



## Healthily's Guide to Face Masks

Confused by the question? We were to so here is a guide to telling face masks apart:

### Homemade masks

Well you should know if you created your own facemask.

The argument that's made for their use by [The European Centre for Disease Prevention and Control](#) among others is that even homemade masks could help to limit transmission of the virus in busy public situations where social distancing is difficult, such as public transport or supermarkets.

The argument against homemade masks is they are less effective than medical masks at preventing the wearer from transmitting the virus and of almost no use in protecting the wearer themselves. So if you've made a cloth face mask at home or bought one you should be aware of their limitations and that social distancing, hand hygiene and avoiding touching the mask or face is of considerably more importance.

### Type I and Type II Masks?

Type I, and Type I R face masks have a BFE (bacterial filtration efficiency) of 95%, whereas Type II and Type II R face masks have a BFE of 98%. The breathing resistance, and splash resistance for Type I R and Type II R masks, are exactly the same.

Type I, I R, II and II R face masks are medical masks tested in the direction of exhalation (inside to outside) and take into account the efficiency of bacterial filtration. Surgical masks of this type stop the wearer from infecting the surrounding environment. They are not effective at protecting the wearer from airbourne diseases such as coronavirus.

### What is a Type II Face Mask?

Type II face masks (EN14683) are medical face masks made up of a protective 3 ply construction that prevents large particles from reaching the patient or working surfaces, however they are not effective when blood or bodily fluids are present.

Characteristics of Type II face masks include:

- Pleat style with ear loops or ties
- Protective three-layer construction
- Available in a variety of colours and styles.

### What is a Type IIR Face Mask?

Type IIR face masks (EN14683) are medical face masks made up of a 4 ply construction that prevents large particles from reaching the patient or working surfaces. Type IIR Face masks

include a splash resistant layer to protect against blood and other bodily fluids. Type IIR face masks are tested in the direction of exhalation (inside to outside) and take into account the efficiency of bacterial filtration.

Characteristics of Type IIR face masks include:

- Pleat style with ear loops or ties
- Protective four-layer construction
- Available in a variety of colours and styles
- Splash resistant layer against bodily fluids.

Type I, Type IR, Type II and Type IIR masks are for use in protecting others from the wearer transmitting infection.

### **N95, FFP2 and FFP3 Face Masks?**

FFP2 & FFP3 Face Masks are European classes of respirators, tested on the direction of inspiration (outside to inside) and take into account leakage to the face and filtration efficiency.

FFP2 face masks are the equivalent of N95 face masks, which meet the guidelines from [The World Health Organisation](#) for protection against Covid-19. FFP2 masks have a minimum of 94% filtration percentage and a maximum of 8% leakage to the inside. These masks are not shaped to your face but are simply held in place by the elastic earloop and have a typical lifespan of 3-8 hours depending on environmental factors.

FFP3 face masks are the most effective at filtration, with a minimum filtration of 99% and a maximum leakage of 2% to the inside. These masks are better shaped to your face for a snug fit and typically have a valve to help breathe as the filtration material is much thicker. The valve also reduces the build-up of moisture, lengthening the lifespan of the mask. FFP3 masks are typically used for handling asbestos.

FFP2, FFP3, N95 and other respirator masks are effective at protecting the wearer from viral transmission.

### **What to look for?**

Medical masks and respirators adhere to different standards and regulations, depending on where they are manufactured.

Medical masks in Europe must comply with the European standard EN 14683. This code should be displayed on the packaging. EN14683 means the mask has 3 levels of bacterial filtration efficiency (BFE1, BFE2, Type R). In the US medical masks must comply with ASTM standards, which have three levels of protection (from low risk of exposure to fluids to high risk of exposure to fluids).

Respirators in Europe must meet European standard EN 149: 2001, which includes three classes of disposable particulate respirators (FFP1, FFP2 and FFP3). In the US respirators must comply with NIOSH (National Institute for Occupational Safety and Health) standards.