

# Practical Guideline for Cleaning and Disinfection of Public Facilities to Fight the Spread of COVID-19



## Definitions:

**Cleaning:** is the process of removing dirt and impurities, including germs, from surfaces. Knowing that, cleaning alone does not kill germs. However, by removing dirt, cleaning minimizes the amount of germs. Thus, it leads to minimizing the risk of spreading the virus.

**Disinfection:** is the process of disinfecting surfaces using chemicals such as the approved disinfectants by the Ministry of Health or Saudi Food and Drug Authority to kill the remaining germs on the surface after the cleaning process, which makes the environmental surfaces safe from the risk of transmitting infection. Considering that, disinfection is not affective if it is not preceded by the cleaning process.

## Targeted Facilities:

- Non-medical public facilities such as: institutions, public and private companies, schools, restaurants, colleges, exam halls, malls, residential complex, hotels and similar ones.
- Hotels and buildings that are used for health quarantine during COVID-19 are excluded.
- These conditions are not applied for health care facilities such as hospitals and primary health care centers.

## General Instructions:

- You should avoid mixing chemical disinfectants during the disinfection process or misuse them to avoid the release of toxic gases that may lead to health problems.

- Rubber gloves, masks and closed shoes should be worn before you start cleaning and disinfection process. Before starting the process of cleaning and disinfecting, skin must be protected and the exposed areas of the body, such as arms, must be protected by wearing thick clothing or wearing a waterproof apron. Eye protection may be needed if there is a risk of using chemicals sprays. These tools should be disposed after the optimum completion.
- Inhalation of disinfectants should be avoided, and it should not reach the skin
- Hands should be washed exactly before starting the cleaning process and after disposing of personal protective equipment for a period of at least 40 seconds with soap and water, or disinfecting hands with an approved alcoholic antiseptic for a period of not less than 20 seconds if soap and water are not available.
- Keep your personal hygiene, keep nails trimmed, cover wounds and moisturize hands constantly.
- It is recommended not to spray people with disinfectants (such as using sterilization rooms and gates) as this practice can be harmful and will not reduce the ability of the infected person to transmit the virus
- All disinfection solutions should be stored in non-transparent containers tightly closed and covered in a well-ventilated area so it will not be exposed to sunlight and preferably prepared daily in order to keep their effectiveness.
- Pets, children and other people should be kept away during the disinfection process until the place gets dry or the odor is gone.
- Make sure to ventilate well while preparing and using disinfectants
- Special towels should be allocated for each purpose, such as allocating a towel for toilets, another for offices and a third for public surfaces.

## Instruction and Guidance for Cleaning and Disinfecting based on the type of the Surface

| Type of the targeted substance           | Examples   | Disinfection Way  | Name and type of the approved disinfectant*   | Example of Using Approved Disinfectant*  | Notes   |
|--|--|---|---|--|---|
| <b>Solid</b><br>(non-porous)<br>Surfaces | Glass, metals, and solid surfaces like: hard floors, tiles, offices and doors. | <ol style="list-style-type: none"> <li>personal protection equipment should be worn such as gloves, masks before starting the process of cleaning and disinfecting.</li> <li>Surfaces should be cleaned using water and soap before the disinfection process, especially if these surfaces are dirty. It's preferred to start from cleanest surfaces to dirtiest ones.</li> <li>Follow the provided instructions on the back of the bottle regarding <u>concentration, method of use, and effective contact time</u>.</li> <li>Use a clean and dry wipe.</li> </ol> | <ol style="list-style-type: none"> <li>Household Liquid Chlorine.</li> <li>Quaternary ammonium compounds (fourth generation) in the form of sprays or wipes</li> <li>Liquid alcohol (70% concentration) as sprays or wipes.</li> <li>Hydrogen peroxide sprays.</li> </ol> | <p><u>Household bleach chlorine:</u><br/>Contains sodium hypochlorite compounds with a concentration of 0.1% or (1000 ppm).</p> <p><u>How to use:</u></p> <ol style="list-style-type: none"> <li><u>Concentration:</u> put 5 tablespoons (1/3 cup) of the liquid chlorine per water gallon (3,8 Litter)</li> <li><u>Contact time:</u> keep it for no less than a minute.</li> <li><u>Ventilation:</u> ventilate before and after the disinfection process (open windows and ventilation fans)</li> <li><u>Effectiveness:</u> the chlorine is affective for only 24 hours.</li> </ol> | It is preferred to ventilate the room for no less than an hour after the disinfection process, if possible. |

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| <p><b>Non-solid (Porous) surfaces</b></p> | <p>moquette, carpet, or curtain.</p> | <ul style="list-style-type: none"> <li>• Clean and disinfect them in the washing machine by adding one of the disinfectants to the laundry detergent or send them to a laundry, if possible.</li> <li>• If washing is not possible, a carpet cleaner machine must be used with adding a disinfectant.</li> </ul> | <p>Household liquid Chlorine (Sodium hypochlorite compounds)<br/>Carpet cleaners can be used instead of bleached chlorine.</p> | <p>Home liquid chlorine:<br/>In the washing or laundry cleaner machine:<br/>Put 5 tablespoons (1/3 cup) of the household liquid chlorine per gallon of water (3,8 L)<br/>Or use carpet cleaners as per the instruction on the back of the bottle</p> | <p>Home bleaching may not be suitable because most of moquette and carpet may be damaged by the chlorine. So, the cleaning instruction must be followed carefully. A proper disinfectant can be used as per its written instructions on the bottle</p> |
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| <b>Electronics</b> | Computers, tablets, remote control devices, touch screens and keyboards | <ol style="list-style-type: none"> <li>1. clean the visible screen dirt by wipes or alcohol sprays</li> <li>2. use wipes or alcohol sprays to disinfect the plastic cover or the non-perishable solid parts.</li> <li>3. Wipe and dry the remaining liquid from the disinfection process using towels or dry wipes that should be clean.</li> </ol> | Liquid alcohol with at least 70% concentration, which comes in the form of wipes or sprays. | <p>Wet wipes with an alcohol disinfectant.</p> <p>The Ethyl alcohol disinfectant spray.</p> | <ol style="list-style-type: none"> <li>1. Please review how to disinfect electronic devices if it is mentioned in the instruction manual to avoid damage from the disinfection process</li> <li>2. It is preferable to use a cover that is easy to clean for covering the hard parts of electronics devices that may be damaged by the disinfectants.</li> <li>3. It is preferable to unplug or turn off the electronic device to avoid the risk of electric shock.</li> </ol> |
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|---|---|--|--|--|--|
| <p><b>Linens, clothes and furniture</b></p> | <p>Bed linens and patient's clothes</p> | <p>When collecting linens and clothes:</p> <ol style="list-style-type: none"> <li>1. Wear gloves and face masks before starting. Collecting of dirty laundry should be in a way that minimize the spread of the virus by carrying them slowly and gently (don't shake) and putting them in a laundry bag then sending them to the laundry.</li> <li>2. An approved disinfectant like the liquid chlorine and a detergent powder should be added to the washing machine.</li> </ol> | <p><u>Household liquid chlorine:</u><br/>(Sodium hypochlorite compounds)</p> | <p>Household liquid bleach (Clorox)<br/><u>Put in the washing machine:</u><br/>5 tablespoons (1/3 cup) of the home liquid chlorine per gallon of water (3,8 L)</p> |  |
|---|---|--|--|--|--|

\*Approved Disinfectants by Saudi Food and Drug Authority

**An illustration chart of how to deal with environmental surfaces to prevent COVID-19 disease**

Is the targeted place indoor (such as home or school classes)?

No

Routine cleaning is considered enough (removing physical parts such as dirt and impurities from surfaces with soap and water) in outdoor places such as garden paths and schoolyards where sunlight and high temperatures play a role in eliminating the novel Corona virus faster compared to indoor places. However, disinfecting (removing germs and microbes using antiseptics) touchable surfaces such as tables and door handles on a regular basis is necessary.

Yes



Was the place used in the last 7 days?

No

Routine cleaning (removing physical parts such as dirt and impurities from surfaces with soap and water) is recommended to be done periodically for places that are empty in the last seven days until they are used again.

Yes



Are there any high-touch tools or surfaces?

No

For low-touch surfaces and tools, only routine cleaning on a regular basis is recommended with considering the importance of disinfection if needed.

Yes





What is the type of these high-touch tools and surfaces

Non-Solid and Impermeable Surfaces (curtains and carpets)

It is recommended to clean, wash periodically, and disinfect them if the suitable and approved product is available. Generally, it is preferable to dispose of non-solid surfaces and tools found in frequently visited areas, such as waiting and meeting rooms.

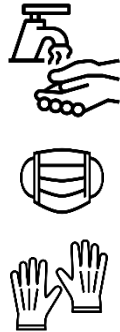
Solid and Impermeable Surfaces (glass, metal and plastic materials)

It is recommended to remove physical parts such as dirt and impurities from surfaces with soap and water first, and then disinfect them frequently with the proper and approved product daily to reduce the possibility of exposure to the virus.

## Essential Steps of Disinfection for environmental Surfaces and Bathrooms

### 1 Washing hands and wearing personal protective equipment

Always before you start cleaning, wash your hands with soap and water, then wear masks and gloves



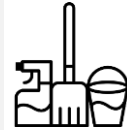
### 2 Dilution of the disinfectant solution

Follow the dilution instructions on the bottle, or put five tablespoons (1/3 of a cup) of liquid household chlorine bleach per gallon of water (3.8 liters)



### 3 Filling the disinfectant solution

Fill the disinfection sprayer or a floor cleaning bucket with a disinfectant solution



### 4 Disinfection process

**First:** cleaning with water and a detergent powder should be conducted if the surfaces are dirty to remove dust.  
**Second:** after that start disinfecting by using a dry and clean towel considering the required contact time instructions on the bottle, or leave the surfaces wet for a period of not less than a minute after disinfection.



### 5 Washing hands after disinfecting

After completing cleaning and disinfection process, remove gloves and masks in a proper way, throw them into a closed trash bin, then wash your hands directly



### 6 Ventilation

Keep the place well Ventilated since the beginning of the preparation process until completing the disinfection. Get rid of the disinfectant solution after you finish.

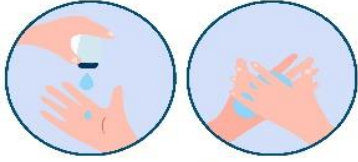




# حافظ على نظافة يديك دائماً

قبل الأكل وإعداد الطعام أو بعد العطس، السعال  
أو استخدام دورات المياه

## كيف تفرك يديك؟



ضع مقدراً من المطهر

## كيف تغسل يديك؟



بلل يديك بالماء وضع مقدراً من الصابون

الخطوات من 1 إلى 6 تطبق عند استخدام الماء و الصابون أو المعقم



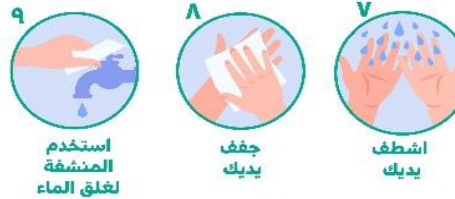
وامسح الاصابع بحركة دائرية

افرك إبهام اليد بشكل دائري

افرك ظهر الاصابع

عند استخدام المعقم

عند استخدام الماء والصابون



استخدم المنشفة لتغلق الماء

جفف يديك

اشطف يديك

٢٠-٣٠ ثانية

٤٠-٦٠ ثانية



يديك آمنة عند جفافها



يديك آمنة عند جفافها



World Health Organization  
ORGANISATION MONDIALE DE SANTÉ



كلنا مسؤول



وقاية Weqaya  
المركز الوطني للأمن وإدارة الأزمات  
Saudi Center for Disease Prevention and Control

# ارتداء القفازات أثناء COVID-19



## عند استخدام القفازات تجنب:

- لمس أغراضك الشخصية مثل المفتاح أو الهاتف المحمول.
- استخدام معقم اليدين على القفازات أو غسلها.
- لبس نفس القفازات في أوقات مختلفة وعدم التخلص منه مباشرة.



## كيف أتخلص من القفازات بعد الانتهاء منها؟

- شد الجزء السفلي من القفاز الأول من الأسفل إلى الأعلى
- التخلص منه في سلة المهملات باليد الأخرى
- إزالة القفاز الآخر عن طريق إدخال الإصبع داخل القفاز
- اقلب القفاز من الداخل إلى الخارج واحرص على ألا تلمس الجزء المكشوف منه
- اغسل يديك جيداً بالماء والصابون أو استخدم المعقم



## **References:**

1. *Cleaning and Disinfection for Households*, CDC, available on link:<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>
2. *CDC. Guidance for Cleaning and Disinfecting*. <https://www.cdc.gov/coronavirus/2019-ncov/community/cleaning-disinfecting-decision-tool.html>. [cited 2020May20].
3. *WOH. Cleaning and Disinfection of Environmental Surfaces-Interim guidance*. <https://apps.who.int/iris/rest/bitstreams/1277966/retrieve> (2009).