

# Risk of Post-Vasectomy Infections: Audits of 133,044 Vasectomies from Large Vasectomy Practices in Canada, Colombia, New Zealand, and the United Kingdom

Samuel Lawton <sup>1</sup>, Alison Hoover <sup>2</sup>, Gareth James <sup>3</sup>, Simon Snook <sup>4</sup>, Diana Soraya Torres Quiroz <sup>5</sup>, Michel Labrecque <sup>6</sup>

<sup>1</sup> Emory University Rollins School of Public Health, Atlanta, United States; <sup>2</sup> Emory University School of Medicine, Atlanta, United States; <sup>3</sup> Association of Surgeons in Primary Care, United Kingdom, UK; <sup>4</sup> SNIP Vasectomy Clinics, New Zealand; <sup>5</sup> Profamilia, Bogota, Colombia; <sup>6</sup> Department of Family and Emergency Medicine, Laval University, Quebec City, Canada

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10482444/#:~:text=Analysis%20of%20our%20data%20demonstrates,for%20suspected%20or%20confirmed%20infection.>

**Objectives:** To estimate the risk of post-vasectomy infection in various settings and across various surgical techniques and sanitization practices.

**Design, Setting, and Participants:** Retrospective review of the records of 133,044 vasectomized patients from four large practices/network of practices using No-Scalpel Vasectomy (NSV) in Canada (2011-2021), Colombia (2015-2020), New Zealand (2018-2021), and the United Kingdom (2006-2021). We defined infection as any mention in medical records of any antibiotics prescribed for treating a genital or urinary condition following vasectomy. We calculated the risk of infection on the total number of vasectomies performed at each site.

**Results and Limitations:** Post-vasectomy infection risks were 0.8% (219/26,809), 2.1% (390/18,490), 1.0% (100/10,506), and 1.3% (1,007/77,239) in Canada, Colombia, New Zealand, and the UK respectively. Comparing audit periods suggests limited effect on the risk of infection of excising a short vas segment, applying topical antibiotic on scrotal opening, and wearing surgical mask in Canada, and of type of skin disinfectant used and use of non-sterile gloves in New Zealand. The risk of infection was lower in Colombia when guideline recommended technique for vas occlusion was used (mucosal cautery and fascial interposition [FI] 0.9% vs. ligation, excision, and FI 2.1%,  $p < 0.00001$ ). Low level of infection certainty in 56% to 60% of patients who received antibiotics indicates that the true risk might be overestimated. Lack of information registered in medical records and patients not consulting their vasectomy providers might have led to underestimation of the risk.

**Conclusions:** The risk of infection after vasectomy is low (about 1%) among international high-volume vasectomy practices performing NSV and various recommended occlusion techniques. Apart from vasectomy occlusion technique, no other factor clearly modified the risk of post-vasectomy infection.