



Directorate of health
Chief Epidemiologist for Iceland

COVID-19

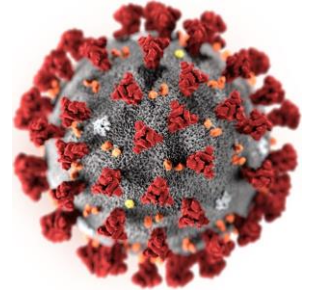
Infection Prevention and Cleaning

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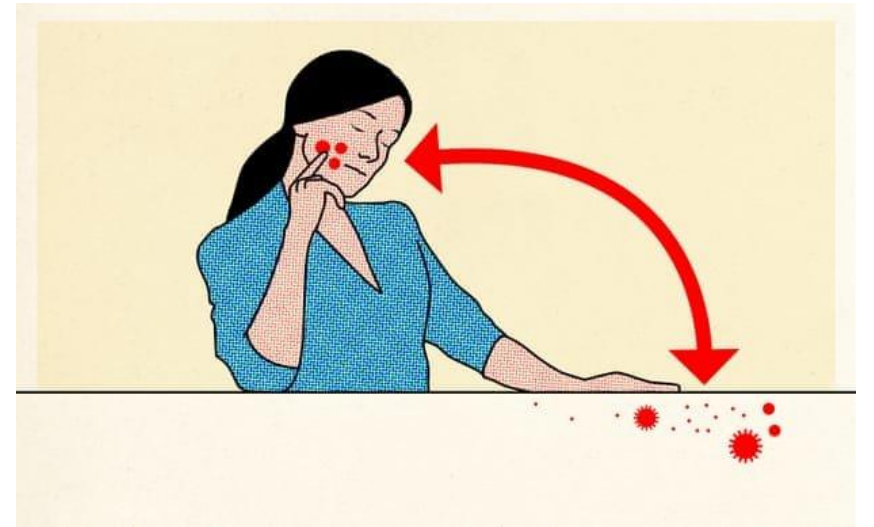
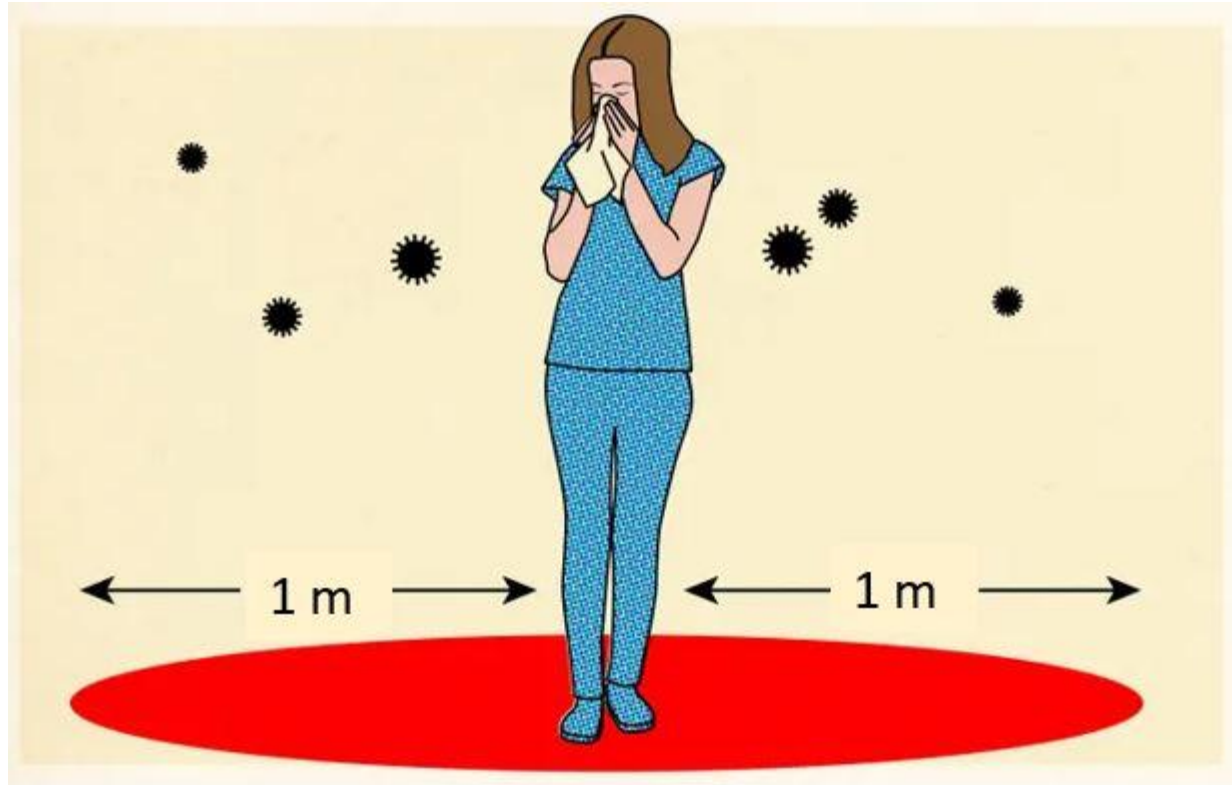
The Directorate of Health

SARS-CoV-2 virus that causes COVID-19

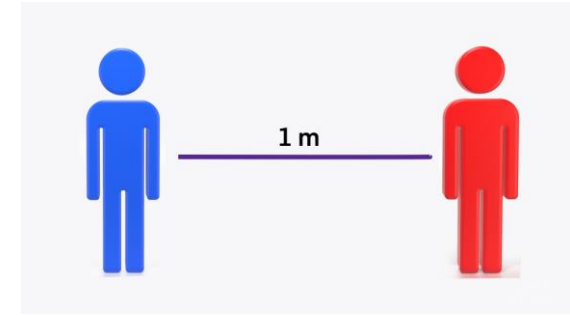


- On infection, the virus lodges itself in the mucous membrane of the respiratory tract and to some extent in the mucous membrane of the digestive system
- The main infection vector is when (large) droplets from the respiratory tract of an infected person when speaking or coughing, are transmitted to the respiratory tract of another person, e.g. when inhaling
- Touching a surface with a viable virus is also considered a vector although the importance of that infection route is unclear
- There are no indications that the virus can infect by contact with blood or stool

Droplet and contact infection



COVID-19 infection prevention



- Maintain a distance of at least 1 metre from others. Avoid crowds and group gatherings
- Wash hands using water and soap after touching contaminated surfaces or use hand sanitiser, if hand washing facilities are unavailable
- Avoid touching face, eyes, nose and mouth
- Avoid handshakes
- If it is not possible to keep 1-metre distance between people in enclosed spaces face mask should be used. It is important to follow instructions on the use of face masks and clean hands if the mask needs to be touched
- Keep the interior surroundings clean with thorough regular cleaning

Hand washing – hand hygiene



Survival of SARS-CoV-2 on different surfaces

Recent study by Van Doremalen et al. (<https://www.nejm.org/doi/full/10.1056/nejmc2004973>)

The study was performed under controlled conditions and should be interpreted cautiously in real environments

The study showed that the virus remains viable in the environment:

- For up to 3 hours in the air after being sprayed using an aerosol can
- For up to 4 hours on copper
- For up to 24 hours on cardboard
- For up to 2 to 3 days on plastic or stainless steel – the virus volume decreases significantly over time

Note: The study evaluated the stability of viral material in aerosols and on various surfaces but not whether it was infectious

Cleaning areas with suspected or confirmed COVID-19

- The room (e.g. waiting room, office, hotel room or quarantined at home) where the person was must first be ventilated properly, for 1 hour at least
- Soft furnishing, towels, bedding and curtains, should be washed in a washing machine at the temperature recommended by the manufacturer of the material in question
- Frequently touched surfaces should be properly cleaned with soap and water and the selected surfaces disinfected as needed
- Use single-use wipes or wash the wipes after use and clean equipment after use
- Those who perform the cleaning must wear surgical masks, gloves and long-sleeved protective gowns
- Used single-use protective equipment may be disposed of in general waste (gloves with plastics and masks with paper)

Disinfectants that destroy viruses – to be used for surface disinfection

- The surface area must first be cleaned with clean soapy water and allowed to dry before being disinfected

Use any of the following:

- Surface alcohol
- Chlorine solutions are a good option to kill viruses, e.g. a mix of bleach 5% (available in e.g. supermarkets), in the proportion of 1 part bleach 5% mixed with 100 parts water
- Virkon and Oxivir are popular disinfectants that are also commonly used in hospitals

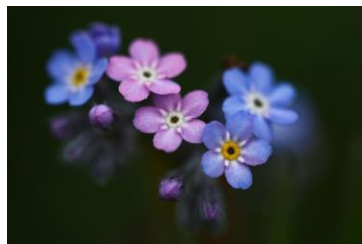


The cleaning of all types of areas in the COVID-19 pandemic

- Frequently touched surfaces should be cleaned often; at least daily and as needed. Examples: door handles and frames, chairs and armrests, tabletops, light switches, stair rails, water faucets, lift buttons, etc.
- Use normal detergents when cleaning general areas (areas where infected persons have not stayed)
- Special care must be taken when cleaning public restrooms, hand basins and sanitary fittings that are used by many, e.g. in shopping malls, airports, etc. Common surfaces should preferably be disinfected using agents that kill viruses
- Employees are to ensure cleanliness, use protective gloves correctly and take care of their personal infection prevention measures
- Change wipes between areas, do not carry the same wipes or gloves from an infected area to an unclean area

Cleaning...

- The equipment used to clean each area must be cleaned after each use
- Hands must be washed or disinfected each time gloves or other protective clothing are removed
- Used protective equipment may be disposed of as regular waste (gloves with plastics, protective masks with paper). The same applies to other waste generated by cleaning operations



Supplementary material:

Study of the virus in the environment of patients with COVID-19

- The amount of SARS-CoV-2 detected in patient rooms with COVID-19 before cleaning varied greatly or from 1 in 13 samples to 13 in 15 samples. No air samples proved to be positive.
- In studies carried out in China during the COVID-19 pandemic, the virus was found in samples from the surroundings of diagnosed patients who were in isolation wards, including on keyboards and printers to which they had access.
- The virus was most often found on gloves (15.4% of samples) and almost never on eye guards.
- These indications show that the virus can be found in the environment of patients with COVID-19 and strengthens the belief that the environment plays an important part as a vector for infection. The proportional importance of this infection vector as opposed to direct contact with respiratory droplets, however, remains unclear.