Properties of Different Face Masks

Properties	Surgical mask	N95 respirator	Cloth Mask
Other names	Single-use face mask, medical mask, patient-care mask, general purpose mask	P2 respirator, N95 respirator, respiratory protection device, particulate respirator	D.I.Y face mask, Cloth Face coverings, home-made face mask
Characteristics	• Loose-fitting • Disposable • Pleated face • Filtration through mechanical impaction • Level of barrier protection • Fluid resistant	• Tight fitting • Raised dome or duckbill • Designed to provide good facial fit to minimise aerosol contamination of the mucous membranes of nose and mouth • Filtration through mechanical impaction and electrostatic capture	• Washability for multiple uses • Covers over face and mouth • Ear loops or ties • Does not filter bacteria or viruses
Material	• 2-3 polypropylene layers	• 4-5 layers (outer polypropylene, central layers electret	• Made of Cloth (cotton, linen, etc)
Sealing	• Ties at crown and bottom of head • Ear loops • top of mask contains metal strip that can be formed • Fit checking recommended	• Ties at crown and bottom of head, pliable metal nose bridge • Fit testing and fit checking required • Special training is required	• Ear loops • Made of multiple layers of fabric
Australian Standard	AS 4381:2015	AS/NZS 1716: 2012	--
Intended Use	• Procedures requiring a surgical aseptic technique (to protect patients from exposure to infectious agents carried in a healthcare worker's mouth or nose) • Routine care of patients with droplet precautions • To protect the mucous membranes of the mouth and nose as well as the respiratory tract during patient contact.	• Routine care of patients on airborne precautions • High-risk procedures such as bronchoscopy when the patient's infectious status is unknown	Everyone in the public should wear cloth face coverings when leaving their homes, regardless of whether they have fever or symptoms of COVID-19. This is due to evidence that people with COVID-19 can spread the disease, even when they do not have any symptoms (CDC, 2020)

Protection	• Procedures that generate splashes or prays of large droplets of body fluids, secretions, and excretions.
	  o Sprays and splashes of blood or body fluids
	  o Droplets of blood or infectious agent
	  o Coughing or sneezing
		• Procedure that involve aerosolization of particles that may contain specific known pathogens	--

Recommended for	• healthcare workers undertaking routine care of patients in medical settings • suspected or confirmed COVID-19 patients and those providing care • healthcare workers who have frequent, close contact with sick or vulnerable people. • In medical or first aid setting	• medical procedures that generate aerosols from patients	• General public who cannot maintain distance in crowded places • Public setting, domestic use
Not recommended for	Healthy members of the public	Non-healthcare settings. Children younger than 2 years People with facial hair	Children under 2 years old People with trouble breathing Anyone who is unconscious, incapacitated, or otherwise unable to remove the mask without assistance
Notes	Not intended to be used more than once. If mask is damaged or soiled, or breathing through the mask becomes difficult, you should remove the face mask, discard it safely and replace it with a new one	Care must be taken when placing respirators on patients and must suit clinical need (i.e. if patient has chronic obstructive airways disease or is in respiratory distress, the respirator will exacerbate symptoms).	Wash homemade cloth masks after every use. When removing, be careful not to touch your eyes, nose, and mouth. Wash hands immediately after removing.

Source: Australian Guidelines for the Prevention and Control of Infection in Healthcare, 2019