

Antimicrobial-Containing Surgical Irrigations

The Antimicrobial Stewardship Team has worked closely with all the surgical service lines to evaluate the prophylactic use of antimicrobial-containing irrigation solutions at Northwestern Medicine, as many published guidelines do not support the routine prophylactic use of antibiotic-containing surgical wound irrigations. This initiative was started in 2020 and has been supported by the NM General Surgery and Orthopedics Health System Clinical Collaboratives as well as Surgical Services and Anesthesia Leadership.

Out of Scope: Therapeutic usage of antibiotic irrigation was out of scope, and is still allowed. Other out of scope indications that are still allowed include:

- Use of antibiotic irrigation in infected and contaminated fields
- Soaking implants in antibiotic solution
- Antimicrobial pouches for pacemaker pockets
- Tobramycin or Vancomycin powder applied topically or in cements when indicated

Along with surgeons from each service line, the Antimicrobial Stewardship Team assessed the available literature and found evidence to support the use of routine prophylactic antimicrobial containing irrigations for the following indications:

Indication	Approved Medication
Sternotomy	<ul style="list-style-type: none">• Vancomycin 1000 mg/1000 mL irrigation
Penile implants	<ul style="list-style-type: none">• Rifampin + gentamicin irrigation
Rhinoplasty with autologous grafts	<ul style="list-style-type: none">• Gentamicin irrigation
Complex or redo posterior spine surgeries	<ul style="list-style-type: none">• Gentamicin irrigation
Neurosurgery ¹	<ul style="list-style-type: none">• Vancomycin 1000 mg/1000 mL irrigation• Gentamicin irrigation when vancomycin is contraindicated (except in posterior fossa)

¹Includes neuro-oncologic cranial procedures, electrodes and generators for deep brain/cortical stimulators or spinal cord stimulators, sacral nerve stimulators, intrathecal catheter/pump systems for intrathecal medication delivery, intradural electrodes for long-term seizure recording, and cerebrospinal fluid shunts

Other than for the above indications, prophylactic irrigation should be performed with normal saline or Irrisept (chlorhexidine gluconate 0.05% in sterile water) unless contraindicated. All irrigations must be made in a pharmacy. Mixing of irrigations in the OR is not permitted and violates regulatory standards.

All requests for antimicrobial-containing solutions for prophylactic irrigation will need to be presented to, and approved by, the Antimicrobial and Diagnostic Stewardship System P&T Subcommittee. **To bring evidence for further exceptions please submit a [Medication Use Policy Request](#) or contact medusepolicy@nm.org.** Please include relevant articles/citations as supporting evidence for the request.