



# REVISTA BRASILEIRA DE ANESTESIOLOGIA

Publicação Oficial da Sociedade Brasileira de Anestesiologia  
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## LETTER TO THE EDITOR

### Waste anesthetic gas exposure: the risks extend outside the operating room



### Exposição a gases anestésicos residuais: os riscos vão além da sala de operação

Dear Editor,

The recent article outlining the occupational hazards of waste anesthetic gas exposure by Lucio et al.<sup>1</sup> provided an in-depth review of the current considerations of the risks associated with occupational exposure to waste anesthetic gases. In particular, they outlined how environmental pollution occurring in the operating room (OR) could lead to DNA damage and contribute to oxidative stress. However important this area is, there are increasingly other areas outside of the OR where occupational exposure to anesthesia can result in unique risks of environmental exposure. For example, post-anesthesia care units are also an area that is often targeted for investigation of occupational anesthetic gas exposure risk.<sup>2,3</sup> In addition, offsite anesthetics have also been reported in the Intensive Care Unit (ICU) where volatile agents have been used for sedation.<sup>4</sup> This ICU use is particularly problematic as it is a setting where scavenging may not necessarily be the same as in the OR. Indeed, the use of volatile agents in the ICU and the need for scavenging systems has been addressed by using the hospital-based vacuum systems, but this has also been identified as a potentially risky and unproven way to scavenge anesthetic gases.<sup>5,6</sup>

Thus, occupational hazards of waste anesthetic gases likely extend far more broadly than the OR setting that Lucio et al. have outlined, further extending the potential

for DNA damage and the superimposed oxidative stress in those exposed.

### Conflicts of interest

The author declares no conflicts of interest.

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Available online 7 February 2018

<https://doi.org/10.1016/j.bjane.2018.01.013>

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