

## Best Practices for Cleansing, Disinfecting, and Care of Polyurethane Support Surface Covers

Most healthcare support surfaces include a polyurethane-coated protective, waterproof, moisture vapor permeable cover, which is designed to protect the internal components of the support surface from damage. Adherence to this guide will extend the operational life of the support surface.

*Note: This document is specific guidance for manual cleansing and disinfecting.*

### Warnings:

***To maintain the support surface cover's performance and integrity, manufacturer instructions on the cleansing, disinfecting, and care of their product should take precedence over instructions from cleansing/disinfectant suppliers and/or other authorities (FDA, CDC, TJC, CMS, Facility, etc).***

Failure to follow the instructions may compromise the performance of the support surface, may increase the risk of patient harm and void product warranty.

**Note:** *Prevention of serious disease transmission may require more aggressive interventions*

Inspect the product for damage such as pinholes, tears, or cracks in the material and replace it if necessary.

**Cleansing and disinfecting are separate processes.** Cleansing must precede disinfection. Between patients: clean, disinfect, and check the product for proper functioning.

### To Cleanse:

- **Blood and gross soiling must be physically removed using non-abrasive means**
- **Wipe all exposed surfaces with pH neutral detergent**
- **Rinse thoroughly with clean, warm water and a clean cloth**

At all steps in the process non-abrasive hospital, approved cleansers and sponges must be used.

## To Disinfect:

- **Wipe all exposed surfaces with disinfectant and incubate for the recommended kill time**
- **Then rinse thoroughly with clean warm water using a clean cloth or sponge and ensure it is dry before linens are added**

## Note: Important Considerations for Cleansing & Disinfecting

- Frequent applications of some disinfectants combined with the failure to rinse and dry, increase exposure to the active ingredients, accelerating degradation of the cover and allowing fluids to pass through the cover

**Note:** *Compromised covers increase cross-infection risk*

- If some disinfectants are left to dry without rinsing, the residue may be reactivated on contact with other fluids or the next cleansing cycle. Partially dissolved residue can be abrasive, leading to cover damage

**Note:** *Sensitive patients may develop dermatitis secondary to this residue reactivation*

## Care of Support Surfaces

### Storage of the support surface

Support Surfaces should be:

- Stored in an air-permeable protective cover, ideally in normal indoor temperature and humidity environment
- Stored flat and not on their edge and without other objects such as side rails or bed ends on top
- Handled by two people to avoid dragging or pulling by its cover
- Transported on a bed or cart suitable for the purpose

### Before use of the support surface

Ensure that the support surface is suitable for the intended patient in terms of:

- Risk assessment
- Pressure redistribution
- Safe working load of the mattress
- Fits properly on the intended frame (to reduce the risk of entrapment)

### Preventing damage to the support surface

- Take care not to puncture the cover as this will permit fluid ingress to contaminate the internal components
- Do not place sharp objects such as scissors, needles, syringes, scalpels or other sharps on the support surface
- Remove or cover hand jewelry including rings with sharp edges to prevent damage to support surface
- Take extra care when using medical equipment such as monitors, intravenous (IV) poles, side rails, transfer boards, X-ray cassettes, etc to prevent damage to support surface
- Do not store medical equipment, IV poles, IV pumps, negative pressure wound therapy devices, bed parts, etc., on top of the support surface due to the risk of tearing the support surface cover
- When using slings, slide sheets, and transfer devices, take care to ensure that buckles do not scratch or snag the support surface cover during use
- Periodically, if possible, open and lift the cover to inspect the inside of the cover and the internal components for breaches and/or contamination
- Damaged covers and internal components should be replaced according to the manufacturer's guidelines

### Addendum:

- Polyurethane: As a class of materials, polyurethanes are very varied - from hard plastics used in ski-boots and car suspension components to stretchy elastomers used in wound dressings and support surface covers. Even the stretchy elastomers used for support surfaces incorporate a wide variety of polymer chemistry offering different characteristics.
- Polyurethane support surface covers are 'soft surfaces' and even the most chemically resistant types are not immune to some of the aggressive ingredients used in 'hard surface' disinfectants.
- Polyurethane support surfaces are more vulnerable to abrasion when wet.
- Disinfectant choices are dynamic, for the most up-to-date guidance refer to CDC: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

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