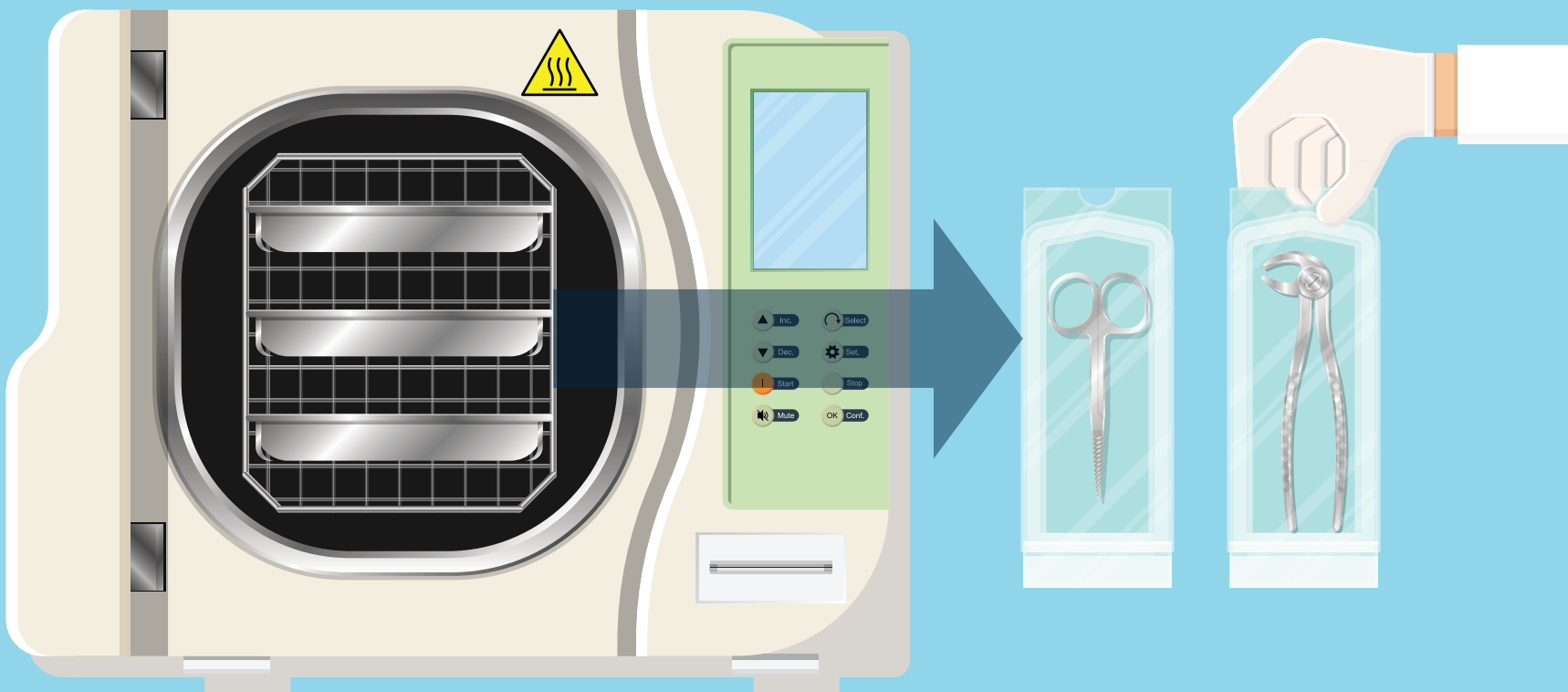


# Does Immediate-Use Steam Sterilization Affect the Risk of Orthopaedic Surgical Site Infections?

Immediate-use steam sterilization (IUSS), which is used to sterilize surgical instruments in emergency situations, has been theorized to increase the risk of surgical site infections (SSIs)

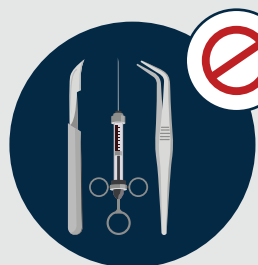


Patients who underwent orthopaedic surgery (N = 70,600)

Propensity score-matched analysis to compare rates and risk of orthopaedic SSIs among 7,052 patients, to include those



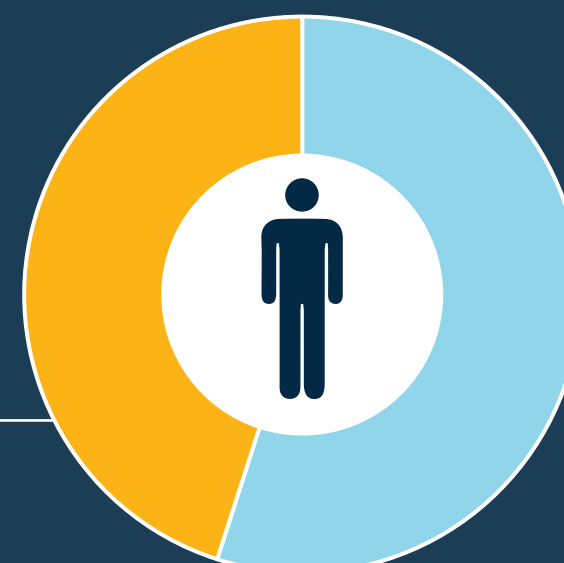
Whose surgeries utilized IUSS (n = 3,526)



Whose surgeries did not utilize IUSS (n = 3,526)

Patients who developed an orthopaedic SSI (n = 111)

45.05%  
Non-IUSS group



54.95%  
IUSS group

Probability of developing orthopaedic SSIs

IUSS group	1.73%
Non-IUSS group	1.42%

No significant difference

Potential advantages of IUSS use in emergent situations



Operating-room efficiency



Surgical delays



Costs and waste



IUSS does not appear to significantly increase orthopaedic SSI risk; its potential benefits warrant further investigation into its use

The Association of Immediate-Use Steam Sterilization with the Incidence of Orthopaedic Surgical Site Infections. A Propensity Score-Matched Cohort Study

Tantillo et al. (2022) | DOI: 10.2106/JBJS.21.01275

www.jbjs.org

theJBJS

@JBJS

