection with mild respiratory symptoms should:

- perform hand hygiene frequently, using alcohol-based hand rub if hands are not visibly soiled or soap and water when hands are visibly soiled;
- keep distance from well individuals as much as possible (at least 1 meter);
- to contain respiratory secretions, a medical mask should be provided to the individual and worn as much as possible, if it can be tolerated. For individuals who cannot tolerate a medical mask, he/she should rigorously apply respiratory hygiene, i.e. cover mouth and nose when coughing or sneezing with disposable paper tissue. Dispose of the material after use. Clean hands immediately after contact with respiratory secretions;
- improve airflow in living space by opening windows and door as much as possible.

Relatives or caregivers to individuals with suspected 2019-nCoV infection with mild respiratory symptoms should:

- perform hand hygiene frequently, using alcohol-based hand rub if hands are not visibly soiled or soap and water when hands are visibly soiled;
- keep distance from affected individual as much as possible (at least 1 meter);
- wear a medical mask when in the same room with the affected individual;
- dispose of the material immediately after use. Clean hands immediately after contact with respiratory secretions;
- improve airflow in living space by opening windows as much as possible.

Health Care Facilities

Individuals with respiratory symptoms should:

- wear a medical mask while waiting in triage or waiting areas or during transportation within the facility;

- wear a medical mask when staying in cohorting areas dedicated to suspected or confirmed cases;
- do not wear a medical mask when isolated in single rooms but cover mouth and nose when coughing or sneezing with disposable paper tissues. Dispose them appropriately and perform hand hygiene immediately afterwards.

Health care workers should:

- wear a medical mask when entering a room where patients suspected or confirmed of being infected with 2019-nCoV are admitted and in any situation of care provided to a suspected or confirmed case^c;
- use a particulate respirator at least as protective as a US National Institute for Occupational Safety and Health (NIOSH)-certified N95, European Union (EU) standard FFP2, or equivalent, when performing aerosol-generating procedures such as tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, and bronchoscopy.

Masks management

If medical masks are worn, appropriate use and disposal is essential to ensure they are effective and to avoid any increase in risk of transmission associated with the incorrect use and disposal of masks.

The following information on correct use of medical masks derives from the practices in health-care settings^d:

- place mask carefully to cover mouth and nose and tie securely to minimise any gaps between the face and the mask;
- while in use, avoid touching the mask;
- remove the mask by using appropriate technique (i.e. do not touch the front but remove the lace from behind);
- after removal or whenever you inadvertently touch a used mask, clean hands by using an alcohol-based hand rub or soap and water if visibly soiled
- replace masks with a new clean, dry mask as soon as they become damp/humid;
- do not re-use single-use masks;
- discard single-use masks after each use and dispose of them immediately upon removal.

Cloth (e.g. cotton or gauze) masks are not recommended under any circumstance.

^d Infection prevention and control of epidemic- and pandemic-prone acute respiratory infections in health care. World Health Organization. (2014). Organization. <https://apps.who.int/iris/handle/10665/112656>