# Disinfecting shoes:

## A how-to for COVID-19 prevention

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# A how-to for COVID-19 prevention

Practicing proper hand hygiene and not touching the face can help limit the spread of SARS-CoV-2. However, there is a growing concern about how to disinfect other surfaces, such as clothes and shoes.

SARS-CoV-2, the virus responsible for COVID-19, infects people through direct and indirect contact with respiratory droplets.

As a result, the majority of the world's population has adopted measures such as physical, or social, distancing and self-isolation in order to limit the spread of COVID-19.

However, not everyone is able to stay home. Many people still report to work, and others have to purchase food, medicine, and other essential supplies from retailers.

Recent research suggests that SARS-CoV-2 can survive on a wide range of surfaces for several hours to several days.

Shoes are one of the main points of contact in public places. As a result, people run the risk of bringing viruses and other harmful pathogens into their homes.

This article looks at why disinfection is a vital preventive measure. It also provides guidelines for cleaning and disinfecting shoes.

# Why disinfection is important

Emerging research has shed light on how SARS-CoV-2 behaves outside of a human body. A group of researchers from the National Institute of Allergy and Infectious Diseases found that SARS-CoV-2 remains active for up to 3 days on plastic and stainless steel surfaces.

Another study, appearing in The Lancet Microbe, suggests that SARS-CoV-2 is “more stable on smooth surfaces.”

These studies suggest that SARS-CoV-2 could remain infectious on shoes made from plastics, leather, and synthetic materials for several hours — or even a few days.

Unlike cleaning, which removes dirt and germs from surfaces, disinfection requires the use of chemicals to kill harmful pathogens.

In a 2019 review article, researchers found evidence to suggest that the laundering process is especially useful against enveloped viruses. This includes SARS-CoV-2.

The authors of the above study also examined how SARS-CoV-2 responds to various disinfectants. It was undetectable after 15 minutes in a 1:49 solution of hand soap and water.

According to their findings, the following disinfectants inactivated SARS-CoV-2 within 5 minutes:

- household bleach
- 70% ethanol (rubbing alcohol)
- 7.5% povidone-iodine
- 0.05% chloroxylenol
- 0.05% chlorhexidine
- 0.1% benzalkonium chloride

Many antiseptic solutions and detergents contain one or more of these ingredients. The exact concentrations of each ingredient vary from product to product, so it is important that people check the labels first.

## How to disinfect shoes

Viruses can attach to shoes and remain infectious there for several hours. This is especially true when people walk around in crowded areas, such as grocery stores, and use public transport.

Essentials workers and other individuals who have to leave their homes should choose a single pair of shoes for leaving the house.

A person should remove their shoes and socks before entering the house. If possible, they should leave those shoes in a garage or entryway, so that they are separated from the rest of the household.

If a person does not have a separate garage or entryway, they can also place their shoes in a sealed plastic bag.

Consider the following guidelines for cleaning and disinfecting shoes:

- Wipe the exterior surfaces and soles of the shoes with a disinfecting wipe.
- Wash machine washable or cloth shoes using hot water coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts”>(60–90°C,or 140–194°F) and detergent or soap.
- If the machine has a sanitize setting, use it.
- Dry shoes in a well-ventilated area.
- Wear gloves when handling potentially contaminated objects, including when disinfecting shoes.
- After disinfecting objects and surfaces, immediately throw disposable gloves away. People can store reusable gloves in a separate laundry basket.
- People who do not have access to gloves should avoid touching their face and wash their hands immediately after handling potentially contaminated objects and surfaces

# Summary

Recent research suggests that SARS-CoV-2 can survive for extended periods of time on several different types of surface, ranging from metals and plastics to cardboard and cloth. However, these findings do not reveal how long viruses remain active on shoes.

Scientists need to conduct more research on this. In the meantime, people should proceed with caution and stay home as much as possible.

If a person needs to visit the grocery store or go to work, they should choose one pair of shoes for leaving the house.

When returning home, people should remove their shoes before entering the house and store them in a separate area, such as a garage or entryway.

Wipe down the shoes' surfaces with disinfecting wipes. Soaking them in hot water and soap is another effective disinfection method.

People should also wash their hands immediately after handling potentially contaminated objects and avoid touching the eyes, nose, and mouth.

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