

Decoding COVID-19 personal protective equipment (PPE)

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Since COVID-19 was discovered in December 2019, the virus has spread around the world causing illness and uncertainty. As time has passed, we've gained a better understanding of how the virus spreads and how we can protect ourselves with the proper use of personal protective equipment (PPE).

To understand what personal protective equipment we need, we must first understand how the COVID-19 virus spreads.

According to infectious disease experts at [CDC](#) and [WHO](#), COVID-19 is transmitted through contaminated droplets, resembling the spread of influenza.

Droplets of saliva or mucus carrying the COVID-19 virus can travel one to two metres through coughing or sneezing. Infection happens if these droplets enter the respiratory tract through the eyes, nose or mouth. This is why the risk of infection can be reduced by practicing social distancing, now known as physical distancing. It may also be possible to get COVID-19 by touching a surface or object that has the virus on it and then touching the eyes, nose or mouth, without sanitizing the hands.

What type of mask should I wear and when do I need to wear it?

To avoid inhaling these droplets, it is necessary to use a surgical mask when you are within one to two metres of someone with respiratory symptoms.

What about N95 masks?

N95 masks are only necessary when there is a risk of airborne transmission. With airborne infections, the particles containing infectious germs remain in the air for a period of time. Examples of those infections are tuberculosis, chickenpox, smallpox and disseminated shingles.

N95 masks should only be used for these types of illnesses, as well as the following medical procedures on a probable and confirmed COVID-19 case:

- Nasopharyngeal swab
- Open airway suctioning
- Use of Nebulizer
- Non-invasive positive pressure ventilation for acute respiratory failure
- High flow oxygen therapy

Do I need to wear personal protective equipment in everyday routines, such as going to the grocery store?

Personal protective equipment is not indicated in everyday routines. You need to follow public health recommendations for proper hand hygiene and following physical distancing with others. Remember, respiratory droplets would reach within one to two metres, so as long as you keep the recommended distance, you do not need to wear a mask. A mask might give a false sense of security and could result in an increase in touching the face to adjust or remove the mask without proper hand hygiene, which could result in transmission of infection.