



Operational floor care recommendations under outbreak conditions re: COVID-19 – Carpeted Areas

Hygiene risk associated with floor care machines and operations are considered low risk under normal conditions. However, the risks associated with conducting floor care operations during the SARS-CoV-2 outbreak are unknown. Carpeted floor care operations and maintenance practices may vary from facility to facility. Some may only use vacuums, whereas others have more complex protocols, e.g. shampoo, rinse and extraction, and either dry or wet foam.

All soft surfaces have the potential to harbor microorganisms. As such, carpet soiled with Blood or Body Fluid (BBF) could be harboring any number of pathogenic microorganisms. These pathogens may survive on these surfaces for an extended period of time.

OSHA does not believe carpets or other non-launderable soft surface can be routinely decontaminated. Instead, OSHA states it is the employer's responsibility to determine and implement an appropriate cleaning and decontamination method for all surfaces [1].

When determining a carpeted floor care plan in your facility during the COVID-19 outbreak, Diversey recommends:

- Ensure that correct PPE is being used before floor care operations begin.
 - For additional guidance on protecting your staff see the CDC web page at <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>.
- Conduct floor care when the facility is minimally occupied, such as at night or early in the morning. If possible, conduct floor care when the facility is closed.
- Delay reopening the facility to patrons after cleaning for as long as possible.
- Disinfect all equipment touch points including handles, machine exterior handles and switches, and any other tools or devices used during cleaning.
 - If an extractor machine is used, flush the machine with clean water after it is used, drain the machine, and store it so that the tanks, hoses, and other parts of the machine dry as quickly and completely as possible.
 - Gloves should be worn while disinfecting equipment and cleaning the carpet. Note that wearing gloves does not eliminate the need for hand hygiene. Hands should be washed before the gloves are put on and after they are removed. Reusable gloves should be washed after each use.
- Available information suggests vacuuming may not present a large risk [2], but there is limited information available currently. To reduce the potential risks from vacuuming, we recommend reducing vacuuming to once every 2 to 3 days.
- If vacuuming or conditioning, we recommend that the machine be equipped with a HEPA filter and where available, Ultra Low Penetration Air (ULPA) filters.
 - For deeper cleaning use foam encapsulation process to trap dirt and contaminants.
- If using carpet extraction, follow label instructions on the carpet detergent.
- Although the CDC recommends regular disinfection of high touch surfaces [3] carpeted floors are not considered high touch surfaces and the risk of carpeting contributing to infections is unknown, but likely low. However, carpets must be appropriately decontaminated in the event of a BBF contamination or as part of a COVID-19 deep clean process.
- If carpet is visibly soiled with BBFs, it should be decontaminated immediately. Carpet should be cleaned in accordance with the manufacturer's recommendations. However, there is no



guarantee that a chemical cleaning treatment will reduce SARS-CoV-2 contamination as the EPA does not allow any cleaning or sanitizing products to have an anti-viral claim [5, 6, 7].

Diversey recommends:

- Facilities with carpet panels:
Determine if carpet panel removal is appropriate, if not follow directions in the next section.
With appropriate PPE:
 - Pre-clean large particulates, if necessary.
 - Apply a typical BBF disinfectant, e.g. hypochlorite, for 10 minutes.
 - Gently remove the carpet panel and dispose all materials used in a proper receptacle, e.g. biohazard waste. Then, replace empty space with a new carpet panel.
- Facilities without carpet panels
With appropriate PPE:
 - Remove the gross soil, and then either
 1. Use a product with soft surface sanitizer claims to reduce the microbial load prior to cleaning with a wet cleaning method such as extraction, or
 2. Apply heat to the affected area for 5 minutes at 70°C (158°F) or ca. 1 minute at 100°C (212°F) [4,5]
 - Prior to heat treating the entire carpet, heat treat a small concealed portion of the carpet to ensure that the treatment will not damage the carpet.
 - Depending on the spill-type a wet-extract may be necessary to remove discoloring.
 - Carpets, should be cleaned following the textile and equipment manufacturer's recommended instructions. **NOTE:** Spot test for fabric compatibility or color bleeding prior to full application.

References:

1. Occupation Safety and Health Agency. Standard Interpretation, Standard Number: 1910.1030(d)(4)(ii)(A). Decontamination of a plush carpet surface after a spill. <https://www.osha.gov/laws-regs/standardinterpretations/1994-06-10>
2. Cheesbrough, J. S., Barkess-Jones, L., & Brown, D. W. (1997). Possible prolonged environmental survival of small round structured viruses. *Journal of Hospital Infection*, 4(35), 325-326.
3. Centres for Disease Control. (2020). Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 (COVID-19). <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
4. Noroviruses. <https://www.osha.gov/Publications/norovirus-factsheet.html>
5. Buckley, D. et al. (2018). Efficacy of silver dihydrogen citrate and steam vapor against a human norovirus Surrogate, feline calicivirus, in suspension, on glass, and on carpet. *Appl. Environ. Microbiol.* 84:12 (2018): e00233-18.
6. Buckley, D. et al. (2017). Recovery optimization and survival of the human norovirus surrogates feline calicivirus and murine norovirus on carpet. *Appl. Environ. Microbiol.*, 83(22), e01336-17.
7. Malik, Y. S. et al. (2006). Disinfection of fabrics and carpets artificially contaminated with calicivirus: relevance in institutional and healthcare centres. *Journal of Hospital Infection*, 63(2), 205-210.