



# Reusable Face Mask With Replaceable Filters

Protection against gases, odor, pollen, haze, dust, smoke or any particle matter with diameter of 0.1 micron or bigger.

## Adjustable Wire Nose Bridge

Adjust to each person's nasal height and shape.  
Tighter fit and better seal.



## Mask + Filter = 5-Layer Filtration



Scan to learn more!

## Bacteria Resistant Graphene Cotton Lined Inner Layer

100% graphene antibacterial colored cotton

- Staphylococcus aureus suppression rate >99%
- E. Coli suppression rate >99%
- Candida albicans >96%

## 5-Layer Filtration



Activated carbon layer is super important. It was originally invented by the UK Ministry of Defense. It was then extensively developed and made into a product for use in chemical, biological and nuclear warfare protection, of the type used by armed forces around the world.

## KN95 - PM2.5 Filters

The filters meet or exceed the US NIOSH N95 filtration standard, meaning they can filter out particulate matter that is 0.1 micron in diameter or larger by at least 95%.

N95 is the standard used by FDA in medical PPE Personal Protection Equipment to protect medical workers against the virus. However, our masks/filters are not approved by FDA and therefore cannot be used in a medical setting. Medical device registration required.

Respiratory droplets are at least 5 microns in diameter.

## Duration of Filters

Each filter can be used anywhere between 1 day to 1 week, depending upon exposure, environment and usage. If supply is ample, replace the filter after 24 hours of **active usage**. Due to the limited supply, we recommend using it longer, especially when the environment is not polluted (dusty).

Coronavirus is heat sensitive. It deactivates at 133 Fahrenheit after 30 minutes. **The filters can be boiled in water for 5-10 minutes for sterilization**, then air dried. We do not recommend oven baking the filters as they tend to melt in the oven. Most treatments of the filters will reduce their original filtration efficiency. You may also "quarantine" the filters for 7 days before reusing them as Coronavirus does not survive on most surfaces beyond 2-3 days. Only reuse the filters a few times, if necessary.

The best way to avoid getting sick is to stay at home. If you must go out, face masks in general are an important, though imperfect, option.

## The California Department of Public Health has these guidelines for cloth masks:

- Ideally, face coverings should be washed after each use. Dirty masks should be placed in a dedicated laundry bag or bin for temporary storage.
- Use detergent and hot water when washing cloth masks, and dry them on a hot cycle.
- Be sure your mask is comfortable; you don't want to have to keep adjusting the mask, because that means touching your face.
- Wash your hands, or use hand sanitizer, before and after touching your face or face coverings.
- If you must wear your cloth face covering again before washing it, wash your hands immediately after putting it back on and avoid touching your face.

## Washable Mask

Do not wash the filters.





## Covid-19 Prevention and Control Plan (5th Edition) published by the National Health Commission (NHC) of China on 2/19/2020

**"Aerosol transmission of coronavirus is possible** when someone is exposed to high concentrations of aerosol in a relatively **closed environment** for a **long time.**"

The difference between aerosols and droplets is that droplets' diameters are greater than 5 microns (1 millionth of a meter) and cannot stay suspended in the air while **aerosols are airborne** with diameters smaller than 5 microns.

**NHC** is the lead agency in mainland China coordinating the national efforts to combat the coronavirus outbreak. **The aerosol transmission (airborne) was added to the 5th Edition** of their **Covid-19 Prevention and Control Plan** published on **2/19/2020**. It was listed in their **4th Edition** as "pending verification" but was since officially added as a possible transmission route, in addition to respiratory droplets and contact.

## AP Associated Press article published on 3/11/2020

"They (researchers) found that viable virus could be detected up to three hours later in the air, up to four hours on copper, up to 24 hours on cardboard and up to two to three days on plastic and stainless steel."

The tests were done at the National Institutes of Health's Rocky Mountain Lab in Hamilton, Montana, by scientists from the NIH, Princeton University and the University of California, Los Angeles, with funding from the U.S. government and the National Science Foundation."

The  
New York  
Times

## New York Times article "More Americans Should Probably Wear Masks for Protection" published on 3/27/2020

"When researchers conducted systematic review of a variety of interventions used during the SARS outbreak in 2003, they found that **washing hands** more than 10 times daily was **55 percent effective** in stopping virus transmission, while wearing a mask was actually more effective — at about **68 percent**. Wearing gloves offered about the same amount of protection as frequent hand-washing, and **combining all measures** — hand-washing, masks, gloves and a protective gown — increased the intervention effectiveness to **91 percent.**"

