The importance of environmental disinfection was illustrated in a study from Singapore, in which viral RNA was detected on nearly all surfaces tested (handles, light switches, bed and handrails, interior doors and windows, toilet bowl, sink basin) in the airborne infection isolation room of a patient with symptomatic mild COVID-19 prior to routine cleaning.

Viral RNA was not detected on similar surfaces in the rooms of two other symptomatic patients following routine cleaning (with sodium dichloroisocyanurate).

Of note, viral RNA detection does not necessarily indicate the presence of infectious virus.

It is unknown how long SARS-CoV-2 and SARS-CoV-1 can persist on surfaces. Other coronaviruses have been tested and may survive on inanimate surfaces for up to six to nine days without disinfection.

A recent research letter to the New England Journal of Medicine, compared the persistence of SARS-CoV-2 and SARS-CoV-1 on various surfaces, including plastic, stainless steel and cardboard. This was not a peer-reviewed study, but has offered an indication of the persistence of the virus.

SARS-CoV-2 was more stable on plastic and stainless steel than on copper and cardboard, and viable virus was detected up to 72 hours after application to these surfaces.

The NICD guidelines don’t make special recommendation about persistence on surfaces, but recommend environmental disinfection in line with standard precautions.

REFERENCES

"Disclaimer drawn up based on the best available evidence at the time, but may be subject to change."