



Integrity Innovation Excellence

Coronavirus Response and Exposure Control Plan

1. Background

Coronavirus disease was first described in 1931, with the first coronavirus isolated from humans in 1965. Until 2003, coronaviruses attracted little interest beyond causing mild upper respiratory tract infections. This changed dramatically in 2003 with the zoonotic SARS-CoV and the more recent emergence of MERS-CoV has confirmed the coronaviruses as significant causes of severe respiratory disease.

Coronaviruses are a large family of viruses that are common throughout the world. These viruses can live in animals, such as camels, cats and bats. While they are commonly found in animals, there are seven coronaviruses that are zoonotic, meaning they can jump from animals to humans.

Coronaviruses (CoV) are a group of viruses that affect humans, causing a range of different symptoms from the common cold to Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). These viruses are particularly dangerous because they can be carried and transmitted between different species, which increases their potential of spreading out to a global scale.

Human coronaviruses spread just like the flu or a cold—through the air by coughing or sneezing; through close personal contact, like touching or shaking hands; by touching an object or surface with the viruses on it; and occasionally, through fecal contamination. This has occurred previously with the Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS) outbreaks.

Coronavirus that was first detected in China and which has now been detected in almost 70 locations internationally, including in the United States. The virus has been named “SARS-CoV-2” and the disease it causes has been named “coronavirus disease 2019” (abbreviated “COVID-19”).

2. Source

The SARS-CoV-2 virus is an enveloped virus of zoonotic origin (between animals and humans), like MERS-CoV and SARS-CoV. All three of these viruses have their origins in bats. The sequences from U.S. patients are similar to the one that China initially posted, suggesting a likely single, recent emergence of this virus from an animal reservoir.

3. Symptoms

Usually, symptoms are mild, similar to a common cold including: headache, coughs, sore throat, difficulty breathing, fever, general lethargy.

More severe symptoms may include:

- Pneumonia
- Kidney Failure
- Severe Acute Respiratory Syndrome (SARS)

As with all viruses, it is the most vulnerable: the elderly and the chronically ill seem to be at greater risk of serious illness. In fact, many of the patients who have died during the initial outbreak, had underlying health conditions including cirrhosis of the liver, hypertension, heart disease, lung disease and diabetes.

Personnel involved in a known or potential COVID-19 must be aware of the symptoms and notify their supervisor at once if they are exhibiting any signs or symptoms.

4. Risk

At the writing of this document, there is no cure for the coronavirus because it is so new.

- For most of the American public, who are unlikely to be exposed to this virus at this time, the immediate health risk from COVID-19 is considered low.
- People in communities where ongoing community spread with the virus that causes COVID-19 has been reported are at elevated, though still relatively low risk of exposure.
- Close contacts of persons with COVID-19 also are at elevated risk of exposure.
- Travelers returning from affected international locations where community spread is occurring also are at elevated risk of exposure.
- Despite the low risk of exposure in most job sectors, some workers in the United States may have exposure infectious people, including travelers who contracted COVID-19 abroad. Workers with increased exposure risk include those involved in:
 - Healthcare (including pre-hospital and medical transport workers, healthcare providers, clinical laboratory personnel, and support staff).
 - Deathcare (including coroners, medical examiners, and funeral directors).
 - Airline operations.
 - Waste management.
 - Travel to areas, including parts of China, where the virus is spreading.
- In assessing potential hazards, employers should consider whether or not their workers may encounter someone infected with COVID-19 in the course of their duties.

Employers should also determine if workers could be exposed to environments (e.g., worksites) or materials (e.g., laboratory samples, waste) contaminated with the virus.

- Depending on the work setting, employers may also rely on identification of sick individuals who have signs, symptoms, and/or a history of travel to COVID-19-affected areas that indicate potential infection with the virus, in order to help identify exposure risks for workers and implement appropriate control measures.

5. Response Criteria

5.1. Control and Prevention

5.1.1. Information

At this time, the U.S. Centers for Disease Control and Prevention (CDC) emphasizes that, while the novel coronavirus, COVID-19 poses a potentially serious public health threat, the risk to individuals is dependent on exposure. For most people in the United States, including most types of workers, the risk of infection with COVID-19 is currently low. Employers and workers in operations where there is no specific exposure hazard should remain aware of the evolving outbreak situation. Changes in outbreak conditions may warrant additional precautions in some workplaces not currently highlighted in this guidance.

Measures for protecting workers from exposure to, and infection with, the novel coronavirus, COVID-19 depend on the type of work being performed and exposure risk, including potential for interaction with infectious people and contamination of the work environment. Employers should adapt infection control strategies based on a thorough hazard assessment, using appropriate combinations of engineering and administrative controls, safe work practices, and personal protective equipment (PPE) to prevent worker exposures. Some OSHA standards that apply to preventing occupational exposure to COVID-19 also require employers to train workers on elements of infection prevention, including PPE.

5.1.2. Prevention

Workers tasked with cleaning surfaces that may be contaminated with COVID-19 virus must be protected from exposure. Employers are responsible for ensuring that workers are protected from exposure to COVID-19 and that workers are not exposed to harmful levels of chemicals used for cleaning and disinfection.

In all workplaces where exposure to the COVID-19 may occur, prompt identification and isolation of potentially infectious individuals is a critical first step in protecting workers, visitors, and others at the worksite.

- Immediately isolate people suspected of having COVID-19. For example, move potentially infectious people to isolation rooms and close the doors. On an aircraft, move potentially infectious people to seats away from passengers and crew, if

possible and without compromising aviation safety. In other worksites, move potentially infectious people to a location away from workers, customers, and other visitors.

- Take steps to limit spread of the person's infectious respiratory secretions, including by providing them a facemask and asking them to wear it, if they can tolerate doing so. Note: A surgical mask on a patient or other sick person should not be confused with PPE for a worker; the mask acts to contain potentially infectious respiratory secretions at the source (i.e., the person's nose and mouth).
- If possible, isolate people suspected of having COVID-19 separately from those with confirmed cases of the virus to prevent further transmission, including in screening, triage, or healthcare facilities.
- Restrict the number of personnel entering isolation areas, including the room of a patient with suspected/confirmed COVID-19.
- Protect workers in close contact* with the sick person by using additional engineering and administrative control, safe work practices and PPE.

**CDC defines "close contact" as being about six (6) feet (approximately two (2) meters) from an infected person or within the room or care area of an infected patient for a prolonged period while not wearing recommended PPE. Close contact also includes instances where there is direct contact with infectious secretions while not wearing recommended PPE. Close contact generally does not include brief interactions, such as walking past a person.*

Train all workers with reasonably anticipated occupational exposure to COVID-19 (as described in this document) about the sources of exposure to the virus, the hazards associated with that exposure, and appropriate workplace protocols in place to prevent or reduce the likelihood of exposure. Training should include information about how to isolate individuals with suspected or confirmed COVID-19 or other infectious diseases, and how to report possible cases.

Workers who conduct cleaning tasks must be protected from exposure to blood, certain body fluids, and other potentially infectious materials covered by OSHA's Bloodborne Pathogens standard (29 CFR 1910.1030) and from hazardous chemicals used in these tasks. In these cases, the PPE (29 CFR 1910 Subpart I) and Hazard Communication (29 CFR 1910.1200) standards may also apply.

Do not use compressed air or water sprays to clean potentially contaminated surfaces, as these techniques may aerosolize infectious material.

5.1.3. Response

5.1.3.1. Environmental Cleaning and Disinfectant

Cleaning and disinfection of environmental surfaces are important components of routine infection control. Although little is known about the extent of environmental contamination after persons suspected/confirmed to have COVID-19 have been in, epidemiologic and laboratory evidence suggests that the environment could play a role in transmission. Therefore, cleaning and disinfection are critical to the control of COVID-19 transmission. Environmental cleaning and disinfection for COVID-19 follows the same principles generally used in healthcare settings.

Cleaning refers to the removal of dirt and impurities, including germs, from surfaces. Cleaning alone does not kill germs. But by removing the germs, it decreases their number and therefore any risk of spreading infection.

Disinfecting works by using chemicals to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs. But killing germs remaining on a surface after cleaning further reduces any risk of spreading infection.

- At a school, daycare center, office, or other facility that does not house people overnight:
- At a health care facility, living centers, hotels that does house people overnight:
- Transportation vehicles, planes, public transportation, ambulances, private vehicles

- Cleaning an area that **NO CONFIRMED or SUSPECTED** COVID-19 cases have been identified:
 - Diluted household bleach solutions or other approved disinfectant surfactants can be used for these applications if appropriate for the surface.
 - Clean and disinfect high-touch hard surfaces daily in common areas (e.g. tables, hard-backed chairs, doorknobs, light switches, remotes, handles, desks, work stations, restrooms, eating & food prep areas, and meeting areas).
 - Also, clean any surfaces that may have blood, stool, or body fluids on them.
 - Linens, Clothing, and Other Items That Go in the Laundry
 - Do not shake dirty laundry; this minimize the possibility of dispersing virus through the air.
 - Wash items as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely.

Dirty laundry that has been in contact with an ill person can be washed with other people's items.

- Clean and disinfect hampers or other carts for transporting laundry according to guidance above for hard or soft surfaces.
- No special treatment is necessary for window curtains, ceilings, and walls unless there is evidence of visible soil. Soft surface items; curtains, cushion covers, area throw rugs can be placed in bags and sent for outside cleaning.
- Cleaning an area with **CONFIRMED or SUSPECTED** COVID-19 cases have been identified:
 - It is recommended to **close off areas used by the ill persons and wait as long as practical before beginning cleaning and disinfection** to minimize potential for exposure to respiratory droplets. **Open outside doors and windows to increase air circulation in the area.** If possible, wait up to 24 hours before beginning cleaning and disinfection.
 - The use of an EPA-registered approved hospital disinfectant shall be used for these applications if appropriate for the surfaces.
 - It is recommended to close off areas used by the ill persons and wait as long as practical before beginning cleaning and disinfection to minimize potential for exposure to respiratory droplets. Open outside doors and windows to increase air circulation in the area. If possible, wait up to 24 hours before beginning cleaning and disinfection.
 - Clean and disinfect all surfaces that were in contact with the patient or may have become contaminated during patient care.
 - Clean and disinfect high-touch hard surfaces daily in common areas (e.g. tables, hard-backed chairs, doorknobs, light switches, remotes, handles, desks, work stations, restrooms, eating & food prep areas, and meeting areas).
 - Also, clean any surfaces that may have blood, stool, or body fluids on them.
 - Linens, Clothing, and Other Items That Go in the Laundry
 - Do not shake dirty laundry; this minimize the possibility of dispersing virus through the air.

- Wash items as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely. Dirty laundry that has been in contact with an ill person can be washed with other people's items.
- Clean and disinfect hampers or other carts for transporting laundry according to guidance above for hard or soft surfaces.
- Soft surface items; curtains, cushion covers, area throw rugs can be placed in bags and transported to be laundered.

Do not spray (i.e., fog) occupied rooms with disinfectant. This is a potentially dangerous practice that has no proven disease control benefit.

Cleaning staff and others should clean hands often, including immediately after removing gloves and after contact with an ill person, by washing hands with soap and water for 20 seconds. If soap and water are not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains 60%-95% alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water.

5.1.3.2. Medical Waste

Medical waste has not been implicated in the transmission of SARS-CoV. Therefore, no special handling procedures are recommended for SARS-CoV-contaminated medical waste.

- Contain and dispose of SARS-CoV-contaminated medical waste in accordance with facility-specific procedures and/or local or state regulations for handling and disposal of medical waste, including used needles and other sharps.
- Discard as routine waste used patient-care supplies that are not likely to be contaminated (e.g., paper wrappers).
- Wear disposable gloves when handling waste. Perform hand hygiene after removal of gloves.

5.1.3.3. Textile (Linen and laundry)

Contact with textiles has not been implicated in the transmission of SARS-CoV.

Therefore, no special handling procedures are recommended for linen and laundry that may be contaminated with SARS-CoV.

5.1.3.4. Dishes and Eating Utensils

Dishes and eating utensils have not been implicated in SARS-CoV transmission.

Therefore, no special precautions, beyond those for Standard Precautions, are recommended for dishes and eating utensils used by a patient with known or possible SARS-CoV disease.

5.1.3.5. Patient-care Equipment

Follow standard practices for handling and reprocessing used patient-care equipment, including medical devices. Wear gloves when handling and transporting used patient-care equipment.

Wipe heavily soiled equipment with an EPA-approved hospital disinfectant before removing it from the patient's room. Follow current recommendations for cleaning and disinfection or sterilization of reusable patient-care equipment.

Wipe external surfaces of portable equipment for performing x-rays and other procedures in the patient's room with an EPA-approved hospital disinfectant upon removal from the patient's room.

5.1.3.6. Wastewater

There is no evidence to suggest that additional, COVID-19-specific protections are needed for employees involved in wastewater management operations, including those at wastewater treatment facilities. Wastewater treatment plant operations should ensure workers follow routine practices to prevent exposure to wastewater, including using the engineering and administrative controls, safe work practices, and PPE normally required for work tasks when handling untreated wastewater.

6. PPE

6.1. Selection

As described in Section 3.3.3, direct physical contact with the waste is to be avoided. And while remote handling of waste is a best workplace practice, an additional measurement of protection shall be utilized by all Field Service Crew Personnel performing area cleaning or removing waste contaminated or potentially contaminated with COVID-19 pathogens or OPIM.

The following procedures provide detailed guidance on the types of personal protective equipment (PPE) to be used and on the processes for donning and doffing PPE for all workers.

PPE Components:

- Inner glove; nitrile (6 – 12 mil)
- Second inner glove; nitrile (6 – 12 mil) (optional)
- Outer glove; Neoprene or Nitrile; (18 mil or greater) with a minimum of a 14-inch cuff.

If the potential for contacting sharps is inherent then a liquid rated glove with a Level 3 in the EN 388 Mechanical Risk Ratings for abrasion, cut, tear, and puncture resistance rating or a Level 3 in the ANSI/ISEA 105-2000 for abrasion, cut, and puncture resistance rating should be selected.

- Dupont Tyvek SL, Kappler Zytron 200, Lakeland ChemMax 2, or equivalent CPC *
CPC shall incorporate:
 - Welded or taped seams**
 - Storm flap over zipper opening
 - Attached hood with elastic around hood opening
 - Elastic around sleeve cuff openings
 - Elastic around pant leg cuffs***
- Steel-toe/Steel-shank chemical/liquid impermeable boot
- Disposable shoe coverings (Rubber over-boots)
- Full Face APR with a HEPA or OV/AG/HEPA cartridge

Taping of wrist and ankles with Chem. Tape required
Other equipment appropriate for the site and associated hazards

For workers who may spend extended periods of time in PPE, safety and comfort are critical. Standardizing attire under PPE (e.g., surgical scrubs or disposable garments and dedicated washable footwear) facilitates the donning and doffing process and eliminates concerns of contamination of personal clothing.

****While different variation to the Level C ensemble may be allowed, changes must be permitted on a case by case situation with both Operations and Health & Safety approval.***

*****Bound seams are not acceptable for wet decontamination process***

******Elastic cuffs are advisable but not mandated however, taping is required.***

6.2 Donning

Donning PPE, Full-face Air Purifying Respirator (FF APR) – This donning procedure incorporates the use of a NIOSH approved FF APR. An established protocol facilitates training and compliance. Use a trained observer to verify successful compliance with the protocol.

1. **Engage Trained Observer:** The donning process is conducted under the guidance and supervision of a trained observer who confirms visually that all PPE is serviceable and has been donned successfully. The trained observer may use the written checklist (See Appendix 10 & 11 of the Bloodborne Pathogen Response & Exposure Control Plan SWP-001) to confirm each step in donning PPE is performed correctly and can assist with ensuring and verifying the integrity of the ensemble. No exposed skin or hair of the clean-up crew worker should be visible at the conclusion of the donning process.

2. **Remove Personal Clothing and Items:** Change into machine washable or disposable garments and dedicated washable (plastic or rubber) footwear in a suitable, clean area. No personal items (e.g., jewelry, watches, cell phones, pagers, pens) should be carried beyond this point.
3. **Inspect PPE Prior to Donning:** Visually inspect the PPE ensemble to be worn to ensure it is in serviceable condition, all required PPE and supplies are available, and that the sizes selected are correct for the worker. The trained observer reviews the donning sequence with the worker before the worker begins and reads it to the worker in a step-by-step fashion.
4. **Perform Hand Hygiene:** Perform hand hygiene with alcohol based hand rub (ABHR). When using ABHR, allow hands to dry before moving to next step.
5. **Donn Boots:** Donn Steel-toe/Steel-shank chemical/liquid impermeable boot.
6. **Donn Inner Gloves:** Donn first pair of approved nitrile inner gloves.
7. **Donn CPC:** Ensure coverall is large enough to allow unrestricted freedom of movement. Ensure cuffs of inner gloves are tucked under the sleeve of the CPC and the pant leg cuffs are outside the boots.
8. **Tape sleeve to glove:** Using approved chemical tape to secure sleeve to glove (Provide tab to assist during doffing procedures).
9. **Put on Boot Covers.** While sitting in chair donn liquid impermeable boot covers.
10. **Tape leg cuff to boot:** Using approved chemical tape to secure pant cuff to boot (Provide tab to assist during doffing procedures). Then pull liquid impermeable boot cover over CPC pant leg cuff and secure with tape.
11. **Donn respirator:** Don FF APR respirator. Complete a user seal check.
12. **Place hood of CPC over head:** Pull hood overhead and bring hood opening up to FF APR.
13. **Close front of CPC with zipper and secure flap:** Secure self-adhering flap over front zipper. Secure with chemical tape. (Provide tab to assist during doffing procedures).
14. **Tape hood to FF APR:** Place tape along edge of hood to completely seal hood to APR mask. (Provide tab to assist during doffing procedures).

15. **Don 2nd Inner Gloves:** Don second pair of approved nitrile inner gloves. *(Optional)*
16. **Tape glove to sleeve:** Using approved chemical tape to secure glove to sleeve (Provide tab to assist during doffing procedures).
17. **Put on Outer Gloves:** Put on third pair of gloves (with extended cuffs). Ensure the cuffs are pulled over the sleeves of the coverall.
18. **Verify:** After completing the donning process, the integrity of the ensemble is verified by the trained observer. The worker should be comfortable and able to extend the arms, bend at the waist and go through a range of motions to ensure there is sufficient range of movement while all areas of the body remain covered.

6.3 Doffing of PPE

Doffing PPE, Full-face Air Purifying Respirator (FF APR) – The purpose of this step is to prepare for the removal of PPE. Before entering the Contamination Reduction Zone (CRZ), inspect and disinfect (using an *EPA-registered disinfectant wipe) any visible contamination on the PPE. Verify that the trained observer is available in the CRZ before entering and beginning the PPE removal process. Use a trained observer to verify successful compliance with the protocol.

Doffing PPE, Full-face Air Purifying Respirator (FF APR) – PPE doffing is performed in the Contamination Reduction Zone (CRZ) with all contaminated PPE waste being placed into leak-proof infectious waste containers.

1. **Equipment Drop:** All equipment, supplies, and cleaning tools will be placed into an established Equipment Drop area prior to beginning proceeding into the decontamination process.

Engage Trained Observer: The doffing process is conducted under the supervision of a trained observer, who reads aloud each step of the procedure and confirms visually that the PPE has been properly removed. Prior to doffing PPE, the trained observer must remind workers to avoid reflexive actions that may put them at risk, such as touching their face. These instructions can be posted and read out loud during doffing to assist.

2. **Inspect CPC and Boot Cover & Outer Glove Wash/Wipe:** Step to next stage and inspect the PPE to assess for visible contamination, cuts, or tears before starting to remove. If any PPE is visibly contaminated, then wash using an *EPA-registered decontamination solution or suitable alternative focusing on visibly contaminated areas. Wash the outer boots and outer gloves. An initial wipe down of the CPC may be performed at this time.

Note: A majority of these decontamination activities will be performed in offices, living areas, and medical setting. These tasks will be performed with moist cloth or paper wipes and limited water. The decontamination process can be conducted in a similar method. Wipe down the PPE with a moist wipe using an *EPA-registered decontamination solution or suitable alternative. This can be completed without a heavy water wash rinse process.

3. **Boot cover & Outer Glove:** Step to next stage and remove the boot covers and outer gloves. . Remove and discard outer gloves taking care not to contaminate inner gloves during removal process.
4. **CPC Wash/Wipe:** Step to next stage and wash/wipe CPC with either an *EPA-registered decontamination solution or suitable alternative. Wash from top down paying close attention to the arms, lower abdomen, behind knees, and elbows.
5. **Outer Garment Open:** This stage is intended to open the CPC for modifications or to allow the individual to cool down before preparing to re-enter the Exclusion Zone. This step can be bypassed if the individual is exiting the Exclusion Zone.
6. **Outer Garment Removal:** Inspect the CPC and 1st inner gloves' outer surfaces for visible contamination, cuts, or tears. Begin to remove the CPC and 1st pair of inner gloves, perform hand hygiene with approved solution on 2nd pair of inner gloves. If no visible contamination, cuts, or tears are identified on the inner gloves or CPC, then remove and discard the CPC. a. To remove coverall, tilt head back to reach zipper or fasteners. Unzip or unfasten coverall completely before rolling down and turning inside out.
7. **APR Wash/Wipe Removal: Remove FF APR:** Step to next stage and disinfect the inner glove with either an *EPA-registered disinfectant wipe or solution. Remove respirator by loosening the lower clips with index finger, grasping the APR by the cartridge and remove without touching the front of the respirator. Remove cartridges from APR and dispose. Place reusable APR in designated area for decontamination.
8. **Disinfect 1st Pair of Inner Gloves:** Step to next stage and disinfect 1st pair of inner gloves with either an *EPA-registered disinfectant wipe or solution.
9. **Inspect, Remove Boots and Underclothing:** Perform a final inspection of worker for any indication of contamination of the surgical scrubs or disposable garments. If contamination is identified, immediately inform health and safety representative or their designee before exiting the CRZ. Change out underclothing. At this point the worker may change into street shoes as they are exiting from the Contamination Reduction Zone.

Remove 2nd pair of Inner Gloves: Remove and discard gloves taking care not to contaminate bare hands during removal process. Perform hand hygiene with an alcohol-based hand rub (ABHR). *Donning a new pair of inner gloves at this time is optional.*

10. **Field Wash/Shower:** Showers are recommended at each shift's end for workers performing high risk work (e.g., exposed to large quantities of blood, body fluids, or excreta).

Scrubs: Worker can leave CRZ wearing dedicated washable footwear and surgical scrubs or disposable garments.

Protocol Evaluation/Medical Assessment: The designated health and safety representative or their designee should meet with the worker to review activities performed to identify any concerns about protocols and to record worker's level of fatigue.

Note: Decon may be performed with a modified Level C to include face-shield and safety glasses as a downgrade from FF APR's.

7. Waste

Waste Containment - Waste generated during the process of decontamination activities will be characterized as RCRA non-hazardous. All waste bulk and non-bulk will be packaged and transported offsite in accordance with applicable regulations for non-hazardous waste. **NOTE:** Also check specific requirements of disposal or receiving facility to whom waste is to be sent.

8. Applicable Standards

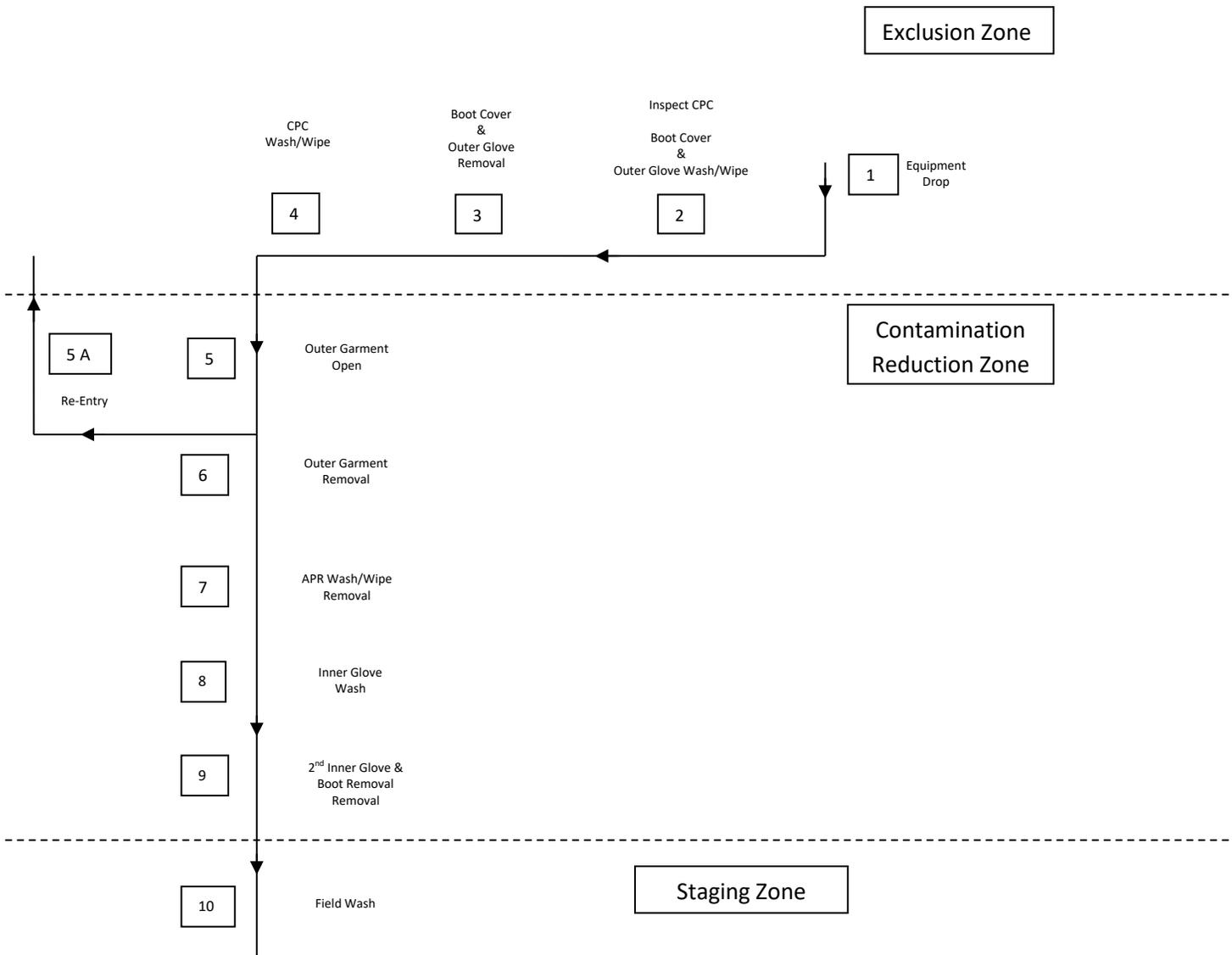
Information:

OSHA's Bloodborne Pathogens standard 29 CFR 1910.1030 covers exposure to COVID-19 virus. COVID-19 is among the subset of contact-transmissible diseases to which the Bloodborne Pathogens standard applies, as it is transmitted by blood or other potentially infectious materials as defined in the standard.

Depending on the specific work task, setting, and exposure to biological or chemical agents, additional OSHA standards, including the following, may also apply:

- OSHA's Personal Protective Equipment standard 29 CFR 1910.132
- OSHA's Respiratory Protection standard 29 CFR 1910.134.
- OSHA's Hazardous Communication standard 29 CFR 1910.1200

APPENDIX 8: COVID-19 CONTAMINATION REDUCTION CORRIDOR



Notice: Printed hardcopies are for reference only. Any copy made from the electronic version shall be considered an uncontrolled copy. Individuals with uncontrolled copies are responsible for ensuring the use of the current version. Revision levels are controlled electronically.

APPENDIX 9: COVID-19 DECONTAMINATION GUIDELINES

Transport Vehicles

Guidelines for Cleaning of Transport Vehicles after Transporting a Patient with Suspected or Confirmed COVID-19

The following are general guidelines for cleaning transport vehicles and equipment after transporting a patient with suspected or confirmed COVID-19 or other potentially infectious materials (OPIM):

- If no symptomatic passengers were identified during or immediately after the transport:
 - Follow routine operating procedures for cleaning transport vehicles, managing solid waste, and wearing PPE.
- If symptomatic passenger(s) are identified during or immediately after the transport, routine cleaning procedures should be followed, and enhanced cleaning procedures should also be used as follows:
 - Clean porous (soft) surfaces (e.g., cloth seats, cloth seat belts) at the seat and within 6 feet (2 meters) of the symptomatic passenger(s) in all directions.
 - Clean porous (soft) surfaces (e.g. seat cushions and covers) by removing visible contamination if present and using appropriate cleaners that are compatible with surfaces and components in accordance with the manufacturer's instructions. For items that can be laundered, use the warm setting and dry items completely on high heat.
 - Clean non-porous (hard) surfaces (e.g., leather or vinyl seats) at the seat of the symptomatic passenger(s) and within 6 feet (2 meters) of the symptomatic passenger(s) in all directions, including: transport cots, plastic and metal parts of the seats and seatbacks, seat belt latches, compartment doors and handles, adjacent walls.
 - Clean non-porous (hard) surfaces with disinfectant products with EPA-approved emerging viral pathogens claims that are expected to be effective against the virus that causes COVID-19 (SARS-CoV-2) and ensure these products are compatible with vehicle surfaces and components. All products should be used according to label instructions (e.g., concentration, application method and contact time, PPE).
 - Properly dispose of any items that cannot be cleaned (e.g., pillows, blankets and other similar items) or single use items.
- After doffing (taking off) PPE, cleaning staff should immediately clean hands with soap and water for at least 20 seconds. If soap and water not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains at least 60% alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water. .
- Cleaning staff should immediately report breaches in PPE (e.g., tear in gloves) or any potential exposures (e.g., contact with blood or body fluids without wearing appropriate PPE) to their supervisor.
- Cleaning staff should dispose of PPE and other disposable items used in cleaning.
- Employers should educate workers to recognize the symptoms of COVID-19 and provide instructions on what to do if they develop symptoms.
 - Cleaning staff should immediately notify their supervisor if they develop symptoms of COVID-19.

Aircraft

Guidelines for Cleaning of Aircraft after Transporting a Patient with Suspected or Confirmed COVID-19

The following are general guidelines for cleaning aircraft and associated equipment contaminated after a flight with a sick traveler who may be suspected or confirmed COVID-19 or other potentially infectious materials (OPIM):

- If no symptomatic passengers were identified during or immediately after the flight:
 - Follow routine operating procedures for cleaning aircraft, managing solid waste, and wearing PPE.
- If symptomatic passenger(s) are identified during or immediately after the flight, routine cleaning procedures should be followed, and enhanced cleaning procedures should also be used as follows:
 - Clean porous (soft) surfaces (e.g., cloth seats, cloth seat belts) at the seat of the symptomatic passenger(s) and within 6 feet (2 meters) of the symptomatic passenger(s) in all directions.
 - Clean porous (soft) surfaces (e.g. seat covers and carpet) by removing visible contamination if present and using appropriate cleaners that are compatible with aircraft surfaces and components in accordance with the manufacturer's instructions. For items that can be laundered, use the warm setting and dry items completely on high heat.
 - Clean non-porous (hard) surfaces (e.g., leather or vinyl seats) at the seat of the symptomatic passenger(s) and within 6 feet (2 meters) of the symptomatic passenger(s) in all directions, including: armrests, plastic and metal parts of the seats and seatbacks, tray tables, seat belt latches, light and air controls, cabin crew call button, overhead compartment handles, adjacent walls, bulkheads, windows and window shades, and individual video monitors.
 - Clean non-porous (hard) surfaces with disinfectant products with EPA-approved emerging viral pathogens claims that are expected to be effective against the virus that causes COVID-19 (SARS-CoV-2) and ensure these products are compatible with aircraft surfaces and components. All products should be used according to label instructions (e.g., concentration, application method and contact time, PPE).
 - Clean lavatories used by the symptomatic passenger(s), including: door handle, locking device, toilet seat, faucet, washbasin, adjacent walls, and counter.
 - Properly dispose of any items that cannot be cleaned (e.g., pillows, passenger safety placards, and other similar items as described below).

General Recommendations during the Enhanced Cleaning Process:

- Ground and cleaning crews should not board the plane until all travelers have disembarked.
- Ventilation systems should be kept running while cleaning crews are working aboard the airplane.
- If visible contamination (e.g., a body substance such as blood or body fluids) is present, routine airline cleaning procedures should be followed based on blood or body substance spill

management according to, 29 CFR 1910.1030.OSHA's Bloodborne Pathogen Standard, 29 CFR 1910.1030.

- Airlines should ensure workers are trained on the hazards of the cleaning chemicals used in the workplace in accordance with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.
- Airlines should train ground and cleaning crews on and require that crew members demonstrate an understanding of when to use PPE, what PPE is necessary, how to properly don (put on), use, and doff (take off) PPE.
- After doffing (taking off) PPE, cleaning staff should immediately clean hands with soap and water for at least 20 seconds. If soap and water not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains at least 60% alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water.
 - Airlines should consider providing alcohol-based hand sanitizer to cleaning staff for their personal use.
- Cleaning staff should immediately report breaches in PPE (e.g., tear in gloves) or any potential exposures (e.g., contact with blood or body fluids without wearing appropriate PPE) to their supervisor.
- Cleaning staff should dispose of PPE and other disposable items used in cleaning following the airline's routine procedures. Note that all waste from international flights will also fall under jurisdiction of the U.S. Department of Agriculture/Animal and Plant Health Inspection Service (APHIS).
- Ground crews assigned to wastewater management operations should follow routine procedures.
- Employers should educate workers to recognize the symptoms of COVID-19 and provide instructions on what to do if they develop symptoms.
 - Cleaning staff should immediately notify their supervisor if they develop symptoms of COVID-19.

Hotels, Living Areas and Public Assembly Areas

Guidelines for Cleaning of hotels, private residencies, and living quarters that has housed an individual with Suspected or Confirmed COVID-19.

The following are general guidelines for cleaning hotels, living areas and public assembly areas contaminated from an individual who may be suspected or confirmed COVID-19 or other potentially infectious materials (OPIM):

- If no symptomatic individuals were identified :
 - Follow routine operating procedures for cleaning area, managing solid waste, and wearing PPE.
- If symptomatic individuals(s) are identified, routine cleaning procedures should be followed, and enhanced cleaning procedures should also be used as follows:
- Isolate the affective area and establish work zones;
 - Isolation Zone
 - Contamination Reduction Zone
 - Staging Zone
- A blood spill or spill of other body fluid or substance (e.g., feces or vomit) should be managed by trained personnel wearing correct PPE, through removal of bulk spill matter, cleaning the site, and then disinfecting the site. For large spills, a chemical disinfectant with sufficient potency is needed to overcome the tendency of proteins in blood and other body substances to neutralize the disinfectant's active ingredient.
- An preapproved disinfectant for viruses that share some technical similarities to COVID-19 (such as, SARS-CoV-2, MER-CoV, Norovirus) and instructions for cleaning and decontaminating surfaces or objects soiled with blood or body fluids should be used according to those instructions. After the bulk waste is wiped up, the surface should be disinfected as described below.
- Clean-up crew personnel performing cleaning and disinfection should follow the response and PPE guidelines. There should be the same careful attention to the safety of the clean-up personnel during the cleaning and disinfection of the affected areas as there is during the care of the patient.
- Contaminated reusable porous items (e.g., bed linens, clothing, and carpet) should be placed in biohazard bags (triple-bagged) and labeled for cleaning and disinfection according to policies. Reusable equipment should be cleaned and disinfected according to manufacturer's instructions by trained personnel wearing correct PPE. Avoid contamination of reusable porous surfaces that cannot be made single use.
- Special cleaning of upholstery, carpets, or storage compartments is not indicated unless they are obviously dirty from blood or other body fluids. Porous material that has been determined to be contaminated should be removed for proper clean or disposal.
- Non-porous surfaces (including counter tops, bathroom surfaces, tile flooring, and walls), as well as electronic devices, washers and dryers and other areas are likely to become contaminated and should be cleaned and disinfected.
- After doffing (taking off) PPE, cleaning staff should immediately clean hands with soap and water for at least 20 seconds. If soap and water not available and hands are not visibly dirty, an

alcohol-based hand sanitizer that contains at least 60% alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water. .

- Cleaning staff should immediately report breaches in PPE (e.g., tear in gloves) or any potential exposures (e.g., contact with blood or body fluids without wearing appropriate PPE) to their supervisor.
- Cleaning staff should dispose of PPE and other disposable items used in cleaning.
- Employers should educate workers to recognize the symptoms of COVID-19 and provide instructions on what to do if they develop symptoms.
 - Cleaning staff should immediately notify their supervisor if they develop symptoms of COVID-19.
- **Do NOT use compressed air, pressurized water or similar procedures, which might create droplets of infectious materials.**