

ICT

INFECTION CONTROL T O D A Y

September 2014 • Vol. 18 No. 9 • \$12.00 US



Quality Improvement In Environmental Services

Sustaining Gains Requires Communication, Collaboration



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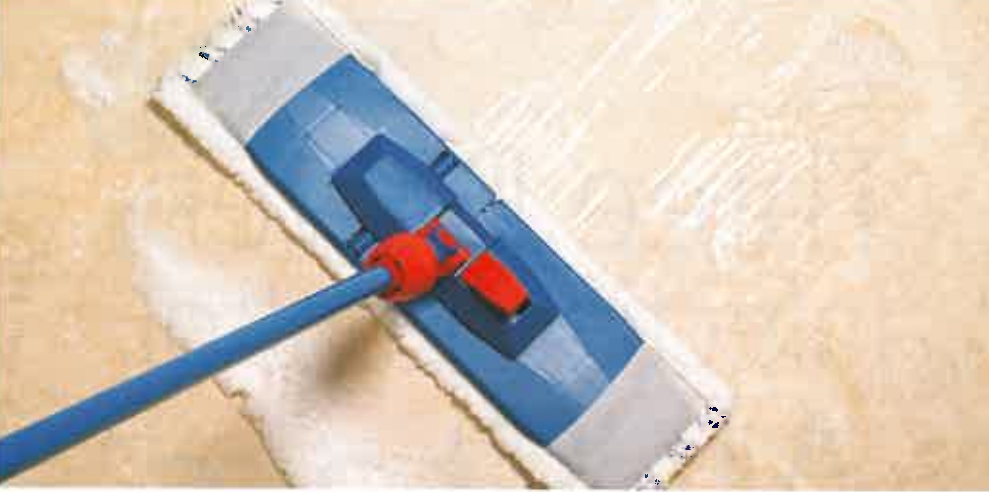


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Microfiber Use in Healthcare Facilities

In the last few years, an increasing number of healthcare facilities have begun using a microfiber mopping technique rather than a conventional, cotton string mop to clean floors. Microfibers are densely constructed, polyester and polyamide (nylon) fibers that are approximately 1/16 the thickness of a human hair, according to the Centers for Disease Control and Prevention (CDC, 2008). The positively charged microfibers attract dust (which has a negative charge) and are more absorbent than a conventional, cotton-loop mop. Microfiber materials also can be wet with disinfectants, such as quaternary ammonium compounds.

worker easily removes the soiled pad by placing a foot on the pad edge and lifting the mop handle away. The soiled pad or cloth is set aside for laundering or disposal, according to facility policy. Used pads or cloths are not returned to the cleaning solution, so the cleaning solution does not become contaminated or need replenishing.

The Sustainable Hospitals Project emphasizes that microfiber mopping is an inherently effective mopping technique, because “Microfiber is a strong, lint-free synthetic fiber. Each fiber is split during manufacturing, and this split structure makes microfiber effective for mopping: The tiny fibers make the fabric very absorbent,



THE MICROFIBER SYSTEM DEMONSTRATED SUPERIOR MICROBIAL REMOVAL COMPARED WITH COTTON STRING MOPS WHEN USED WITH A DETERGENT CLEANER (95 PERCENT VERSUS 63 PERCENT, RESPECTIVELY).

According to a factsheet by the Sustainable Hospitals Project, microfiber mops generally consist of a lightweight handle with a maneuverable flat head that holds a microfiber pad or cloth of some kind. In a typical application, fresh microfiber pads are placed to soak in a basin of cleaning solution on the cleaning cart. In each room, a clean pad or cloth is taken from the basin, hand wrung out, dropped flat on the floor and the mop head is placed on it, and is held in place by some type of a hook-and-loop construction. In a typical setting, the environmental services (EVS) professional uses several pads or cloths to clean a patient room. After use, the EVS

so the mop holds sufficient water for cleaning, yet doesn't drip. As a result, the pad doesn't need to be replenished and the floor is merely damp and quickly dries after cleaning, rather than being visibly wet. The microfibers have a positive charge that attracts dust, which has a negative charge. Dust and dirt particles are not only attracted to the microfiber, but are held tightly and not redistributed around the room.”

Microfiber mopping is generally associated with ease of use for EVS professionals because personnel are lifting less and maneuvering lighter loads. Microfiber mopping completely eliminates rinsing and wringing a heavy loop mop. There is

a smaller volume of cleaning solution, the water-soaked microfiber mop is considerably lighter than a loop mop, the wheeled cart is correspondingly lighter and there is no need to repeatedly return to the sink to dispose of and replenish buckets of cleaning solution. In addition, the Sustainable Hospitals Project notes, there is less potential for healthcare worker injury. Microfiber mopping uses less water and disinfectant, resulting in less weight to lift and less potential for fatigue, back pain, neck strain, and other upper body injuries. Because the mops are lightweight and maneuverable, the worker can largely avoid awkward and uncomfortable postures. The microfiber mops eliminate wringing of the heavy wet loop mop. This is expected to reduce potential for back pain, shoulder, elbow, wrist tendonitis and injury to finger joints. And because microfiber holds liquid without dripping, it leaves only a light film of water on the floor which dries quickly, resulting in less opportunity for slips and falls on a wet floor. Patients are happier with microfiber-mopping systems because it is usually a faster, quieter and less intrusive method of floor cleaning.

The Sustainable Hospitals Project says that microfiber mopping is cost-effective because even though initial purchase costs for microfiber mops are about twice that of loop mops, the useful life of a microfiber mop is about 10 times as long as a loop mop.

- For many hospitals, water and sewer costs are significant and the reduction in water used yields considerable savings.
- The reduced volume of cleaning chemicals results in avoided purchase costs.
- Reduced mopping time frees the staff to perform other productive tasks.
- Worker compensation claims are likely to be reduced due to the lower potential for injury.
- Eliminating the need for large janitor sinks and closets simplifies plumbing and maintenance and reduces the storage area needed for supplies.

As for the effectiveness of microfiber mops to reduce microbial levels on floors, Ruita, Gergen and Weber (2007) compared the efficacy of microfiber mops with that of conventional, cotton string mops in three test conditions (cotton mop and standard wringer bucket, microfiber mop and standard wringer bucket, microfiber

system). Twenty-four rooms were evaluated for each test condition. RODAC plates containing D/E Neutralizing Agar were used to assess pre-cleaning and post-cleaning microbial levels. The microfiber system demonstrated superior microbial removal compared with cotton string mops when used with a detergent cleaner (95 percent versus 68 percent, respectively). The use of a disinfectant did not improve the microbial elimination demonstrated by the microfiber system (95 percent versus 95 percent, respectively). However, use of disinfectant did significantly improve microbial removal when a cotton string mop was used (95 percent versus 68 percent, respectively). Rutila, Gergen and Weber (2007) concluded that the microfiber system demonstrated superior microbial removal compared with cotton string mops when used with a detergent cleaner; the use of a disinfectant did not improve the microbial elimination demonstrated by the microfiber system.

The Sustainable Hospitals Project provides

the following suggestions for evaluating and purchasing microfiber mopping products:

- Always evaluate new products carefully to assess safety and performance in your own setting.
- Hospitals will need to evaluate the cleaning performance of different manufacturers' mops, as they are not all equally effective.
- The number of the mop pads used in a room will depend on the room size; EVS personnel should participate in the decision of how many mops to purchase to ensure a ready supply.
- Microfiber mops are not appropriate for areas contaminated with a considerable amount of blood and body fluids, such as emergency rooms and operating rooms.
- Microfiber should not be laundered in industrial washers and dryers because high temperatures can damage the material. It is recommended to use standard washers with mild detergents that do not contain

bleach, caustics or harsh cleaners that can degrade the microfiber.

- Microfiber mops should not be washed or dried with lint-generating items.
- Hospitals should consider how the microfiber mop pads will be laundered to ensure a rapid turnaround between use and laundering and to protect the performance capability of the microfiber.

References

- Centers for Disease Control and Prevention (CDC). Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008.
- Environmental Protection Agency (EPA). Best Practices Publication: Using Microfiber Mops in Hospitals. 2002.
- Rutila WA, Gergen MF and Weber DJ. Microbiologic evaluation of microfiber mops for surface disinfection. *Am J Infect Control*. 2007 Nov;35(9):569-73.
- The Sustainable Hospitals Project. 10 Reasons to Use Microfiber Mopping. <http://www.sustainablehospitals.org>
- The Sustainable Hospitals Project. Are Microfiber Mops Beneficial for Hospitals? <http://www.sustainablehospitals.org>

Wipes & Microfiber Product Showcase

WetTask* System Dual Performance Wiper

There are times when you need to do more than just clean and disinfect. You need a wipe with scrubbing power to help remove dried-on substances while you disinfect. That's why we designed new WetTask* Dual Performance Wipers, the newest addition to the WetTask* System line. This new wiper features a white side for regular cleaning and a purple, textured side to make cleaning hard to remove substances easier. The wipes are designed to be compatible with disinfectants, bleach and sanitizers. The WetTask* System is the original closed-bucket system for cleaning and disinfecting and is guaranteed to deliver a 30 percent savings on chemical cost. To request a free sample of WetTask* Dual Performance Wipers send an email to: KCP.Behealthy@kcc.com, don't forget to include your name and address.

(800) 241-3146 www.kcprofessional.com/solutions/wettask



Rubbermaid HYGEN™ Disposable Microfiber System

Killing microbes doesn't make them disappear. Stop the chain of infection with the Rubbermaid HYGEN™ Disposable Microfiber System, proven to remove 99.9 percent of microbes and eliminate the food source for live pathogens. Developed for the healthcare industry to effectively manage infection rates and increase patient safety, Rubbermaid HYGEN™ Disposable Microfiber delivers superior cleaning performance and optimal infection prevention. Rubbermaid HYGEN™ Disposable Microfiber features innovative microbe-removing technology, enhanced with built-in polyester scrubbers, to effectively remove dirt with no smearing or streaking.

(800) 347-9800 or www.rubbermaidcommercial.com



Clear Path Lint-free Microfiber OR Wipers

Clear Path OR Wipers are constructed with split microfiber technology designed to capture residue and particulates at a microscopic level. The wiper's heat-sealed edges allow for true lint-free cleaning. Designed for use on the sterile field.

(800) 990-7489 or www.cygnusmedical.com

Peridox® Sporicidal Disinfectant and Cleaner

Peridox reduces the spread of C. difficile, MRSA and more than 40 other pathogens. It contains no alcohol or bleach, requires no rinsing, and leaves no film on surfaces. Peridox Sporicidal Disinfectant and Cleaner is ideal for all healthcare facilities including critical environments such as surgical suites. Peridox stays wet and is effective against C. difficile spores and other dangerous pathogens. Available in ready-to-use and concentrated formulas.

(864) 503-8333 or www.contechealthcare.com



Sani-Cloth® Pail and Refill

PDI introduces the new Sani-Cloth® Pail and Refill format for Sani-Cloth® Bleach and Sani-Cloth® AF3 Germicidal Disposable Wipes. The new pail and refill packaging is specifically designed to address the needs of environmental services professionals and contains 160 pre-moistened, ready-to-use, extra-large wipes. Each pre-moistened wipe contains the proper concentration of disinfectant, reducing labor time and compliance issues associated with mixing or measuring chemicals.

(800) 999-6423 or www.pdihc.com



Sani-Cloth® AF3 Portable Pack

PDI Sani-Cloth® AF3 Germicidal Disposable Wipe, an alcohol- and fragrance-free quaternary-based disinfectant, is available in the new Portable Pack, an innovation in packaging designed to keep disinfection of mobile equipment top-of-mind and make disinfection on-the-go easier than ever. Sani-Cloth® AF3 is tested effective against 44 microorganisms, including 12 clinically relevant multidrug-resistant organisms (MDROs) with an overall contact time of three minutes and is ideal for use around patients and staff, especially those with respiratory sensitivities.

(800) 999-6423 or www.pdihc.com



Aramark's Microfiber System

From ceiling to floor, Aramark's microfiber system helps support infection prevention practices by improving cleaning protocols and providing on-going ATP monitoring. An integrated system of dusters, towels and mops combine to help prevent cross-contamination and reduce the risk of nosocomial infections. Aramark's microfiber is routinely sanitized in a science-based wash process that provides an enhanced level of clean and helps maintain the integrity of the product. Contact Aramark for a complimentary ATP assessment.

800-ARAMARK (272-6275) or www.aramark-uniform.com/healthcare



PerfectCLEAN® Environmental Hygiene System

The stakes are high for preventing HAIs and the PerfectCLEAN Environmental Hygiene System offers superior efficacy for hygiene specialists at leading hospitals. This sustainable infection prevention system, which supports increased HCAHPS scores, includes products designed and developed to meet all challenges. The products represent the only true color-coded, ONEperRoom system supported by a number of training programs. Proprietary micro-denier fiber is used in all PerfectCLEAN products — the highest percentage and most durable micro-denier fiber available in the industry.

(888) 920-0370 or www.perfectclean.com