

## Galway: GAPP - Galway Antimicrobial Prescribing Policy / Guidelines (GAPP): Orthopaedic and Trauma Surgery

Antibiotics for Orthopaedic and Trauma Surgery				
Type of Surgery	Procedure	1 <sup>st</sup> Line Antibiotic	Penicillin allergy: immediate or severe delayed reaction <a href="#">See penicillin hypersensitivity section</a> for further information	Number & Timing of Doses
<b>Prophylaxis in Orthopaedic and Trauma Surgery</b>  See <a href="#">Note Regarding Risk Factors for MRSA</a>  See Note Regarding Multi-drug Resistant Organisms ( <a href="#">MDRO</a> )	<b>Closed clean orthopaedic procedures without implant of foreign material (e.g. arthroscopy)</b>	Antimicrobial prophylaxis NOT required		
	<b>Minor metalwork insertion</b>  (e.g. K-wires, screws, small orthopaedic plates)	CefUROXime IV 1.5g (one dose only)	Teicoplanin IV 10mg/kg* (Max 800mg) (one dose only)	One dose within 60 minutes before incision. Give antibiotic prophylaxis at least 15 minutes prior to tourniquet inflation.
	<b>Orthopaedic implant surgery (total joint replacement or revision)</b>	CefUROXime IV 1.5g every 8 hours for a total of 3 doses (24 hour cover)	Teicoplanin IV 10mg/kg* (Max 800mg) every 12 hours for a total of 2 doses (24 hour cover)	1 <sup>st</sup> dose within 60 minutes before incision & <b>continued for 24 hours</b>
	<b>Open reduction with internal fixation</b> of closed fractures	If risk factors for or colonised with <a href="#">MRSA</a> Add Teicoplanin IV 10mg/kg * (Max 800mg) every 12 hours for a total of 2 doses (24 hour cover)	+ <a href="#">Gentamicin</a> IV one dose only, dose per GAPP App calculator	Give antibiotic prophylaxis at least 15 minutes prior to tourniquet inflation.
	<b>Spinal surgery</b> (with or without implant).			
	<b>Open fracture intervention</b> +/- insertion of nail/screw (includes acute trauma with contaminated wounds)	CefUROXime IV 1.5g every 8 hours  + Metronidazole IV 500mg every 8 hours  <b>See comment re duration</b>	Teicoplanin IV 10mg/kg* (Max 800mg) every 12 hours for 3 doses, then every 24 hours  + <a href="#">Gentamicin</a> IV dose per GAPP App calculator every 24 hours  + Metronidazole IV 500mg every 8 hours  <b>See comment re duration</b>	1 <sup>st</sup> dose within 60 minutes before incision.  <b>Duration usually 3 to 5 days – maximum 24 hours post final wound closure.</b>  <b>It is vital that any patient with an open fracture be closely observed for signs of sepsis.</b> Please discuss with Microbiology or Infectious Diseases if necessary and if treatment with gentamicin is extended beyond 3 days
<b>Debridement surgery/patients with chronic bone infection</b>	Prophylactic antibiotic depends on infecting organism(s). Check results of previous cultures if available. Discuss with Microbiology or Infectious Diseases if necessary.			
* Discuss dosing in obese patients with Microbiology, Infectious Diseases or Pharmacy				