



*April 2020*

## **MCAA SAFETY TALK: COVID-19 - FACILITY CLEANING AND DISINFECTING GUIDELINES**

Recent research suggests that COVID-19 can live on various surfaces for a few hours up to several days, depending on the type of surface. For example, it may live up to 72 hours on hard shiny surfaces, such as stainless steel, glass, and plastic. Therefore, it's safe to assume that it could live for several days on jobsite tools, equipment, and building materials, as well as many surfaces in trailers, and office buildings.

### **HELP PROTECT YOURSELF AND OTHERS WHEN A JOBSITE OR FACILITY MAY HAVE BEEN CONTAMINATED BY COVID-19**

The best way to help protect yourself and others is to have all surfaces that may have been contaminated cleaned and disinfected. Cleaning refers to the removal of dirt and impurities. Disinfecting refers to the use of chemicals to kill the virus. There are professional cleaning and disinfecting businesses that provide these services. Whenever it's feasible, it's best to hire a reputable third party to perform the services. Setting up a routine cleaning and disinfecting regiment with a third party is also an option. If it will be necessary for you or someone else from your company to perform the cleaning and disinfection service, the following guidelines may help protect that person from exposure to COVID-19.

### **DELAY CLEANING AND DISINFECTING SURFACES AS LONG AS PRACTICAL**

The longer you can wait before starting the cleaning and disinfection process the more likely it is that any virus that's present will lose its potency before you could be exposed to it. It's recommended that you close off the areas that have been used by a person who is known to have tested positive for the virus, place signage and barriers or barricades around those areas, open outside doors and windows to increase air circulation, and wait as long as practical before starting the cleaning and disinfection process, but at least 24 hours. Affected surfaces should be cleaned with a detergent or soap and water before being disinfected.

### **SOAPS AND DETERGENTS**

Any type of detergent or soap is acceptable for cleaning surfaces.

## **DISINFECTANTS**

To be effective, the disinfectant solution should be an alcohol-based solution with at least 70% alcohol, or a properly diluted household bleach.

### **Commercial Products:**

Where available, you can purchase commercial disinfectants that will likely kill the virus. Read the label to ensure that the product is appropriate for the application, and carefully follow all manufacturer recommendations for application and safety. Visit the [EPA website](#) for more information on List N: Disinfectants for Use Against SARS-CoV-2.

### **Alcohol-Based Solutions:**

There are commercial alcohol-based cleaning products that may be available in your area, but you can also use isopropyl alcohol, which is available in most pharmacies. Isopropyl alcohol is available in varying concentrations, such as 70%, 90%, 91%, and 99% alcohol. CAUTION: Isopropyl alcohol is highly flammable.

### **Bleach-Based Solutions:**

Prepare a disinfectant solution using common household bleach, following the instructions below:

- Make sure the bleach you'll be using is not past its expiration date;
- Wear impermeable gloves that are approved for use with bleach;
- Wear safety goggles;
- Mix the solution in a well-ventilated area;
- Be sure not to mix household bleach with ammonia or any other cleanser;
- Mix 5 tablespoons (1/3 cup) of bleach per gallon of water (4 teaspoons of bleach per quart of water);
- Follow the bleach manufacturer's instructions for proper application;
- Before you begin the cleaning process, verify that the bleach solution won't damage the surfaces you are planning to clean; and
- Use the solution only in well ventilated areas.

## **PROCESS FOR CLEANING AFFECTED SURFACES**

Clean all affected surfaces with a detergent or soap and water before disinfecting them. Use the following process for cleaning affected surfaces:

- Wear safety goggles;
- Wear a splash proof face shield;
- Wear a NIOSH certified N95 face mask/respirator;
- Wear liquid-repellant coveralls, such as Tyvek (outer suit);
- Wear liquid-repellant coveralls, such as Tyvek (inner suite);
- Wear nitrile inner gloves;
- Wear flexible rubber outer gloves;
- Wear rubber boots;

- Use a sponge or microfiber cleaning cloth to saturate, wipe down, and clean the affected surfaces;
- Use a clean wet sponge or microfiber cleaning cloth to rinse the cleaned surfaces; and
- Let the surfaces air dry for a few minutes before disinfecting them.

## **PROCESS FOR DISINFECTING AFFECTED SURFACES**

Disinfect all affected surfaces using an appropriate chemical solution as described above. Use the following process for disinfecting affected surfaces:

- Keep all the personal protective equipment that you used for cleaning the surfaces on your body and in place;
- Use a sponge or microfiber cleaning cloth saturated in the chemical disinfectant solution to thoroughly wipe down all affected surfaces;
- Frequently wring out the sponge or cleaning cloth into an empty bucket and Re-saturate it with the disinfectant solution; and
- Allow the disinfected surfaces to air dry.

## **DECONTAMINATION OF PPE**

After completing the cleaning and disinfection process, it's best practice to assume that your personal protective equipment (PPE) has been contaminated. The following procedures may help you protect yourself, your family, and others from infection:

- Never leave the area after completing the cleaning and disinfection process until you have also decontaminated or properly disposed of your PPE;
- Be extremely careful not to touch your face at any time during the decontamination process;
- While standing inside an open trash bag placed on the floor, carefully remove the outer suit by rolling it off inside out. Make sure to be standing on the inside material of the now crumpled suit;
- Carefully remove the first of your outer gloves by pinching the outer part of the gauntlet while sliding it forward and turning it inside out. Place this glove as a ball into the palm of the second outer glove. Slide the index finger of the clean glove under the second outer glove while rolling it off until it balls around the first glove;
- Place the gloves in the plastic bag with the used coveralls;
- Step outside of the bag, leaving it open on the floor to accept other waste;
- Remove your faceshield and safety goggles and submerge them in a clean bucket with hot soapy water;
- Scrub your faceshield and safety goggles in the hot soapy water with a clean sponge or microfiber cloth;
- Rinse them off, shake them out, and dry them with clean paper towels;
- Wipe them down with an alcohol solution and clean paper towels, or alcohol wipes (either must contain at least 70% alcohol);
- Hang them in a clean place to dry out completely;

- Carefully pour the soapy water down an acceptable drain, rinse the bucket, and set it aside to air dry;
- Carefully pour any used decontamination chemical down an acceptable drain, rinse the bucket, and set it aside to air dry;
- Place all used sponges or microfiber cloths and used paper towels in the plastic bag with the other used items;
- Carefully remove your inner suit by rolling it inside out being careful not to contact any contaminated surfaces;
- Place the suit in the plastic bag with the other used items being extremely careful not to touch anything inside the bag, including any inner part of the bag itself;
- Carefully remove your inner gloves in the same manner as you removed the outer gloves. Be extremely careful not to touch any part of the outside of your inner gloves with any part of your bare hands;
- Place the gloves in the plastic bag with the other used items being careful not to touch anything inside the bag, including any inner part of the bag itself;
- Do not touch any part of your face;
- Seal the bag for proper disposal;
- Carefully scrub your hands with soap and hot water for at least 20 seconds. Be sure to scrub the backs of your hands, including underneath your nails, fingertips thumbs, and the skin under your rings or other jewelry ([See efficient hand washing video demonstration](#));
- Dry your hands with clean paper towels;
- Remove your N95 respirator being extremely careful not to touch the inside of the mask. Store it in a paper bag with the opening folded closed (plastic bags won't let it dry out properly);
- Again, carefully scrub your hands with soap and hot water for at least 20 seconds. Be sure to scrub the backs of your hands, including underneath your nails, fingertips thumbs, and the skin under your rings or other jewelry;
- Dry your hands with clean paper towels; and
- When the faceshield and safety goggles are dry, seal them in clean plastic bags for storage.

## DECONTAMINATION OF CLOTH

Dr. Amesh Adalja, MD from Johns Hopkins Center for Health Security suspects that the virus can survive on clothes for several hours up to a day. If you used a cloth facemask in lieu of an N95 respirator, or if it's possible that any of your clothing was contaminated during the cleaning and disinfection process, you can wash the cloth items.

- Wash the cloth items in a washing machine using hot water, laundry detergent, and household bleach; and
- After placing the items in the washing machine, carefully scrub your hands with soap and hot water for at least 20 seconds. Be sure to scrub the backs of your hands and the skin under your rings.