

Letter in Reply

Reply to Greene: New SHEA expert guidance for infection prevention in the anesthesia work area needs improvement

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To the Editor—We thank Drs. Greene and Bradley for their thoughtful comments, and we applaud their enthusiasm for infection prevention in the anesthesia work area. Indeed, we are pleased that members of the anesthesia community are reading and commenting on the expert guidance. We encourage all anesthesia providers to implement as many of the suggestions contained in the SHEA anesthesia infection prevention expert guidance document¹ as possible while considering even more stringent standards and measures not mentioned in the document, commensurate with local practices and patient requirements. Moreover, clinicians must always apply sound medical judgement to any guidance statement.

For instance, the SHEA expert guidance¹ states that “Stopcocks should have closed injection ports installed to convert them into ‘closed ports,’ or they should be covered with sterile caps.” Naturally, various clinical applications may influence the best infection control strategy because not all stopcocks are used for the purpose of injecting medications. For example, stopcocks on pressure transducers are periodically opened to air to calibrate the transducer to atmospheric pressure and are not used as an injection port. These stopcocks may reasonably be covered with sterile caps rather than needleless injection ports. Conversely, we agree with Drs Greene and Bradley that stopcocks used for injecting drugs should ideally be closed with needleless injection ports.

We also agree that environmental decontamination of the anesthesia work area and its components is critically important, as is optimal hand hygiene by anesthesia providers and high-level decontamination or sterilization of reusable laryngoscopes.² Single-use materials such as single-use laryngoscopes and single-use monitoring sensors may be a useful strategy. Medical devices intended for multiple-patient use must be expertly cleaned, inspected, and stored according to manufacturer guidelines, including anesthesia reservoir bags and circuits. Areas of additional concern should include the anesthesia machine itself, the anesthesia cart, and other elements (eg, EMR computer and keyboards) that are used for multiple patients. Evidence continues to accumulate that anesthesia providers may be contaminating their patient-related

work surfaces inadvertently within minutes of the start of anesthesia care and that the contamination spreads throughout the operating room.^{3–5} However, external cleaning of the anesthesia machine surface and computer components is challenging, and we encourage clinicians to explore new and innovative approaches to this dilemma (eg, disposable covers, etc). For the foreseeable future, the significant challenge of avoiding contamination while ensuring appropriate decontamination of all of the “reusable” components of the anesthesia work area remains. The SHEA expert guidance is a start, and now we call on anesthesia providers to continue this vital work in their clinical practice as well as the development of newer technologies and practices to improve patient safety related to contamination of operating rooms.

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