5 Steps to Effective Disinfection

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1. Survey Your Workspace
2. Establish a Disinfection Plan
3. Use Appropriate Disinfectants
4. How to Disinfect
5. Proper Glove Use
To establish an effective disinfection strategy, it is important to survey your workplace.

- Consider what items can be moved or removed completely to reduce frequent handling or contact.
- Determine what kinds of surfaces and materials make up the area.
- Soft and porous materials, such as area rugs and seating, may be removed or stored to reduce the challenges of disinfecting them.
- Most surfaces and objects will just need normal routine cleaning.
2 Establish a Disinfection Plan

Frequently touched surfaces / objects will need to be cleaned, and then disinfected.

1. Develop a routine cleaning schedule with soap and water
   *Routine cleaning decreases the amount of germs and dirt on surfaces and objects.*

2. Implement a disinfection schedule
   *Frequently touched surfaces and objects, such as light switches, desk, and doorknobs, will need to be cleaned, and then disinfected.*

3. Ensure cleaning and disinfection strategies are sustainable
Establish a Disinfection Plan

**Making Your Plan to Clean and Disinfect**

Cleaning with soap and water removes germs, dirt, and impurities from surfaces. It lowers the risk of spreading infection.

Disinfecting kills germs on surfaces. By killing germs on a surface after cleaning, it can further lower the risk of spreading infection.

**Is the area indoors?**

**YES**

It is an indoor area.

**NO**

Maintain existing cleaning practices. Coronavirus naturally die in hours to days in typical indoor and outdoor environments. Viruses are killed more quickly by warmer temperatures and sunlight.

**Has the area been occupied within the last 7 days?**

**YES**

Yes, the area has been occupied within the last 7 days.

**NO**

The area has been unoccupied within the last 7 days.

The area will need only routine cleaning.

**Is it a frequently touched surface or object?**

**YES**

Yes, it is a frequently touched surface or object.

**NO**

Thoroughly clean these materials. Consider setting a schedule for routine cleaning and disinfection, as appropriate.

**What type of material is the surface or object?**

Hard and non-porous materials like glass, metal, or plastic.

Visibly dirty surfaces should be cleaned prior to disinfection. Consult EPA’s list of disinfectants for use against COVID-19, specifically for use on hard, non-porous surfaces and for your specific application need. More frequent cleaning and disinfection is necessary to reduce exposure.

Soft and porous materials like carpet, rugs, or material in seating areas.

Thoroughly clean or launder materials. Consider removing soft and porous materials in high traffic areas. Disinfect materials if appropriate products are available.

Source: EPA & CDC Guidance for Cleaning & Disinfecting
3. **Use Appropriate Disinfectants**

Ensure disinfectants are safe to users, surfaces, objects, and materials.

- Use [EPA-approved Disinfectants](#)
- Use Alternative Disinfectants if EPA-approved disinfectants are unavailable
  - 1/3 cup of bleach added to 1 gallon of water
    
    *Bleach solutions are effective for disinfection up to 24 hours.*
  - 70% Alcohol Solution
- Use water at room temperature for dilutions unless stated otherwise on the label
- Use no more than the recommended amount of cleaning solution
- Ensure all containers of cleaning and disinfectant solutions are properly labeled.

NEVER ingest, breathe or inject these products into your body or apply directly to your skin as they can cause serious harm.
**How to Disinfect**

**DO NOT** mix bleach or other cleaning and disinfection products together.

1. **Check that your product is EPA-approved** or use alternative disinfectant
   *Ensure the area/room has adequate ventilation prior to cleaning and disinfecting.*

2. **Don gloves and other protective gear as needed**
   *Ensure your hands are clean and dry before putting on disposable gloves. Consider eye protection for potential splash hazards.*

3. **Read the label and/or instructions**
   *Follow manufacturer's instructions. Note the product’s uses, the compatible surfaces, and the precautionary statements.*

4. **Pre-clean the surface with soap and water**
   *Wash the surface with soap and water if the directions mention pre-cleaning or if the surface is visibly dirty.*

5. **Apply disinfectant and allow recommended contact time**
   *The surface should remain wet the whole time to ensure the product is effective. The contact time can be found in the directions.*

*Source: EPA 6-Steps for Safe & Effective Disinfectant Use*
DO NOT mix bleach or other cleaning and disinfection products together.

6. Remove gloves and other protective gear
   For disposable gloves, discard them after each cleaning. Wash your hands with soap and water after removing the gloves.

7. Properly store cleaning products and supplies
   Store the cleaning products according to the manufacturer’s instructions, and away from heat and direct sunlight. Ensure the lids are tightly sealed.

8. Maintain your established disinfection plan
   But be flexible. As changes occur with the pandemic recovery, resources may also be impacted.

Source: CDC How to Remove Gloves
Dry surfaces thoroughly to avoid pooling of liquids. DO NOT use bleach on electronics.

- Remove visible contamination if present with a lint-free cloth, such as a screen wipe or a cloth made from microfiber.
- Ensure moisture does not get into any openings to avoid damage.
- Avoid excessive wiping and submerging items in cleanser.
- Unplug all external power sources and cables as necessary.
- Do not use aerosol sprays, bleach, or abrasive cleaners.
- Never spray cleaner directly on an item. Consider using wipeable covers for electronics.
- If no manufacturer guidance is not available, consider the use of alcohol-based wipes or sprays containing at least 70% alcohol to disinfect touch screens.

Source: Clean & Care for Microsoft Devices

How to Clean Apple Products
Proper Glove Use

Studies have shown frequent glove changes is the best way to reduce contamination.

- Always wash and dry your hands before putting on gloves, between glove changes, and after removing gloves
- Change your gloves any time you would need to wash your hands
- Ensure gloves fit properly and are designed for the task
- Store gloves in a clean, dry area away from direct sunlight and heat
- Avoid cross-contamination by changing gloves
  - Before beginning a different task or entering a new work station/area
  - After sneezing, coughing or touching contaminated surfaces/objects with a gloved hand
  - As soon as gloves become soiled or torn
  - At least every four hours during continual use
Proper Gloves Use is Essential! Avoid Cross-Contamination.

The pictures above illustrate cross-contamination. The process by which germs are unintentionally transferred from one substance or object to another, with harmful effect. The pictures of a gloved hand contaminating other surfaces were taken under UV light. Photos: EverythingLubbock.com

Gloves are meant to protect the wearer, not others. Often people develop a false sense of security when wearing gloves, because they forget contaminated gloves can carry as many germs as bare hands.

If you touch something that is contaminated with gloved or ungloved hands, you can still spread those germs onto other surfaces/objects such as phones, computer/lab equipment, door knobs, handrails, or other items.
Resources

• CDC & EPA Guidance for Cleaning and Disinfecting
• EPA 6-Steps to Safe and Effective Disinfectant Use
• CDC Guidance for Cleaning & Disinfecting for Community, Schools, and Workplaces
• Everything Lubbock: How Quickly Cross Contamination Happens