

reduced to 0.1 ± 0.1 and 1.24 ± 1.13 , respectively, post-wash (each $P < 0.001$). Thus, despite intense contamination of the rinsing water, ozone at 4 mg/L proved able to control the tested microorganisms.

Some studies have shown that many species, i.e. *E. coli*, *Streptococcus*, and *Bacillus*, can be inactivated by 30 seconds of exposure to an aqueous solution of ozone (0.2 mg/L).⁴

In the current study, we demonstrated that ozone used in a laundry processing system reduced by five logs the total number of coliforms and *E. coli* present in hospital laundry rinsing water. However, comparative studies testing different conventional disinfectant agents are still necessary to establish the efficacy of ozone as a laundry disinfectant agent.

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Claudia Catiani Cardoso, DVM
João E. Fiorini, PhD
Luciano R. Ferrera, PhD
 Universidade de Alenas
 Alenas, MG, Brazil
José W.B. Gurgão, ChemEng
 White Martins Gases Inds. S/A
 Rio de Janeiro, RJ, Brazil
Luiz A. Amaral, PhD
 UNESP
 Jaboticabal, SP, Brazil

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Disinfection of Hospital Laundry Using Ozone: Microbiological Evaluation

To the Editor:

We investigated a hospital laundry system that uses ozone gas as a disinfection agent. Ozone is a powerful oxidizing agent that has been used as a chemical disinfectant for water treatment in Europe since 1893.^{1,2} The use of ozone has increased in medicine lately due to the number of microorganisms resistant to chlorine.³

The process used for washing highly contaminated hospital linen can be summarized as follows: (1) execution of one washing cycle with conventional chemical products (quantification and pre-wash), (2) one washing cycle with ozone (4 mg/l) for 15 minutes, and (3) a softening cycle. Water samples were collected using sterile 20-mL syringes. Pre-wash samples were taken after 2 minutes of agitation without any additives. Post-wash samples were collected similarly, following the final cycle with ozonized water. The samples were evaluated for the most probable number of total coliforms and *Escherichia coli* using the chromate-geometric substrate test method (Colbert, Idexx Laboratories, Westbrook, ME).

The most probable numbers (±SD) per 100 ml of *E. coli* and of total coliforms were $1.3 \pm (0.3 \times 10^1$ and $3.74 \pm 1.8 \times 10^5$ pre-wash, and were