

WHITE PAPER

Clinical, Financial and Workflow Advantages of Disposable Microfibre





Hospitals and other healthcare facilities are expected to be clean; creating a safe environment for sick and at-risk patients. While reducing the risk of infection in a healthcare environment has always been important, it's more critical than ever. The initial outbreak of COVID-19 directly impacted care facilities, putting a strain on general resources such as preventative and medical equipment, but also making it more difficult to gain access to cleaning and sanitising tools to combat the potential spread of the disease.¹

With an abrupt need for new and improved cleaning interventions, custodial staff in hospitals and other care facilities have started using microfiber fabrics and have noticed a major improvement in comparison to the traditional cleaning methods that have been used in the past.



The Center for Disease Control and Prevention recommends healthcare facilities utilise microfiber cloths and mop heads to comply with safety and cleanliness guidelines.²

Let's take a look at some of the advantages that come with utilising disposable microfiber products in the healthcare space from a clinical, financial and workflow process point of view



The benefits of disposable microfibre

Laundering cleaning mechanisms can be disadvantageous, being more costly and time consuming to handle. Inconsistent laundering protocols, such as chemical handling and temperature adjustments, may not always be in line with laundering guidelines, which can adversely affect and deteriorate the microfibre quality and impact its efficacy.

Comparatively, disposable microfibre comes with many benefits. Between convenience and the reduction of cross-contamination and infection, to cost-effectiveness and improved staff processes and workflow, the advantages of utilising disposable cleaning products outweigh the reusable options that could come with potential adverse reactions.



Convenience

Laundering microfibre in hospital settings has been the traditional method for cleaning, **but disposable options improve ease-of-use and can be more convenient in a fast-paced work environment like a care facility.** Furthermore the use of disposable solutions reduces the chances of cross-

contamination. In the wake of the novel Coronavirus pandemic, the Australian government guidelines provided information about cleaning and disinfection for health and residential care facilities, noting that “disposable cleaning equipment is preferred,” in rooms of patients known to have COVID-19.³



Reduced risk of infection

The convenience of utilising disposable microfibre increases compliance, which leads to greater outcomes, specifically in terms of keeping care facilities clean and reducing the risk of infection.

Researchers William A. Rutala, PhD, MPH, Maria F. Gergen, MT (ASCP) and David J. Weber, MD, MPH of Chapel Hill, North Carolina, sought to better understand the effectiveness of utilising microfibre mops in an effort to reduce microbial contamination on floors as opposed to a traditional, cotton string mop.

The experiment consisted of mopping 24 different rooms using three different testing conditions: A cotton mop and standard bucket with a wringer attachment, a microfibre mop with a standard bucket

with wringer attachment and a basic microfibre system.

At the end of the experiment, the researchers concluded that the efficacy proved greatest for the standard microfibre system. **This method demonstrated “superior microbial removal” at 95% efficacy in comparison to traditional string mops when utilised with detergent cleaner at 68% efficacy.**⁴

Rubbermaid disposal HYGEM microfibre, for example, is designed to remove dead microbes and eliminate the food source for live pathogens. In fact, these mops and cloths can remove 99.9% of microbes in bacterial and viral infections such as C. diff and COVID-19 with water alone.⁵



Cost effectiveness

While reusable microfibre can reduce costs dedicated to replenishing supply, **disposable microfibre can save in energy and detergent costs that would be used to launder reusable products.** When laundering internally, labour and chemical costs are also accounted for. Laundering externally also comes with its own costs associated with paying a company to remove, clean and return supplies and typically costs about

\$1 per mop pad and \$0.50 per cloth. At scale these fees naturally compound. For instance, in an aged care facility with 100 residents occupying their own bedroom and bathroom, it would cost \$9000 per month to launder used mop pads and cloths, taking into account that 2 mop pads and 2 cloths would be required to safely clean residents' quarters, covering each bedroom and each bathroom daily.



Improved staffing processes

While immediate hospital staff may not be laundering wet cloths and mops, custodial staff will no longer have to worry about this task. This can improve workflows across the board. In terms of a financial impact, training and changeover of staff can be expensive. When a burdensome task like laundering and taking care of cleaning material is removed from the equation, it's one less task to worry about training staff if turnover becomes a major issue.

The U.S. Environmental Protection Agency highlighted a study by the University

of California Davis Medical Center (UCDMC) in Sacramento, CA, which found that cleaning staff was motivated to try a different approach to cleaning patient room floors based on the amount of time it took to get the job done with traditional methods:

“Conventional wet mopping practices—including mopping the floor, preparing and changing the cleaning solution, and wringing the mop before and after jobs—take approximately 15 minutes for a typical patient room.” ⁶

Are all microfibre cloths created equal?

Microfibre cloths come in different sizes and levels of durability, generally measured by the number of fibres that make up the material. As previously mentioned, one of the major differences in microfibre cloth type is laundry-safe and disposable options. **While launderable cloths may offer longevity and reusability, the**

effectiveness wears out over time and this obstruction may outweigh the benefits.

Colour-coded microfibre cloths are also available to minimise cross-contamination by encouraging users to dedicate one color to each cleaning task.

Conclusion

In the eyes of a healthcare or facility manager, it should be a top priority to take a proactive approach to cleaning in a way that minimises infection risk and takes infection prevention seriously.

A combination of reduced expenses, improved convenience and enhanced cleanliness in the clinical care setting

make disposable microfibre the choice when it comes to disease control and prevention within the healthcare space.

Learn more about how Rubbermaid disposable HYGEN microfibre can break the chain of infection and eliminate cross-contamination.

Sources:

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