

INFORMATION

COVID-19 SURFACE STABILITY



INTRODUCTION

The COVID-19 pandemic sweeping across the globe is an unprecedented time and information is being developed in a fluid and changing environment.

To that end, the Australasian Paper Industry Association and The Real Media Collective, working collaboratively, have reviewed research and commentary for your consideration in specific regard to the COVID-19 virus life-span on paper and other surfaces.

THE SCIENCE

The latest and most referenced scientific research of COVID-19 surface rate of infection is the *'Aerosol and Surface Stability of HCoV-19 (SARS-CoV-2) compared to SARS-CoV-1'* published in The New England Journal of Medicine (doi: [10.1056/NEJMc2004973](https://doi.org/10.1056/NEJMc2004973)).

Within this research, surface stability was evaluated across plastic, stainless steel, copper, and cardboard across a range of household and hospital situations. It must be noted, paper as used for print marketing, catalogues, magazines or other commercial requirements has not been tested. In this paper we will refer to the closest substrate tested: Cardboard.

Lloyd-Smith, Author of the 'Aerosol and Surface Stability of HCoV-19 (SARS-CoV-2) compared to SARS-CoV-1' commented:

"In a laboratory experiment, the conditions are pretty carefully controlled and constant," he says. By comparison, "in the real world, conditions fluctuate" — conditions like temperature, humidity and light. So, the survivability may vary, too. For instance, if the virus contaminates a sunny windowsill or countertop, it may not last as long.

Daniel Kuritzkes, Infectious Disease Expert, Brigham and Women's Hospital

"Ultraviolet light can be a really powerful disinfectant and we get a lot of UVA light from the sun," says Daniel Kuritzkes an infectious disease expert at Brigham and Women's Hospital. "Direct sunlight can help rapidly diminish infectivity of viruses on surfaces," he says. He was not involved in the new research.

The World Health Organization states:

"The likelihood of an infected person contaminating commercial goods is low and the risk of catching the virus that causes COVID-19 from a package that has been moved, travelled and exposed to different conditions and temperature is also low."

The World Economic Forum comments on the official guidelines being that the risk is low:

"In general, because of poor survivability of these coronaviruses on surfaces, there is likely very low risk of spread from products or packaging that are shipped over a period of days or weeks at ambient temperatures," the Centres for Disease Control have said.

INFORMATION

COVID-19 SURFACE STABILITY



FINDINGS

The findings concluded the virus on substrates as follows:



Source: 'Aerosol and Surface Stability of HCoV-19 (SARS-CoV-2) compared to SARS-CoV-1', 2020

Viable COVID-19 could be detected in aerosols up to three (3) hours post aerosolization, up to four (4) hours on copper, up to twenty-four (24) hours on cardboard and up to two-three (2-3) days on plastic and stainless steel. Both viruses show relatively long viability on stainless steel and polypropylene (plastic) compared to copper or cardboard: the median half-life estimate for COVID-19 is around thirteen (13) hours on steel and around sixteen (16) hours on polypropylene (plastic).

IS MY MAIL SAFE?

Across Australia and New Zealand, print and mail processing time occurs over more than three (3) days which is additional support of the advice from experts that your mailbox including letters, magazines and packages are safe.

"In general, because of poor survivability of these coronaviruses on surfaces, there is likely very low risk of spread from products or packaging that are shipped over a period of days or weeks at ambient temperatures," U.S Centre of Disease Control and Prevention.

In addition, Australia Post and NZ Post are implementing further safety across signature and social distancing practices to already existing safety and handling measures.

Australia Post - To help protect our posties, drivers and customers, in addition to measures already introduced around signature for delivery, again – we are asking for the practice of good social isolation techniques. If you are showing symptoms, please let your postie or driver know. If you are not, please, we again ask customers to keep a distance of at least one metre from people, and continue to practice good hygiene. For more information: <https://auspost.com.au/about-us/news-media/important-updates/coronavirus>

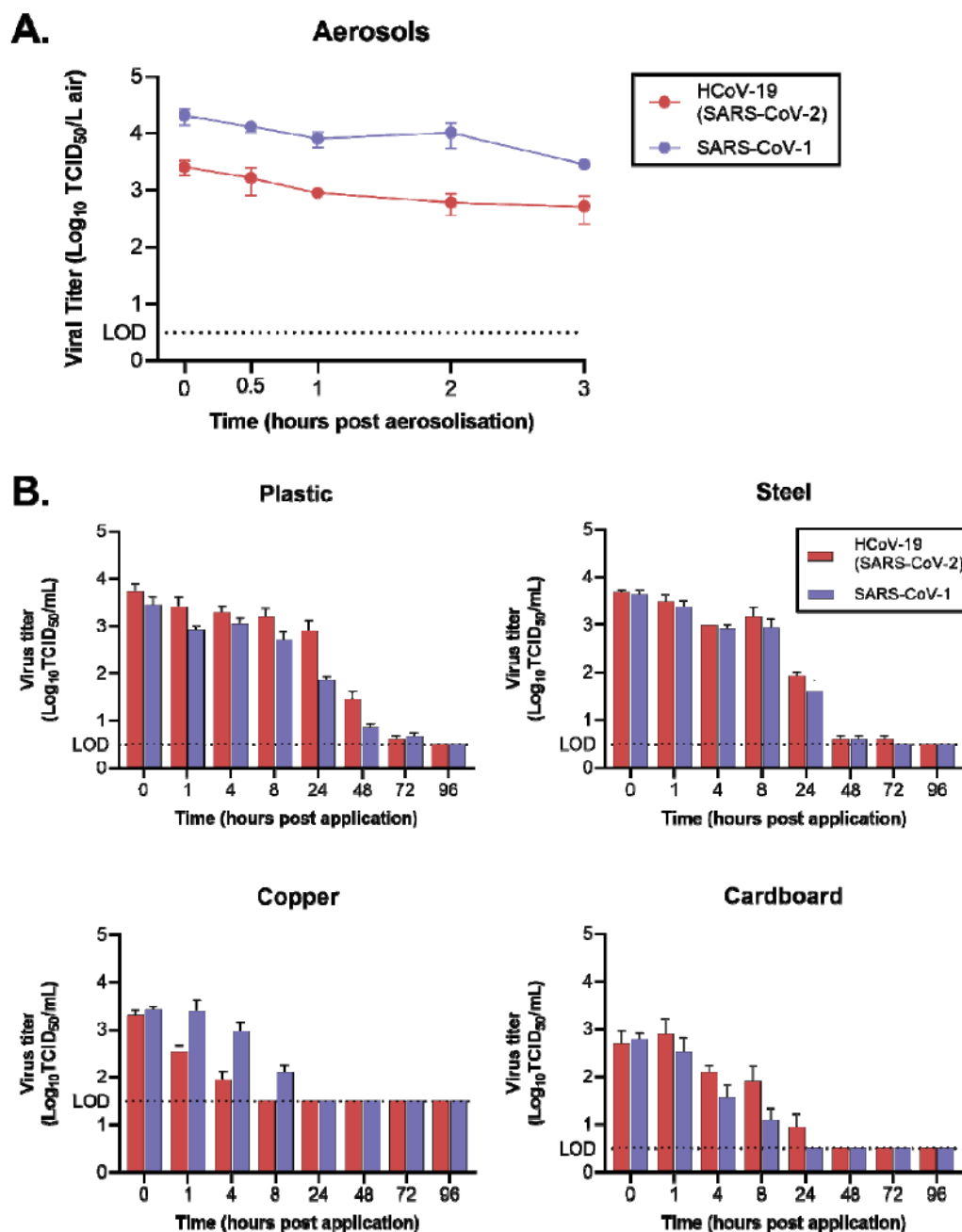
NZ Post - While the overall risk of transmission of any virus is low in our day to day business operations, it's the right thing to do to limit close physical contact with others during this time. This is consistent with the Government's advice. NZ Post posties will maintain social-distancing with two-metres from doors for parcel delivery. Required Product will accept a name as proof of delivery, instead of a signature. For more information: <https://www.nzpost.co.nz/business/covid19updates>

INFORMATION

COVID-19 SURFACE STABILITY



GRAPHICAL REPRESENTATION OF THE TIME OF VIABLE VIRUS DETECTION BY SUBSTRATE



INFORMATION

COVID-19 SURFACE STABILITY



CONCLUSION

The findings of the study across surface contamination and further international literature supports guidance from public health professionals across the world, to slow the spread of COVID-19:

- > Avoid close contact with people who are sick,
- > Avoid touching your eyes, nose and mouth,
- > Stay home when you are sick,
- > Cover coughs or sneezes with a tissue, and dispose of the tissue in the rubbish,
- > Clean and disinfect frequently touched objects and surfaces using a household cleaning spray or wipe, and
- > Wash your hands regularly.

Cardboard, and through this, assumption of paper or fibre-based products including mail, as well as Polypropylene, and through this, assumption of low-grade plastics such as polyethylene for magazine wraps, is reported as carrying a low risk of contamination.

The mechanical process of print, mail processing and mail lodgement, across ambient conditions and over a longer period than three (3) days provides additional reassurance and aligns with expert advice.

Following the recommended guidelines from Government at all times across all substrates you encounter will slow the spread of COVID-19.



INFORMATION

COVID-19 SURFACE STABILITY



REFERENCE LINKS

1. *New England Journal of Medicine*

<https://www.nejm.org/doi/full/10.1056/NEJMc2004973>

2. *World Health Organisation*

<https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>

3. *World Economic Forum*

<https://www.weforum.org/agenda/2020/03/can-i-send-mail-postal-services-coronavirus-covid19/>

4. *Brigham and Women's Hospital*

<https://www.npr.org/sections/health-shots/2020/03/14/811609026/the-new-coronavirus-can-live-on-surfaces-for-2-3-days-heres-how-to-clean-them>

5. *NSW Government*

<https://www.health.nsw.gov.au/Infectious/alerts/Pages/coronavirus-faqs.aspx>

6. *Medrxiv*

<https://www.medrxiv.org/content/10.1101/2020.03.09.20033217v2>

7. *US Centres for Disease Control and Prevention*

<https://www.cdc.gov/coronavirus/2019-ncov/faq.html>

IMPORTANT

The material presented in this publication is distributed by The Real Media Collective as a reference and information source only. The Real Media Collective makes no statements, representations, or warranties about the accuracy or completeness of, and you should not rely on, any information contained in this publication.

Despite our best efforts, The Real Media Collective makes no warranties that the information in this publication is free of infection by computer viruses or other contamination.

The Real Media Collective disclaims all responsibility and all liability (including, without limitation, liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason