

Coronavirus on Aluminum Surfaces

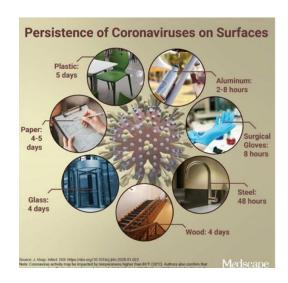
- Confirmed infection transmission by surface contact is rare to non-existent
- Persistence studies were performed on pre-COVID-19 coronaviruses
- Laboratory conditions for surface persistence may differ from actual conditions

Virus Persistence Rates

Several studies to date have assessed persistence of coronaviruses on metal surfaces, including aluminum. A major study conducted in 2000 found that coronavirus no longer persisted on aluminum surfaces within 2-8 hours of virus contact¹ and this was recently confirmed as part of a broader 2020 research reassessment of the topic².

The major study was performed at 72 degrees F and 40% relative humidity, however, coronavirus persistence time on surfaces can be significantly affected by temperature and humidity, with generally longer persistence times on colder, more humid surfaces.

Additionally, the referenced study was performed on coronaviruses prior to the emergence of the coronavirus that causes COVID-19, SARS-CoV-2, and further findings on coronavirus persistence rates on hard surfaces such as aluminum will be made available once known.



Transmission and Risk

The potential for transmission of the coronavirus that causes COVID-19 by touch of everyday objects (including aluminum objects) has been assessed as low to very low by several risk assessments of that pathway conducted by national³ and international⁴ research organizations. Infection transmission to another person appears possible if the sneeze/cough of an infected individual deposits viral material on a surface and then the hand of another person is wiped across that surface with subsequent hand contact shortly thereafter to the mucous membranes of their mouth, nose, or eyes. However, multiple researchers including the US FDA and the German Institute of Risk Assessment have reported that there have been no confirmed transmissions to date via this potential pathway.

Cleaning and Disinfection

A variety of widely available products are proven effective at cleaning and disinfecting coronavirus on surfaces (such as aluminum) including soap and water, disinfectant wipes, and chemical spray solutions. The EPA maintains a list of approved disinfectants that are effective at coronavirus destruction⁵. If surface appearance is a concern, a small area of the surface should be cleaned/disinfected initially to confirm acceptable post-treatment surface appearance.

¹ Journal of Hospital Infection, September 1, 2000

² Journal of Hospital Infection, March 20, 2020

³ FDA Guidance for Consumers on Food and Packaging Safety

⁴ German Institute for Risk Assessment - Coronavirus Assessment

⁵ EPA List of Approved Disinfectants