

Well-Fitting Masks

Under certain circumstances, a well-fitting mask is being required instead of the normal cloth face mask or 3-ply mask because it has a higher protection factor than the 3-ply mask. The KN95 mask is an example of a well-fitting mask that meets the requirements and does not require any medical examination to wear. For this reason, KDOT is stocking their supply rooms with these masks for anyone that needs them.

The KN95 mask fits tighter to the face, bridge of the nose and has more layers of filtering media. This mask has a higher Bacterial Filtration Efficiency (BFE) and captures a higher percentage of smaller particles and aerosol particles in the filter media. The straps fit tighter to hold the mask firmly to the face, increasing outward, inward, and leakage protection. These have mainly been used by hospitals and medical personal because they provide more protection since they are dealing with fully infected individuals.

The protection factor or level of protection a mask provides to the person wearing it is determined by The National Institute for Occupational Safety and Health (NIOSH) and The American Conference of Governmental Industrial Hygienists (ACGIH). Both groups test and determine a mask effectiveness by reviewing the inward and outward leakage, the filter medias effectiveness, and if the media is resistance to bacterial growth. In other words, effectiveness is determined by the percentage of particles entering the facepiece and the percentage of particles exhaled that are exiting the facepiece and if the media will support bacterial growth, virus, bacteria, mold, and other organisms.

The rating of masks for COVID protection is determined by the amount and type of filtration media, inward, and outward leakage, and the filtration media's resistance to bacterial growth:

- **Cloth face** coverings offer between 50 to 65% inward and outward leakage depending on the material. Most fabrics are not resistant to bacterial growth. Some fabrics that are used have better filtration and static properties but do not limit bacterial growth and require washing after use.
- **3 ply masks or surgical masks**, when worn properly, offer between 75 to 80% inward, and outward, leakage, and the material resists bacterial growth.
- **KN95** face filtering masks worn properly offers between 90% inward, and outward leakage, has the highest level of filter media, and resists bacterial growth.
- **N95** face filtering mask properly worn offers between 95 to 98% inward, and outward leakage, has the highest level of filter media, and resists bacterial growth. These are being used for medical field and for other environmental needs like Silica, Lead, and Asbestos.

Nether the KN95 or N95 face filtering (without a foam face seal) requires a medical exam.

All N95 Face filtering masks with an elastomeric or foam face sealing surface requires a medical evaluation. Below are types of N95 masks that require a medical examination because they seal tight to the face and cause the same restriction as a Half mask N95. Below are 3 types of foam or elastomeric face sealing masks, some with adjustable straps that require a medical evaluation before use.

