

# Face Masks: What Works

Due to the recent COVID-19 pandemic, it is recommended by the CDC and the WHO that all persons wear a mask in public settings and when around people who don't live in their households, especially when other social distancing measures are difficult to maintain. While current research shows face covering to be effective as a measure to slow the spread of the virus., the degree of effectiveness relies heavily on how the mask is worn and the material the mask is made of. Recent research has shown that certain materials and styles of masks are more or less effective at blocking large respiratory droplets from penetrating the mask. This paired with the extended duration of more than 20 minutes of exposure, leaves certain masks to be incredibly ineffective and are not recommended for protective use. The fit of the mask also greatly affects the level of protection and efficacy of the mask. Masks need to need to fit snugly around the nose and mouth, and tucked under the chin. Masks that do not wrap around the chin (i.e. bandanas, neck wraps) do not work as effective face covering and are not recommended for use as personal protective equipment.

This information can be used as a guideline to build safety policies around the use of facial coverings within a work environment

## Ranked Facemask Efficacy for Filtering Expelled Droplets for Prolonged Exposure

### Highly Effective and Recommended Materials and Mask types

*N95 and N99 mask \*Primarily used in healthcare setting, not required for daily use*

*3-layer surgical mask \*Most common disposable PPE*

*Cotton-polypropylene-cotton (polyester cotton woven blend) mask*

*2-layer polypropylene (polyester) apron mask*

*2-layer tightly woven cotton mask*

*Antimicrobial fabric mask*

### Less Effective Materials and Mask Types

*2-layer knit cotton mask*

*Single layer cotton mask*

*Linen mask*

*Silk mask*

### Non-Effective and Non-Recommended Materials and Mask Types

*One-way valve masks*

*Cotton Bandanas*

*Gaiter neck bands*

*Nylon Masks*

