## AB119. SOH21AS076. Operation room traffic: the Irish experience

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Background: Over the last number of decades, there has been growing interest of an aseptic surgical practices with various infrastructure evolving together with principles and protocols to maintain surgical sterility. Several researchers and safety management agencies have focused on many factors impacting on the outcome of operations, one of which is the operation room (OR) traffic. Operation room traffic, which is ultimately linked to door openings, has the potential for air contamination in the OR by its interference with the laminar flow of air, altering the pressure gradient thus changing the environmental milli leading to containment failure. These increases the bacterial colony and particulate count in the air which has the potential to increase the risk of post-operative surgical skin infection (SSI). It also has the potential to distract the team, leading to increase stress from noise during movements that may lead minor or even potentially serious clinical care errors, with its attendants' consequences

**Methods:** A pilot study was undertaken in a University Hospital, using a human observer assisted by finger held digital tally counter to monitor the opening of door(s) during all operation over a period of 2 months. the participants were blinded to the observation in order to counteract the possible Hawthorne effects on the data generated.

Results: A total of 1,002 minutes of surgery was monitored

recording 350 episodes of door opening given an average of 15 episode per case or 2.86 times of door opening per minute

**Conclusions:** Operation room traffic in our operation room is highly prevalent and superceeds most of the reported episodes in the literature and exceeds the recommended safe limits of door opening per case as advised.

**Keywords:** Operation room; operation room traffic; distraction surgical skin infection; laminar flow

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## **Footnote**

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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