Infection Prevention and Control (IPC) &

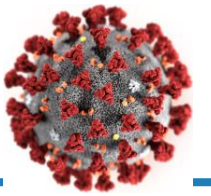# MASKS

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Advice on the use of masks in the context of COVID-19

Interim guidance
5 June 2020

World Health Organization

- This document provides advice on the use of masks in health care, during home care, as well as for the general public
- It is intended for decision makers, public health and infection prevention and control (IPC) professionals, health workers (HWs), and individuals in the community.
- Updated information on transmission from symptomatic, pre-symptomatic and asymptomatic people infected with COVID-19
- *Now includes updated information on what type of mask to wear in different settings and by various populations*

Key messages – what hasn't changed

1. Mask part of a comprehensive package of measures to suppress transmission and save lives: the use of a mask alone is insufficient to provide adequate levels of protection – we still need to observe physical distancing and hand hygiene

2. WHO overall guidance for decision makers remains the same:

- WHO advises decision makers to apply a <u>risk based approach for advising on mask use in the community</u>

What hasn't changed from previous guidance regarding HW:

– PPE recommendations remain the same for health workers providing direct care for suspect/confirmed COVID-19 patients (droplet/contact precautions)

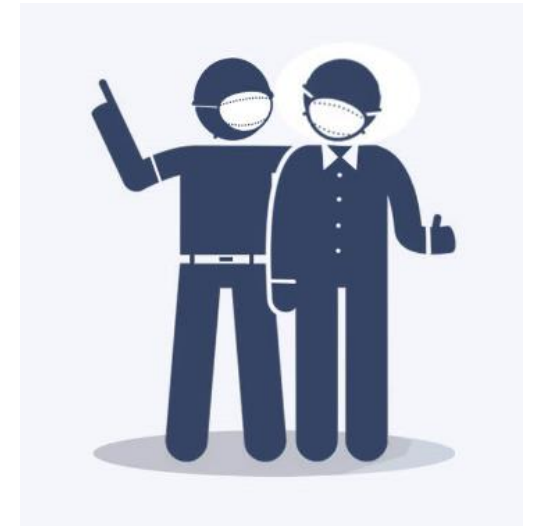– For aerosol generating procedures and/or settings – use of respirators (airborne precautions)

What has been updated: mask guidance (5 June 2020)

Guidance updated as evidence emerges constitution of IPC GDG). For example, appraisal of evidence on modes of transmission with focus on pre-symptomatic and asymptomatic status.

In areas of widespread COVID-19:
1. **Health Workers** to wear <u>medical masks</u> continuously throughout their shift in clinical areas
2. For the **general public**, advice on what settings (where distancing cannot be maintained) and what type of mask to wear
3. The **ideal features of a fabric mask** that provide the best barrier

Definitions

- *Universal masking* in health facilities is defined as the requirement to wear a medical mask by all health workers and anyone entering the facility, no matter what activities are undertaken.

- *Targeted continuous medical mask use* is defined here as the practice of wearing a medical mask by all health workers 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 removes the mask (e.g. for eating or drinking or caring for a patient who requires droplet/contact precautions for other reasons).

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Where community transmission

Mask	What: Type of mask	Who: Masks should be used for	Where: Settings
Medical mask		Health workers	Health care settings within the clinical areas
		People caring for suspect or confirmed cases of COVID-19 outside of health facilities	Home settings with a sick person
		Anyone with symptoms suggestive of COVID-19	Any setting in the community
		People aged 60 or over People with underlying health conditions	Community settings where physical distancing cannot be maintained
Non-medical mask **Aka** **Fabric mask**		• People in the general public in settings where at least 1m distance cannot be maintained • Essential workers (grocery stores, store clerks etc)	• Public settings • Workplaces

Advice to decision makers on the use of masks for the general public

WHO advises decision makers to apply a risk-based approach focusing on the following criteria when considering or encouraging the use of masks for the general public:

1. **Purpose** of mask use: if the intention is preventing the infected wearer transmitting the virus to others (that is, source control) and/or to offer protection to the healthy wearer against infection (that is, prevention).

2. Risk of **exposure** to the COVID-19 virus

    – due to epidemiology/number of cases/intensity of transmission in the population: if there is community transmission and there is limited or no capacity to enforce other containment measures such as contact tracing, ability to carry out testing and isolate and care for suspected and confirmed cases.

    – depending on occupation: e.g., individuals working in close contact with the public (e.g., community health worker, social workers, cashiers).

3. **Vulnerability** of the mask wearer/population: for example, medical masks could be used by older people, immunocompromised patients and people with comorbidities, such as cardiovascular disease or diabetes mellitus, chronic lung disease, cancer and cerebrovascular disease.[59]

4. **Setting** in which the population lives: settings with high population density (e.g. refugee camps, camp-like settings, those living in cramped conditions) and settings where individuals are unable to keep a physical distance of at least 1 meter (e.g. public transportation).

5. **Feasibility**: availability and costs of masks, access to clean water to wash non-medical masks, and ability of mask wearers to tolerate adverse effects of wearing a mask.

6. **Type** of mask: medical mask versus non-medical mask

Fabric masks

WHO requested a research group to conduct this study following the WHO Research and Development meeting in February 2020.

Their study identified:

- Type of material
- Number of layers
- Combination of materials
- Mask shape
- Mask maintenance

Guidance and practical considerations on non-medical masks

Fabric selection:

Choose materials that capture particles and droplets but remain easy to breathe through.

Avoid stretchy material for making masks as they provide lower filtration efficiency during use and are sensitive to washing at high temperatures.

Fabrics that can support high temperatures (60° or more) are preferable.

Construction:

A minimum of three layers is required, depending on the fabric used: an inner layer touching the mouth and an outer layer that is exposed to the environment.

Choose water-absorbing (hydrophilic) materials or fabrics for the internal layers, to readily absorb droplets, combined with an external synthetic material that does not easily absorb liquid (hydrophobic).

Mask management:

Masks should only be used by one person.

All masks should be changed if soiled or wet; a soiled or wet mask should not be worn for an extended period of time.

Non-medical masks should be washed frequently and handled carefully, so as not to contaminate other items.

Clothing fabrics used to make masks should be checked for the highest permitted washing temperature, which is indicated on the clothing label.

Non-woven polypropylene (PP) spunbond may be washed at high temperature, up to 140°C.

The combination of non-woven PP spunbond and cotton can tolerate high temperatures; masks made of these

Risk Communications materials

How to wear a mask

How to wear a medical mask

https://www.youtube.com/watch?time_continue=9&v=adB8RW4I3o4&feature=emb_logo
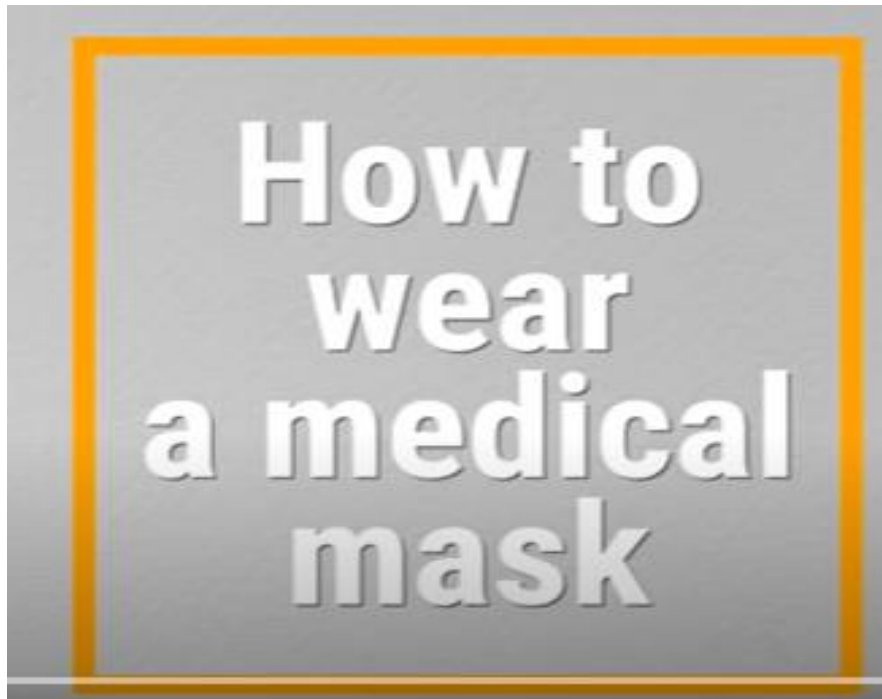
How to wear a fabric mask

https://www.youtube.com/watch?v=ciUniZGD4tY&feature=emb_logo

How to wear a mask properly

- Ensure **hand hygiene** is performed 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. Replace masks as soon as they become damp with a new clean, dry mask.
- **Remove the mask** using the appropriate technique: do not touch the front of the mask but untie it from behind or from the straps
- After removal or whenever a used mask is inadvertently touched, clean hands using an alcohol-based hand rub or soap and water if hands are visibly dirty.
- Do not re-use single-use masks. Discard after each use and dispose of them immediately upon removal.

Mask Do's and Don'ts

Do's	How to correctly wear a mask	Don't	Incorrect use of the mask
Wear the mask over the nose, mouth, covering the chin		Don't - wear the mask on the chin, on the head, under the nose	
The mask should be fitted well to the face		Don't - touch the mask while it is on the face Don't wear a mask that is too small or too large so that there are large gaps around the mask	
Colored side should face outwards		For medical masks the inside is white so this side should be touching the face.	
Removing the mask: should be done by pulling it from the straps or ear loops		Don't - remove the mask by touching the front of it to pull it off	

How to handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

Duration of the entire procedure: 20-30 seconds

1a Apply a palmful of the product in a cupped hand, covering all surfaces;

1b

2 Rub hands palm to palm;

3 Right palm over left dorsum with interlaced fingers and vice versa;

4 Palm to palm with fingers interlaced;

5 Backs of fingers to opposing palms with fingers interlocked;

6 Rotational rubbing of left thumb clasped in right palm and vice versa;

7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

8 Once dry, your hands are safe.

How to handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

Duration of the entire procedure: 40-60 seconds

0 Wet hands with water;

1 Apply enough soap to cover all hand surfaces;

2 Rub hands palm to palm;

3 Right palm over left dorsum with interlaced fingers and vice versa;

4 Palm to palm with fingers interlaced;

5 Backs of fingers to opposing palms with fingers interlocked;

6 Rotational rubbing of left thumb clasped in right palm and vice versa;

7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

8 Rinse hands with water;

9 Dry hands thoroughly with a single use towel;

10 Use towel to turn off faucet;

11 Your hands are now safe.

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Personal Protective Equipment (PPE)for use in health care settings includes:

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Gown

Body

Gloves

Hands

Face Mask

Nose + mouth

N95 Mask

Nose + mouth

Face shield


Eyes + nose + mouth

Goggle

Eyes

Respiratory hygiene/etiquette procedures

- Turn head away from others when coughing/sneezing

- Cover the nose and mouth with a tissue.

- If tissues are used, discard immediately into the trash

- Cough/sneeze into your sleeve if no tissue is available

- Clean your hands with soap and water or alcohol-based products

Good respiratory hygiene/cough etiquette can reduce the spread of microorganisms (germs) that cause respiratory infections (colds, flu).

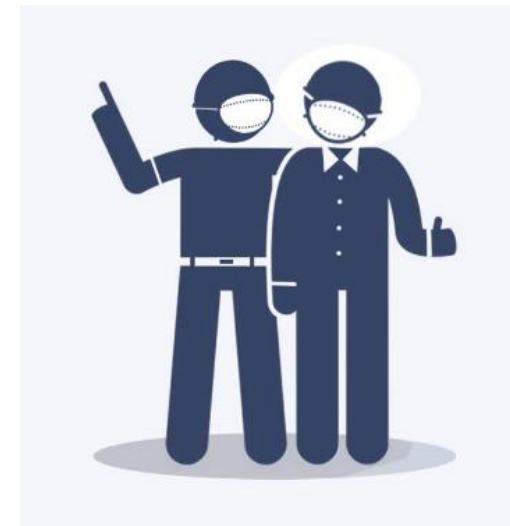# IPC Resources – in the context of COVID-19
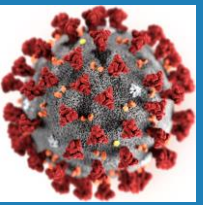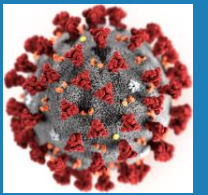
Technical Guidance documents
- IPC during health care
- Rational use of personal protective equipment
- Advice on the use of masks
- IPC guidance for long-term care
- Infection prevention and control for the safe management of a dead body
- Consideration for quarantine of individuals in the context of containment for COVID-19
- Home care for patients with suspected novel coronavirus (nCoV) infection presenting with mild symptoms and management of contacts
- Consideration for quarantine of individuals in the context of containment for COVID-19
- Q&A on infection prevention and control for health care workers
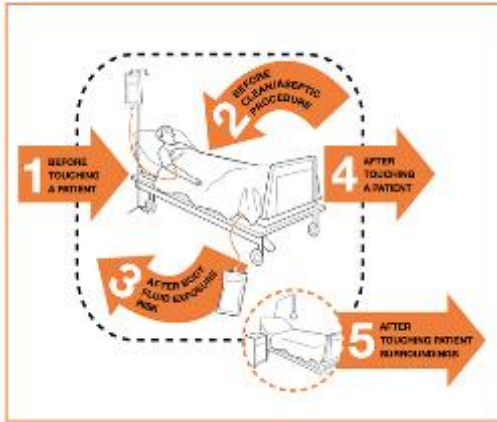
Tools for health workers
- Health workers exposure risk assessment and management in the context of COVID-19 virus
- Surveillance protocol for SARS-CoV-2 infection among health workers
- Assessment of risk factors for coronavirus disease 2019 (COVID-19) in health workers: protocol for a case control study

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https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/infection-prevention-and-control

HEALTH EMERGENCIES programme

IPC online training options

• https://openwho.org/channels/covid-19

Most popular course currently with 579,000 enrolments and in 15 languages!

Standard precautions: Hand hygiene
Self-paced English
Most health care-associated infections are preventable through good hand hygiene – cleaning hands at the right times and in the right way. The WHO Guidelines on hand hygiene in health care support hand hygiene promotion and improvement in health care facilities worldwide and are complemented by the WHO multimodal hand hygiene improvement strategy, the guide to implementation, and implementation toolkit, which contain many ready-to-use practical tools. This module has been prepared to help summarize the WHO guidelines on hand hygiene, associated tools and ideas for effective implementation.
Show course details Enroll me for this course

How to put on and remove personal protective equipment (PPE)
Self-paced English
This is a guide for healthcare workers involved in patient care activities in a healthcare setting. It aims to show the type of personal protective equipment or PPE needed to correctly protect oneself. Based on the current available evidence, the WHO recommended PPE for the care of COVID patients are CONTACT and DROPLET precautions, with the exception of aerosol producing procedures, which require CONTACT and AIRBORNE (hence, a respirator mask such as N95, FFP2, FFP3). Keeping in mind, PPE is part of a larger infection prevention and control bundle of measures and should be implemented as part of a multimodal strategy of management of COVID-19 patients. Only clinical staff who are trained and competent in the use of PPE should be allowed to enter the patient's room.
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Infection Prevention and Control (IPC) for Novel Coronavirus (COVID-19))
Self-paced English
This course provides information on what facilities should be doing to be prepared to respond to a case of an emerging respiratory virus such as the novel coronavirus, how to identify a case once it occurs, and how to properly implement IPC measures to ensure there is no further transmission to HCW or to other patients and others in the healthcare facility.
This training is intended for healthcare workers and public health professionals, as it is focused on infection prevention and control.
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Reach of IPC training