



Infection Prevention and Control Considerations for Return of Blood Components and Products to Inventory

APPENDIX A: SARS-CoV-2 (COVID-19)

Infectious Organism: SARS-CoV-2, human coronavirus

Mechanism of Spread: Droplets, contaminated surfaces or hands

Surface Viability:

Material	Temperature	Persistence
Cardboard	Not specified (presumed room temp)	None detected at 24 hours ¹
Glass	22°C	None detected at 4 days ^{1,2}
Plastic	22°C	None detected at 7 days ²
Stainless Steel	22°C	None detected at 7 days ²

Refrigerator: Highly stable at 4°C, with persistence of detectable virus at 14 days²

The evidence as it pertains to SARS-CoV-2 survival and inactivation continues to evolve. A recently published literature review detailing the persistence of human and veterinary coronaviruses (other than SARS-CoV-2) on inanimate surfaces, as well as inactivation strategies with biocidal agents used for chemical disinfection provides valuable information about this virus family.³

References:

1 van Doremalen N, Bushmaker T, Morris DH et al. Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1. *N Engl J Med*. Published online March 17, 2020. DOI: 10.1056/NEJMc2004973 <https://www.nejm.org/doi/full/10.1056/NEJMc2004973>

2 Chin AWH, Chu JTS, Perera MRA, et al. Stability of SARS-CoV-2 in different environmental conditions. *Lancet Infect Dis*. Published online 2 April 2020. [https://doi.org/10.1016/S2666-5247\(20\)30003-3](https://doi.org/10.1016/S2666-5247(20)30003-3)

3 Kampf G, Todt D, Pfaender S, et al. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *J Hosp Infect*. Published online 6 February 2020. <https://doi.org/10.1016/j.jhin.2020.01.022>