Guidelines
For
Cleaning and Applying Disinfectants

Proper cleaning and disinfection is critical in preventing the spread of disease and ensuring that we do our jobs right. Below are several considerations for helping you properly clean and apply disinfectants.

Purpose –

This guidance provides recommendations on the cleaning and disinfection of rooms or areas that have been occupied by those with suspected or with confirmed COVID-19. It is aimed at limiting the survival of SARS-CoV-2 in key environments.

Know why and what you are cleaning and apply disinfectants to:

We will be focusing on **"High Touch Points"** and **"Frequently Touched Objects".**

Clean high-touch points properly, this includes using the proper cleaning solutions and tools. Remember: There is a difference between cleaning **and** disinfecting**. Additionally, many disinfectants target specific bacteria or viruses. Make sure you check the CDC website for a list of registered disinfectants that are for COVID 19.**

High-touch areas can include but are not limited to - doorknobs, arms of reception area chairs, elevator buttons, stair railings, file cabinets, office chairs, desks, office cubicle divider walls, telephones, restroom surfaces, toilet seats and handles, sinks, paper towel dispensers, coffee pot handles, soap dispensers, and water cooler handles.

Cleaning staff should clean and disinfect all areas such as offices, bathrooms, common areas, shared electronic equipment like tablets, touch screens, keyboards, remote controls, and ATM machines used by the ill persons, focusing especially on frequently touched surfaces.

How Clean is Clean? -

- Everyone can look at a surface and tell you it looks clean to them.
- The human eye can see anywhere from 50 to 70 microns. To put this in perspective, a single hair on you head is around 70 microns.
- It's not what you see it's what you don't see.
- You should just clean the surface; this will ensure that your quality of work has been done without question.

1. Know the difference between Cleaning and Disinfecting

Cleaning removes germs, dirt, and impurities from surfaces or objects. Cleaning works by using soap (or detergent) and water to physically remove dirt, dust and grime from surfaces.

Disinfecting kills biological materials on surfaces or objects. Disinfecting works by using chemicals to kill germs on surfaces or objects.

2. Cleaning and Disinfecting

It is important to match your cleaning and disinfecting activities to the types of germs you want to remove or kill. Most studies have shown that the flu virus can live and potentially infect a person for up to 48 hours after being deposited on a surface. Flu viruses and other viruses are relatively fragile, so standard cleaning and disinfecting practices are sufficient to remove or kill them.

3. Clean and Disinfecting Correctly

Always follow label directions on cleaning products and disinfectants. Wash surfaces with a general household cleaner to remove germs. Let surfaces air dry, and follow with an EPA-registered disinfectant label to apply the disinfectant to the surfaces. Read the label to make sure it states that EPA has approved the product for effectiveness against virus or contaminate you are disinfecting for. Also check the CDC website for a list of EPA approved disinfectants. Disinfection usually requires the product to remain on the surface for a certain period of time (e.g., letting it stand for 10 to 15 minutes). Pay close attention to the directions for using disinfecting products. It may be necessary to use more than one wipe to keep the surface wet for the stated length of contact time.

How to Clean and Disinfect -

Hard Surfaces -

- Surfaces shall be forensically cleaned using a detergent or soap and water prior to applying disinfection.
- For disinfection, most common EPA-registered household disinfectants should be effective.
- A list of products that are EPA-approved for use against the virus that causes COVID-19 is available https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-againstsars-cov-2
- Follow the manufacturer's instructions for all cleaning and disinfection products for concentration, application method and contact time, (dwell time) etc.

Soft Surfaces –

- Fabric or cushions remove visible organic load, **i.e. dirt, dust and grime** prior to spraying down with a disinfectant.
- There is no proven way to effectively disinfect fabrics or carpets. By cleaning and applying disinfectants you are sanitizing.
- Follow the manufacturer's instructions for all cleaning and disinfection products.

Electronics -

- For electronics such as tablets, touch screens, keyboards, remote controls, and ATM machines, remove visible organic load, **i.e. dirt, dust and grime** prior to wiping down with a disinfectant.
- Follow the manufacturer's instructions for all cleaning and disinfection products.
- Do not spray electronics directly with cleaning solutions or disinfectants. Wet your towels then clean electronics and do the same when you are applying disinfectants.
- Make sure that the electronics can withstand the use of liquids for cleaning and disinfecting process.
- Consider using microfiber towels to clean and apply the disinfectants to the electronic devices. Microfiber towels due to their design have the most efficient capture rate and do not scratch surfaces.

Paper or Paper Products -

- We will not be cleaning or apply disinfectants to any paper products, i.e. office files, loose papers on desks.

Cleaning and Disinfecting High-Touch Surfaces
Best Practices

This section covers routine cleaning. Additional measures are required when cleaning after a vomit, fecal or other bodily fluids during this outbreak. Clean and disinfect high-touch points even if they are not visibly dirty. If they are visibly dirty, other cleaning methods may be used to remove the organic load from the surfaces, scrub brushes, scrubbing pads or HEPA vacuuming. All surfaces must be cleaned and air dried prior to applying a disinfectant.

Follow the instructions on the EPA Product label of the disinfecting solution.
Do not mix disinfectants and cleaners unless the label indicates that it is safe to do so. The most common inappropriate mixture of cleaning agents is bleach with an acid or ammonia.

Cleaning –

- Wash frequently touched surfaces with a clean, reusable cloth or a disposable towel dipped in soap and warm water.
- Scrub vigorously to remove dirt and soil. Use a brush if necessary.
- Rinse surfaces with warm to hot water to remove cleaning products and debris.
- Do not keep using the same towels continuously when cleaning, change out towels as needed.
- Hand held squeegees are also good for tabletop surfaces to evenly distribute cleaning products and minimize the use of towels
- Let surfaces air dry after cleaning.

Disinfection –

- Using a clean reusable cloth or a disposable towel, apply enough disinfecting solution to cover the surfaces thoroughly. All surfaces must be saturated with the disinfectant in order for it to work properly.
- Make sure there is enough disinfecting solution on the surface to stay wet for the recommended contact time.
- All surfaces need to remain wet for the specified contact time (dwell time) according to the product directions.
- The longer the surface remains wet will result in a higher success rate for killing the virus.
- Replace the disinfecting solution and cleaning cloths on a regular basis, in order to reduce the contamination of other surfaces.
- Electronic Items - Wipe the entire surface, paying special attention to keyboards and buttons.

- Use spray bottles or pump sprayers to apply disinfectants to surface when applicable, examples: counter tops, desk surfaces, conference room tables.
- One may use more than one wipe to keep the surface wet for the given contact time.

Microfiber vs Cotton -

Microfiber is increasingly used as an alternative to cotton for both cleaning cloths and mop heads. Microfiber cloths contain charged fibers, which result in higher adherence of dirt particles and microorganisms (i.e., increased absorbency) than cotton. However, microfiber cloths can be damaged by high pH and therefore not compatible with all disinfectant products (e.g., chlorine-based).

Surface cleaning cloths should be cotton or microfiber (disposable wipes can be used if resources allow). Have a supply of different colored cloths to allow color-coding: for example, one color for cleaning and a second color for disinfecting. Color-coding also prevents cross-contamination between areas.
Figure 4. Color-coded cleaning cloths

Fig. #4

This is the general surface cleaning process:

1. Thoroughly wet (soak) a fresh cleaning cloth in the environmental cleaning solution

2. Fold the cleaning cloth in half until it is about the size of your hand as this will ensure that you can use all of the surface area efficiently (generally, fold them in half, then in half again, and this will give 8 sides)

3. Wipe surfaces using the general strategies as above (e.g., clean to dirty, high to low, systematic manner), making sure to use mechanical action (for cleaning steps) and making sure to that the surface is thoroughly wetted to allow required contact time (for disinfection steps)

4. Regularly rotate and unfold the cleaning cloth to use all of the sides

5. When all of the sides of the cloth have been used or when it is no longer saturated with solution, dispose of the cleaning cloth or store it for reprocessing

6. Repeat process from step 1.

ULV and Electrostatic Foggers -

The use of fogging machines may be used as a precautionary measure but there is no scientific evidence that pre-fogging surfaces prior to cleaning has killed viruses.

- Some situations may require the use of machines to distribute the disinfectants.
- Thought this is not necessary if your staff has properly cleaned and applied the disinfectants to all High Touch Points and Frequently Touched Objects.
- You may use foggers to spray onto horizontal surfaces if applicable.
- Remember we are not disinfecting the air we are disinfecting High Touch Surfaces.
- Follow the manufacturer's instructions for application of disinfection products.
- Some products cannot be used in ULV or Electrostatic Foggers.

PPE Best Practices -

PPE is considered the last line of defense against hazards. Ideally, engineering controls should be used as primary barriers, functioning to contain the hazards. When necessary, the use of PPE can augment engineering and administrative controls to reduce the risk of worker exposure to workplace hazards.

- Always perform hand hygiene directly before wearing gloves (donning) and directly after removal (doffing).
- Train cleaning staff on appropriate use, application, and removal of required PPE for all environmental cleaning procedures and tasks for which they are responsible.
- Appropriate PPE for the cleaning staff for all environmental cleaning procedures should always be available and used appropriately to reduce risk to the staff.
- PPE is required to prevent: • exposure to microorganisms, biological pathogens and other bodily fluids. It is recommended to wear coveralls that are non-permeable (liquids cannot pass through). This will limit exposure to cleaning chemicals (e.g., disinfectants) and reduce the spread of microorganisms from one worker to another within the facility (when used correctly).
- Put on all required PPE before entering the building and remove it at your designated decon zone
- Include required PPE for specific tasks in standard operating procedures and other visual job aids (e.g., signage for isolation areas, preparation of solutions).
- Use SDS to determine required PPE for preparing environmental cleaning products and solutions (e.g., manual dilutions). In addition PPE needs to be used for the hazards in the work areas.
- Conduct regular fit-testing for cleaning staff that are required to wear respirators.
- Use chemical-resistant gloves (e.g., nitrile, latex) for preparation of cleaning chemicals.