



*March 2020*

## **MCAA SAFETY TALK: CORONAVIRUS (COVID-19)**

In 2019, an outbreak of respiratory disease caused by a novel coronavirus was detected in Wuhan, China. This new coronavirus has been named SARS-CoV-2 which causes the disease known as “coronavirus disease 2019” (abbreviated “COVID-19”). This new virus is spreading much quicker than the 2003 SARS outbreak that infected 8,098 individuals. To date, Johns Hopkins reports that over 190,000 people worldwide are infected with over 7,500 fatalities. Because this virus can be easily transmitted between humans, on March 11, 2020 the World Health Organization (WHO) characterized this virus a pandemic. On March 13, 2020, the President of the United States declared the outbreak a national emergency.

Coronavirus (COVID-19) is a new virus and much is unknown, therefore, much of current knowledge is based on similar coronaviruses. There is currently no vaccine to prevent the disease, so the best way to prevent illness is to avoid being exposed.

### **WHAT IS CORONAVIRUS?**

Coronaviruses are a large family of viruses that can cause respiratory infections, such as fever, cough, and shortness of breath in humans and animals. Symptoms may appear anywhere from 2-14 days after exposure and range from mild to severe illness or death.

Most individuals who contract the virus will experience mild symptoms and recover. However, some individuals are at higher risk for developing more serious complications and may require hospital care. The CDC considers those at higher risk to include older adults, and individuals with serious chronic medical conditions like heart disease, diabetes, and lung disease.

### **HOW IT SPREADS**

COVID-19 mainly spreads by person-to-person contact including:

- Between people who are in close contact, i.e. within about 6 feet
- Through respiratory droplets produced when an infected person coughs, sneezes, exhales, etc.

The virus most likely enters the body by way of inhalation, and through mucus membranes, i.e. the eyes, nose, and mouth. Some respiratory droplets may fall onto nearby surfaces or objects that people frequently touch and then contact their eyes, nose or mouth.

According to the CDC, the virus has not been detected in drinking water. Conventional water treatment methods that use filtration and disinfection should remove the virus. According to the CDC, the virus can survive in human feces. How long it will survive and how contagious it is remains unclear. It is recommended that anyone working on a sanitary drain and vent system use “Universal Precautions”. Assume that everything inside that system is contagious.

## **PROTECT YOURSELF & OTHERS**

The best way to prevent illness is to avoid being exposed to the virus, as much as possible, and guard the routes of entry into the body as best you can. CDC recommends the following:

- Clean your hands often with soap and water for at least 20 seconds, especially after blowing your nose, coughing, sneezing, or having been in a public place
- Use hand sanitizer that contains at least 70% alcohol
- Avoid crowds as much as possible (gatherings of more than 10 people)
- Avoid non-essential travel
- Avoid close contact with people with social distancing
- Avoid touching surfaces that are frequently touched by others
- Avoid shaking hands
- Avoid touching your face (nose, eyes, and mouth)
- Stay home if you're sick
- Cover coughs and sneezes, and immediately wash your hands
- Wear a facemask if you are sick and around other people or in a doctor's office
- Clean and disinfect frequently
- Wear the appropriate personal protective equipment when working

## **IF YOU ARE SICK**

If you are sick or think you may be sick, stay home and avoid close contact with all people.

Watch for emergency warning signs. If you have trouble breathing, shortness of breath, persistent pain or pressure in the chest, new confusion, inability to arouse, bluish lips or face, or any other severe symptoms, contact your medical provider *immediately*.

## **CLEAN & DISINFECT**

Clean and disinfect frequently touched surfaces daily. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks. If surfaces are dirty, clean them using detergent or soap and water prior to disinfection.

Most common EPA-registered household disinfectants will work. Use disinfectants appropriate for the surface.

Disinfectant options include:

- Dilute your household bleach and make a solution by mixing:
  - 5 tablespoons (1/3rd cup) bleach per gallon of water OR
  - 4 teaspoons bleach per quart of water
  - Note: Follow manufacturer's instructions for application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted.
- Alcohol solutions with at least 70% alcohol
- Other common EPA-registered household disinfectants with EPA-approved emerging viral pathogens claims. Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.). EPA's ([www.epa.gov](http://www.epa.gov)) List N: Disinfectants for Use Against SARS-CoV-2.

## **PERSONAL PROTECTIVE EQUIPMENT**

It's still uncertain if, when, and where mechanical construction and service workers may be exposed to the virus while working. However, it stands to reason that there could be exposure, in some cases, when working on or near plumbing vents, exhaust fans, and/or HVAC equipment, especially in hospitals, urgent care facilities, hospice facilities, funeral homes, wastewater treatment facilities, etc.

That said, first, follow all OSHA Standard 29 CFR 1926, Safety and Health Regulations for Construction requirements. The most relative subsections to review are: 1926.20 - *General safety and health provisions*; 1926.21 - *Safety training and education*; 1926.23 - *First aid and medical attention*; 1926.28 - *Personal protective equipment*; 1926.50 - *Medical services and first aid*; 1926.95 - *Criteria for personal protective equipment*; 1926.102 - *Eye and face protection* and 1926.103 - *Respiratory protection*.

When needed, use personal protective equipment that will protect the routes of entry into the body. To protect the nose, mouth, and lungs, wear a NIOSH certified N95 facemask/respirator. If workers are wearing respirators, make sure the company is in compliance with OSHA's detailed respiratory protection standard.

## **WORK ON DRAINS AND SANITARY SEWER SYSTEMS**

Mechanical tradespeople working on sanitary drains and sewer systems should receive proper personal protective equipment (PPE), training on how to properly use the PPE, and hand washing facilities. Workers should wash hands, arms and face (in that order) with soap and water for at least 20 seconds per body part *immediately after* removing PPE.

The following PPE is recommended for workers handling human waste or sewage:

- Safety goggles
- Splash-proof face shield
- NIOSH certified N95 facemask/respirator
- Liquid-repellent coveralls, such as Tyvek
- Nitrile inner gloves (6 mil thickness or greater)
- Rubber outer gloves
- Rubber boots

For additional protection during cleaning of tools and equipment, wear two liquid-repellant protective suits (outer suit and inner suit). After completing work, note the following procedures:

- Carefully remove outer suit and gloves by rolling them inside out;
- Place suit and gloves in a plastic bag that can be sealed;
- Complete cleaning of tools and equipment (see guidelines below);
- Remove inner suit and gloves by rolling them inside out, being careful not to contact any contaminated surfaces;
- Wash hands, arms, and face (in that order) with soap and water for at least 20 seconds each *immediately after* removing PPE; and
- Keep your PPE clean by following manufacturer instructions carefully.

## **HVAC WORK NEAR PLUMBING VENTS, ROOFTOP HVAC EQUIPMENT, AND EXHAUST FANS**

Mechanical tradespeople working near plumbing vents and rooftop HVAC equipment, specifically exhaust fans, should be provided proper personal protective equipment (PPE), training on how to properly use the PPE, and hand washing facilities. Workers should wash hands, arms and face (in that order) with soap and water for at least 20 seconds per body part *immediately after* removing PPE.

The following PPE is recommended for HVAC workers near plumbing vents and rooftop HVAC equipment, specifically exhaust fans:

- Safety glasses
- Face shield
- NIOSH certified N95 facemask/respirator
- Protective suits/coveralls, such as Tyvek
- Nitrile inner gloves (6 mil thickness or greater)
- Cut-resistant outer gloves
- Disposable boots

When working on energized electrical conductors or circuit parts, make sure you are protected *first* from arc flash and electrical shock hazards by complying with NFPA 70E - 2018. Use all compatible protective measures against COVID-19, such as wearing an N95 facemask/respirator under the arc flash face shield and following the hygiene practices described in these guidelines. Once trouble shooting is completed, shut off the

power, lock it out, test it dead, remove your arc flash and electrical shock PPE, and don the appropriate PPE for protection against COVID-19 described in these guidelines before completing the work.

**IMPORTANT:** If working in a healthcare facility, the Infectious Control Risk Assessment (ICRA) Program for the facility must be followed regarding anterooms and removal of PPE.

## **TOOL CLEANING PROCEDURES**

Good work area and tool cleaning practices are extremely important. Workers should avoid sharing tools with coworkers, as much as possible.

When choosing cleaning chemicals, look for cleaning agents effective against viral pathogens. If such cleaning agents are not available, use soap and water and dry tools thoroughly after use.

The CDC also recommends sanitary waste and vent system workers perform the following:

- Avoid touching face, mouth, eyes, nose, or open sores and cuts while working;
- Wash hands with soap and water for at least 20 seconds immediately after working;
- After working, wash your hands with soap and water for at least 20 seconds before eating, drinking, before and after using the bathroom;
- Before eating, remove soiled work clothes and eat in designated areas away from human waste and sewage-handling activities;
- Do not smoke or chew tobacco or gum while working;
- Cover open sores, cuts, and wounds with clean, dry bandages;
- Flush eyes with safe water if human waste or sewage contacts eyes;
- Wash contaminated work clothing daily with 0.05% chlorine solution (1-part household bleach to 100 parts water);
- Clean and disinfect tools, equipment, and work area;
- Cover coughs and sneezes;
- Keep a minimum of six feet between each other;
- If incident occurs, inform supervisor and document exposure; and
- Stay home and do not report to work if symptoms occur.

## **CUSTOMER BEST PRACTICES**

It is important to assure customers that your company has taken all possible steps to ensure a safe and healthy work environment. Make sure to communicate the implemented procedures, including but not limited to:

- Employees working remotely;
- Reinforcement of social distancing protocols;
- Sanitizing high-touch areas multiple times a day;

- Canceling all company meetings & gatherings;
- Providing hand sanitizers & gloves;
- Distributing CDC and WHO information to all employees on proper hand washing and general hygiene best practices;
- Providing hand sanitizer, masks and rubber gloves;
- Proper disposal of work products; and
- Implementing policies whereby employees are required to report:
  - If they currently have a fever, cough or shortness of breath;
  - If they have traveled internationally in the last 14 days; and
  - If they have had contact with someone who has COVID-19 or someone who has traveled internationally in the last 14 days.

Any employee exhibiting symptoms or signs of COVID-19 will be immediately instructed to follow CDC and WHO organization protocols.

Customers should be required to provide notification if they have knowledge of anyone in the facility or residence who either have COVID-19 or have been exposed to the virus.