

MSA Novel Coronavirus Disease (2019-nCoV) Brief



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Guidance on the novel Coronavirus (2019-nCoV) is available from national and international organizations, such as the United States Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), the World Health Organization (WHO), the European Centre for Disease Prevention and Control (ECDC), and/or your local health authority. The purpose of this bulletin is to provide a summary of key information from these authorities on this viral-related disease, as well as some recommendations on potential personal protective equipment (PPE) that may be suitable for use when working in an environment where 2019-CoV or individuals infected with the virus may be present. This bulletin is NOT a substitute for the detailed information provided about the disease or any related topics by these organizations and is based on the information available as of the issue date of this bulletin. For the most up-to-date information, as well as actions needed to prevent, control and manage contact with 2019-nCoV, you should regularly consult one of these authorities:

US CDC	https://www.cdc.gov/coronavirus/index.html
US NIH	https://www.nih.gov/news-events/news-releases/nih-officials-discuss-novel-coronavirus-recently-emerged-china
WHO	https://www.who.int/health-topics/coronavirus
ECDC	https://www.ecdc.europa.eu/en/coronavirus

What is the Novel Coronavirus (2019-nCoV)?

The 2019 Novel Coronavirus, or 2019-nCoV, is a new respiratory virus first identified in Wuhan, Hubei Province, China. Since that time, it has been reported in other regions of the world. Public health officials are closely monitoring the virus and we encourage you to visit the websites listed above for the latest information and advice.

How is 2019-nCoV Transmitted?

While animals are the source of the virus, human-to-human transmission has been demonstrated. Although there is not enough epidemiological information to determine how easily and sustainably this virus is spreading between individuals, it is believed to be transmitted primarily via respiratory droplets that people sneeze, cough, or exhale. These droplets are subsequently inspired into the mouths or noses of people who are nearby or possibly be inhaled into the lungs. According to the CDC, at this time it is unclear if a person can be exposed to the 2019-nCoV by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes.

According to the CDC, the incubation period for 2019-nCoV (i.e. the time between exposure to the virus and onset of symptoms) is currently estimated at between two and 14 days. While people are mostly infectious when they exhibit (flu-like) symptoms, there are indications that some may be able to transmit the virus without presenting any symptoms (asymptomatic) or before the symptoms appear.

There is more to learn about the transmissibility, severity, and other features associated with 2019-nCoV, and investigations are ongoing.

Who is at Risk?

The level of risk to individuals is dependent upon exposure. Those at higher risk of infection include Healthcare Professionals (HCP) and others coming in close contact with infected individuals.

How Can I Protect Myself, and Prevention Transmission?

According to the CDC, currently there is no vaccine to prevent 2019-nCoV infection. However, exposure to the virus can be controlled/minimized through use of protective measures where contact with the virus could occur. When the protective measures recommended by the CDC or other authorities includes the use of respirators and/or eye and face protection, those devices must carry approval by a government agency. If the equipment is not disposable, it must be sterilized properly before reuse.

It is recommended that, at a minimum, the following preventive actions be followed to prevent or minimize the spread of respiratory viruses.

- Wash your hands often with soap and water for at least 20 seconds. Use an alcohol-based hand sanitizer if soap and water are not available.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact with people who are sick, have a fever or cough.
- Cover your cough or sneeze with a tissue. Afterwards, properly dispose of the tissue and immediately wash your hands.
- Clean and disinfect touched objects and surfaces.
- When visiting live markets in areas currently experiencing cases of novel coronavirus, avoid direct unprotected contact with live animals and surfaces in contact with animals.

What PPE Should I Use?

The CDC does not currently recommend the use of face masks among the general public in the United States, stating that "While limited person-to-person spread among close contacts has been detected, this virus is not currently spreading in the community in the United States". The CDC however, has established "Interim Infection Prevention and Control Recommendations for Patients with Confirmed 2019 Novel Coronavirus (2019-nCoV) or Patients Under Investigation for 2019-nCoV in Healthcare Settings".

Employers should select the appropriate PPE (as listed below), and provide it to Health Care Professionals in accordance with OSHA's PPE standards (29 CFR 1910 Subpart I).

- Fluid resistant, impermeable, disposable gloves
- Fluid resistant, impermeable, disposable gowns
- Eye Protection such as goggles or a disposable face shield that covers the front and sides of the face. Reusable eye protection must be cleaned, disinfected and maintained in accordance with the manufacturer's instructions.
- Facemask which has been fit-tested and provides protection that is at least as protective as a fit-tested NIOSH-certified N95 filtering facepiece respirator. If reusable respirators (e.g., powered air purifying respirator/PAPR) are used, they must be cleaned, disinfected and maintained in accordance with the manufacturer's instructions. Respirator use must be in the context of a complete respiratory protection program in accordance with Occupational Safety and Health Administration (OSHA) Respiratory Protection standard (29 CFR 1910.134).

MSA offers both eye/face and respiratory protection that meet the CDC guidance. Be sure to follow the CDC or other authority's proper PPE donning and doffing instructions, as the sequence followed can help prevent the spread of infection. Additionally, ensure proper disposal of any PPE after each use – **MSA PPE is not designed to be sterilized in a manner prescribed by health authorities to effectively eliminate the 2019 Novel Coronavirus (2019-nCoV) and, as such, must be disposed of after each use.**

Keep in mind, as well, that while PPE can prevent infected material from coming in contact with mucous membranes and exposed, open skin, it is essential that all relevant infection prevention and control (IPC) protocols, and our manufacturer's user instructions are followed when using any of our PPE described below.

Goggles - Non-vented, anti-fog (AF) coated goggles can be worn to meet the CDC guidance. Vents in goggles can provide an exposure path. The AF on non-vented goggles will help reduce the likelihood of fogging during potential exposure work. Be sure the goggles are tightly sealed to the face. Goggles exposed to 2019-nCoV should be disposed of properly once removed.

Faceshields - While goggles reduce the likelihood of splashes to the eyes, they do not protect other mucous membranes (nose, mouth) that could be exposed; nor do they protect skin. To help reduce the likelihood of splash on these areas, use a faceshield designed for splash protection, such as a polycarbonate visor. DO NOT use a mesh visor as these do not provide splash protection. Faceshields do not take the place of respirators and goggles. Be sure to wear

an appropriate respirator and goggles under any faceshield. Faceshields exposed to 2019-nCoV Virus should be disposed of properly once removed.

Respirators - Government approved particulate respirators can be used to meet the CDC guidance; recommendations from CDC and other authorities include US NIOSH approved N95, European CE certified filtering facepieces EN149 FFP2 or EN149 FFP3, particulate filter EN143 P2 or P3, in combination with full- or half-mask, or any higher-level respiratory protection, such as power-assisted devices. Consult the information from your local authority to determine the specific recommendations for your situation.

When making a personal decision to use a government approved respirator to help reduce exposure to dispersoids, aerosols or particulates containing the 2019-nCoV virus, the user needs to understand that:

1. Reducing exposure to 2019-nCoV does not mean that the risk of exposure, infections and illness has been eliminated. Respirators will not prevent you from becoming infected by the virus in other ways such as by touching your mouth, nose or eyes with contaminated hands or objects, or by other means mentioned above.
2. In order for a respirator to be most effective, you must properly wear the respirator during the entire time you're exposed. Removing the respirator to eat, drink, talk or smoke while you are in a contaminated area will increase the likelihood that you may be exposed to virus particles or droplets.
3. Fit of the respirator to your face is very important to minimize the risk of virus particles or droplets from getting inside your lungs. Particles or droplets can enter your respirator through any leaks between the respirator and your face. Hair from beards and mustaches or anything that prevents the respirator from directly touching your skin can prevent a proper seal. Following the manufacturer's instructions to assure a proper fit is essential. Contact the manufacturer with questions about proper fit. Without a proper fit, the air you breathe may go around the mask rather than through the respirator filter.
4. Respirators are not intended for use by children or by individuals with a medical condition that might prevent the use of a respirator, such as asthma, emphysema or a history of heart disease. If you have such a condition, consult your health care provider before use.
5. Properly dispose of respirators and filters/cartridges after they are used. Once used, they should not be shared with others.
6. Be sure to read and follow all instructions on the fit, use and warnings provided by the manufacturer before using any respirator.
7. Please be cautious of claims being made by websites and other sources regarding the use of respirators for protection against 2019-nCoV. We recommend that you reference your government or appropriate health agencies. For additional information or help selecting MSA products, please contact your local MSA affiliate.

Resources Used in the Development of this Brief

CDC, Coronavirus - <https://www.cdc.gov/coronavirus/index.html>

CDC, 2019 Novel Coronavirus, Situation Summary — <https://www.cdc.gov/coronavirus/2019-ncov/summary.html>

CDC, Prevention for 2019 Novel Coronavirus — <https://www.cdc.gov/coronavirus/about/prevention.html>

CDC, "Interim Infection Prevention and Control Recommendations for Patients with Confirmed 2019 Novel Coronavirus (2019-nCoV) or Patients Under Investigation for 2019-nCoV in Healthcare Settings"—
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html>

NIH, "Coronaviruses: An Overview of Their Replication and Pathogenesis" — <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4369385/>

NIH, A Novel Coronavirus from Patients with Pneumonia in China, 2019 — <https://www.ncbi.nlm.nih.gov/pubmed/31978945>

NIH, 2019 Novel Coronavirus (2019-nCoV) Outbreak — <https://www.nih.gov/health-information/coronavirus>

OSHA, 2019 Novel Coronavirus —

https://www.osha.gov/SLTC/novel_coronavirus/index.html WHO, Coronavirus—<https://www.who.int/health-topics/coronavirus>

WHO, Novel Coronavirus (2019-nCoV) — <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

European Center for Disease Control and Prevention (ECDC), Novel Coronavirus —

<https://www.ecdc.europa.eu/en/novel-coronavirus-china>

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice.

MSA operates in over 40 countries worldwide. To find an MSA office near you, please visit MSAsafety.com/offices.