

What should you look for in a protective facemask?

In the rush to provide protective masks during the COVID-19 Coronavirus pandemic of 2020, there has been a flood of basic face coverings produced that provide minimal actual protection against the spread of the disease. Wearing a face covering will slow the spread of the disease but depending on the construction and materials used basic fabric masks may not be optimal to protect you or others in the spread of this deadly disease.

Health-care workers, nurses, and doctors are the most at risk and should wear N95 type masks which are the best at filtering and blocking the transmission of virus size particles. The size of these particles are typically 0.3 to 0.5 microns and can linger airborne for eight minutes or more according to a study published May 13th 2020 by the National Academy of Sciences USA. Using the assumption of seven million virus particles per milliliter, one minute of load speech by an individual could generate more than 1,000 virus-containing droplets that could linger in the airspace for eight minutes or more.

Basic single or 2-ply fabric masks being typically being sold have very low "overall protection values" when compared to the N95 type masks being produced under strict guidelines and laboratory type conditions. These are considered the "gold standard" and have a protection value of approximately 95% for the wearer when the mask is fitted to the face and worn properly. By comparison a typical disposable surgical mask made using a rectangular piece of pleated fabric with elastic ear loops has a filtration efficiency ranging from 60 – 80 percent depending on the materials and fit of the mask.

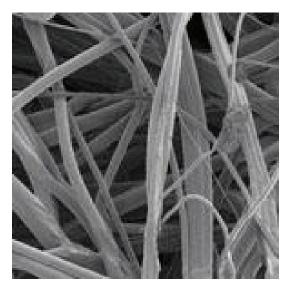
Fit matters. Small gaps and spaces between the wearers face and mask are normal. The fewer and smaller the gaps will provide the best protection for each individual. Using a material that conforms to the wearers face snuggly will provide the best protective shield for the wearer. Having a mask manufactured using a protective barrier material will also provide superior protection over simple 1 or 2-ply fabric masks lacking a protective barrier material.



One of the greatest challenges when choosing a mask is to find a good balance between viral protection, breathability, and comfort for the wearer. You need a mask that is efficient at blocking viral particles from entering your respiratory system and being expelled from your system to others, yet easy to breath while wearing for extended periods of time.

We did not rush to market with our "Protective Face Coverings". We took the approach to study what made a superior mask and to procure the necessary protective barrier materials to produce a quality product. We spent a considerable amount of time trying to create the best fit for each of the masks we offer. There are hundreds of facial shapes and sizes. We have tried to offer several different fits using a handful of materials to create a good offering of masks.

All of the masks we produce are 3-ply masks utilizing a protective "Spunbond Polypropylene" barrier material fitted in the middle layer to form a protective shield that is also easy to breath through. The different materials we are using for each of the layers are carefully chosen to offer different levels of comfort and protection depending on the configuration of materials and design of each mask. Each type of mask we offer has been tested for filtration efficiency or "protection value against viral droplets" and air flow or "breathability". While our test results are not precise due to the fit on each individual wearing a mask being slightly different, the values are approximate and give the wearer a sense of which masks offer more protection than others.



Spunbond Polypropylene Up-close

We hope you will enjoy wearing the various masks we offer. We have worked to make them as comfortable and affordable as possible. Each of our masks is washable and we recommend washing your mask before using it for the first time. Please consider purchasing one of our masks to protect yourself and your loved ones, over a simple 1 or 2-ply basic fabric mask without a protective barrier.