

# CORONAVIRUS (COVID-19)

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The intent of this white paper is to provide general background on the Coronavirus and recommendations on how to protect against it. It is not intended to be all-inclusive nor replace any local, regional or national requirements or guidelines currently in place.

## WHAT IS THE CORONAVIRUS?

According to the World Health Organization (WHO): Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases. A novel coronavirus (COVID-19) is a new strain that has not been previously identified in humans. Coronaviruses are transmitted between animals and human and most recently discovered from human to human.

## SYMPTOMS

Common signs of infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death according to the WHO. Pursuant to the Centers for Disease Control and Prevention (CDC) symptoms of the COVID-19 may appear in as few as 2 days or as long as 14 days after exposure.

## PREVENTATIVE ACTIONS

At the current time, per CDC, there is no vaccine to prevent COVID-19 infection. The optimal way to prevent infection is to avoid being exposed to this virus. With that said, everyday preventive actions to help prevent the spread of respiratory viruses include; washing your hands with soap and water, avoid touching your eyes, nose and mouth with unwashed hands, avoid close contact with people who are unwell, stay home when you are unwell, clean and disinfect frequently touched objects and surfaces using regular household cleaning spray or wipe.

## SOURCE

Due to the recent onslaught of this virus there has been many general questions regarding COVID-19. Firstly, what is the source of the COVID-19? Public Health officials and partners are working hard to

identify the source considering the fact that Coronaviruses are a large family of viruses that are spread by various means. How does it spread? This virus most likely emerged from an animal source but now seems to be spreading from human-to-human.

What are leading agencies like CDC doing about the COVID-19? As one can imagine, this is a very fluid situation that evolves daily, therefore leading organizations will continue to provide information to the public as it becomes available or visit the various official websites for additional information.

## PERSONAL PROTECTION PRODUCTS

Avon Protection, a global leading manufacturer of respiratory protection products including Escape Hoods, full face Air Purifying Respirators (APR), Powered Air Purifying Respirators (PAPR), Self Contained Breathing Apparatus (SCBA) and Filtration can provide protection against nCoV dependent upon the actual need, usage, performance and budget requirements.

CDC is recommending disposable N95 masks for healthcare workers, which must meet a 95% filtration efficiency. In contrast, all filters made by Avon Protection in our U.S. facility have a minimum of NIOSH P100 level of protection against particulate exposure. That equates to a particulate protection performance of  $\geq 99.97\%$  filter efficiency towards aerosol at approximately the most penetrating particle size.

The COVID-19 virus particle is spherical, with an approximate diameter of 0.125 micrometers. This virus is close in size to the particle size used to test the efficiency of the HEPA component, in Avon Protection filters. Thus, Avon Protection filters protect with  $\geq 99.97\%$  efficiency against the virus. Because the particulates produced during coughing or sneezing

will be greater in size than the naked virus particle, the filter will actually be able to protect significantly better than  $\geq 99.7\%$ .

It is important to note that the above-mentioned filter will trap the virus, not kill it. Proper disposal of a contaminated filter (not reuse) or product is required and should follow local guidelines. It is imperative that the user read, understand and follow all respective product user instructions specifically on donning, doffing, training and disposal. Exhaled air will leave through an exhale valve that does not filter the exhaled air. If an individual wearing a mask or hood is contagious, the filter will not prevent the individual from spreading the disease.

In addition to full face APR's and filters, an encapsulating escape hood will protect the wearer from exposure of face, eyes and mucous membranes of the nose as well as preventing hand contact with eyes and mouth during use.

## SUMMARY

In summary, Avon Protection masks, filters and or escape hoods will provide excellent protection against exposure to the COVID-19. For further details on the full product offering from Avon Protection, please contact your local Avon Protection Representative.

### Sources:

- World Health Association (WHO)
- Centers for Disease Control (CDC);
- Avon Protection Global Filtration team

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