

# 4<sup>th</sup> World Congress on Health Economics, Health Policy and Healthcare Management

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## Hospital cleaning for health and safety, without using chemicals

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Cleaning is critical to prevent the spread of disease and essential in providing quality healthcare. Routine cleaning of hospital surfaces must eliminate pathogens where contamination may have occurred. Traditional methods of cleaning using detergents and disinfectants can be time consuming, expensive and associated with health and safety risk. Detergent alone is unable to remove all pathogens and disinfection is required for its biocidal effect. However, complete removal of pathogens is a safe alternative to biocidal use and is employed at our healthcare facilities. Monash Health replaced traditional cleaning with microfibre and steam cleaning after conducting trials from 2011. Results showed that 90% less water was used; chemicals were eliminated along with the risk of slips and falls from wet floors. Microfibre and steam cleaning was demonstrated to be effective at preventing pathogen transmission, including multi-drug resistant pathogens. Cleaning was achieved in less time, costs were limited and capacity to protect equipment from chemical damage was evident. Following outbreaks associated with traditional cleaning methods, microfibre and steam was introduced. However, monitoring of cleaning was demonstrated to be an important aspect of cleaning management, to ensure it is conducted according to procedures. A review of gastroenteritis outbreaks across Victorian healthcare settings showed a statistically significant reduction in outbreak number and duration following the introduction of this cleaning technology at Monash Health.

### Recent Publications

1. Gillespie E, Tabbara L, Scott C, Lovegrove A, Kotsanas D, Stuart R (2017) Microfibre and steam for a neonatal service: An improved and safe cleaning methodology. *AJIC*. 45 (1): 98-100.
2. Gillespie E, Wright P, Snook K, Ryan S, Vandergraaf S, Abernethy M, Lovegrove A. The role of ultraviolet marker assessments in demonstrating cleaning efficacy. *AJIC*. 43 (12): 1347-9.
3. Gillespie E, Brown R, Treagus D, James A, Jackson C (2015) Improving operating room cleaning results with microfiber and steam technology. *AJIC*. 44 (1): 120-22.
4. Abernethy M, Gillespie E, Snook K, Stuart R (2013) Microfiber and steam for environmental cleaning during an outbreak. *AJIC* February. 41 (11): 1134-5.

### Biography

Elizabeth Gillespie has completed her graduation from Royal Melbourne Hospital as a registered nurse and has qualifications in Midwifery, Operating Room Management and Infection Control. She has completed her Master of Public Health at the University of Melbourne, majoring in Epidemiology. Her current role is in co-directing and managing the Infection Control and Epidemiology unit for Monash Health.

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