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Summarised advice is not provided for burns surgery or ophthalmic surgery; see [Therapeutic Guidelines](#) for discussion.

Surgical antibiotic prophylaxis: abdominal surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
GASTRODUODENAL AND OESOPHAGEAL SURGERY			
endoscopic procedures	NO		
nonendoscopic procedures that do not enter the gastrointestinal tract lumen	ONLY IF the patient has risk factors for postoperative infection	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision	Risk factors for postoperative infection include morbid obesity; gastric outlet obstruction; reduced gastric acidity or motility; and gastrointestinal bleeding, malignancy or perforation.
nonendoscopic procedures that enter the gastrointestinal tract lumen	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision	
BILIARY SURGERY, INCLUDING LAPAROSCOPIC SURGERY			
laparoscopic surgery	ONLY IF the patient has risk factors for postoperative infection	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision	Risk factors for postoperative infection include age older than 70 years, diabetes, obstructive jaundice, common bile duct stones, acute cholecystitis, and nonfunctioning gallbladder.
open cholecystectomy	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision	If the patient is being treated with antibiotic therapy for acute cholecystitis, additional antibiotic prophylaxis may not be required—see Therapeutic Guidelines for discussion.
SMALL INTESTINAL SURGERY			
endoscopic procedures	NO		
nonendoscopic procedures	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if the small intestine is obstructed metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
COLORECTAL SURGERY			
endoscopic procedures	NO		
nonendoscopic procedures	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	
APPENDICECTOMY			
all appendicectomy procedures	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	This advice applies to laparoscopic appendicectomy. If the patient is being treated with antibiotic therapy for appendicitis, additional antibiotic prophylaxis is not required—see Therapeutic Guidelines for discussion.
HERNIA REPAIR			
hernia repair with or without prosthetic material	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if entry into the bowel lumen is expected metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .

MRSA = methicillin-resistant *Staphylococcus aureus*

Surgical antibiotic prophylaxis: assisted reproductive technology and infertility diagnostic procedures

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
hysterosalpingography	ONLY IF history of PID or tubal dilation, or tubal damage is noted on visualisation, AND STIs not investigated, and treated as indicated, before the procedure	doxycycline 100 mg orally, 12-hourly for 5 days. The first dose should be given before the procedure	
hysterosalpingo-contrast sonography			
laparoscopic dye test (chromotubation)			
oocyte retrieval (donor or recipient)	NO		

PID = pelvic inflammatory disease; STI = sexually transmitted infection

Surgical antibiotic prophylaxis: breast surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
axillary lymph node clearance	YES	cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .
biopsy	NO		This advice applies for diagnostic excisional and stand-alone sentinel node biopsies.
breast augmentation surgery	YES	cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines . Postoperative prophylactic doses can be considered, but prophylaxis should not continue beyond 24 hours—see Therapeutic Guidelines for discussion.
breast reconstruction surgery	YES	cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	This advice applies for autologous breast reconstruction surgery, and prosthetic breast reconstruction surgery with a prosthetic implant or acellular dermal matrix. For risk factors for MRSA infection, see Therapeutic Guidelines . Postoperative prophylactic doses can be considered, but prophylaxis should not continue beyond 24 hours—see Therapeutic Guidelines for discussion.

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
lumpectomy	NO		This advice applies for lumpectomy with or without needle or wire localisation.
nipple surgery	YES	<p>cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
reduction mammoplasty	YES	<p>cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
simple mastectomy	YES	<p>cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
wide local excision	YES	<p>cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
repeat or revision procedures	YES	<p>cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .

MRSA = methicillin-resistant *Staphylococcus aureus*

Surgical antibiotic prophylaxis: cardiac surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
all cardiac procedures other than TAVI	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	<p>Cardiac procedures include valve replacement, coronary artery bypass surgery, cardiac transplant, and insertion of a ventricular assist device.</p> <p>Patients undergoing a prosthetic cardiac valve procedure that is a reoperation (return to theatre or early revision) are at increased risk of being colonised or infected with MRSA. For other risk factors for MRSA infection, see Therapeutic Guidelines.</p> <p>Repeat intraoperative doses are often necessary because of the long duration of cardiac procedures—see Therapeutic Guidelines for discussion.</p> <p>Postoperative prophylactic doses can be considered, but prophylaxis should not continue beyond 24 hours—see Therapeutic Guidelines for discussion.</p>
TAVI	YES	Seek expert advice	<p>The optimal prophylactic regimen for TAVI is not known. The prophylactic antibiotic regimens recommended for other cardiac procedures may need to be modified for TAVI according to the organisms causing infection within the institution and their susceptibility patterns.</p>

MRSA = methicillin-resistant *Staphylococcus aureus*; TAVI = transcatheter aortic valve implantation

Surgical antibiotic prophylaxis: ear, nose and throat surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
adenoidectomy	NO		
complex septorhinoplasty	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	This prophylactic regimen is appropriate for most patients. If the procedure is contaminated or dirty or undertaken in the setting of current or recent infection, the optimal prophylactic regimen is uncertain. The choice of prophylaxis should be guided by recent culture and susceptibility test results—seek expert advice. For stratification of surgical wounds, see Therapeutic Guidelines .
hearing implant procedures	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	This advice applies for cochlear implant procedures. For risk factors for MRSA infection, see Therapeutic Guidelines .
laryngectomy (primary or salvage)	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines . Postoperative prophylactic doses can be considered, but prophylaxis should not continue beyond 24 hours—see Therapeutic Guidelines for discussion.

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
major ear surgery	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	This prophylactic regimen is appropriate for most patients. If the procedure is contaminated or dirty or undertaken in the setting of current or recent infection, the optimal prophylactic regimen is uncertain. The choice of prophylaxis should be guided by recent culture and susceptibility test results—seek expert advice. For stratification of surgical wounds, see Therapeutic Guidelines .
otoplasty	NO		
revision sinus surgery	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	This prophylactic regimen is appropriate for most patients. If the procedure is contaminated or dirty or undertaken in the setting of current or recent infection, the optimal prophylactic regimen is uncertain. The choice of prophylaxis should be guided by recent culture and susceptibility test results—seek expert advice. For stratification of surgical wounds, see Therapeutic Guidelines .
stapedectomy	NO		
tonsillectomy	NO		
tympanomastoid surgery	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	
uncomplicated ear surgery	NO		
uncomplicated nose or sinus surgery	NO		This category includes endoscopic procedures.

MRSA = methicillin-resistant *Staphylococcus aureus*

Surgical antibiotic prophylaxis: gastrointestinal endoscopic procedures

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
ROUTINE GASTROINTESTINAL ENDOSCOPY			
routine gastrointestinal endoscopy (upper or lower)	NO		
ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY (ERCP)			
ERCP involving transpapillary or transmural drainage of pseudocysts	YES	The choice of prophylaxis should be guided by local microbiological data. If data are not available: gentamicin (adult and child) 2 mg/kg intravenously over 3 to 5 minutes, within the 120 minutes before the procedure	If the patient is obese, use adjusted body weight to calculate the gentamicin dose.
ERCP with evidence of biliary tract obstruction	ONLY IF complete biliary drainage may not be achieved	The choice of prophylaxis should be guided by local microbiological data. If data are not available: gentamicin (adult and child) 2 mg/kg intravenously over 3 to 5 minutes, within the 120 minutes before the procedure	If the patient is obese, use adjusted body weight to calculate the gentamicin dose.
ERCP procedures not listed above	ONLY IF the patient has communicating pancreatic cysts or pseudocysts	The choice of prophylaxis should be guided by local microbiological data. If data are not available: gentamicin (adult and child) 2 mg/kg intravenously over 3 to 5 minutes, within the 120 minutes before the procedure	If the patient is obese, use adjusted body weight to calculate the gentamicin dose.
ENDOSCOPIC ULTRASOUND (EUS)			
diagnostic EUS	NO		
EUS-FNA of cystic lesions	YES	metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before the procedure PLUS cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before the procedure	
EUS-FNA of solid lesions	NO		

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
GASTROSTOMY OR JEJUNOSTOMY TUBE INSERTION			
PEG or PEJ tube insertion	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .
PRG or PRJ tube insertion	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .

ERCP = endoscopic retrograde cholangiopancreatography; EUS = endoscopic ultrasound; EUS-FNA = endoscopic ultrasound-guided fine-needle aspiration; PEG = percutaneous endoscopic gastrostomy; PEJ = percutaneous endoscopic jejunostomy; PRG = percutaneous radiologic gastrostomy; PRJ = percutaneous radiologic jejunostomy; MRSA = methicillin-resistant *Staphylococcus aureus*

Surgical antibiotic prophylaxis: gynaecological surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
autologous mid-urethral sling procedures	NO		
cervical tissue excision procedures	NO		Cervical tissue excision procedures include LLETZ, biopsy, and endocervical curettage.
dilation and curettage, except surgical termination of pregnancy	NO		
endometrial biopsy or ablation	NO		
gynaecological laparotomy procedures	YES	cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg intravenously, within the 120 minutes before surgical incision	
gynaecological-oncological procedures	YES	cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg intravenously, within the 120 minutes before surgical incision	
hysterectomy	YES	cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg intravenously, within the 120 minutes before surgical incision	
hysteroscopy (operative or diagnostic)	NO		
insertion of an intrauterine device	NO		

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
laparoscopic procedures that do not enter the bowel or vagina	NO		
pelvic organ prolapse procedures	YES	cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg intravenously, within the 120 minutes before surgical incision	
surgical termination of pregnancy	YES if not investigated for STIs and bacterial vaginosis, and treated as indicated, before the procedure	doxycycline 100 mg orally, 60 minutes before the procedure, then 200 mg orally, 90 minutes after the procedure OR doxycycline 400 mg orally, with food, 10 to 12 hours before the procedure	Nausea has been reported when doxycycline is administered in the perioperative period; consider concurrent use of an antiemetic drug—see Therapeutic Guidelines .
synthetic mid-urethral sling procedures	YES	cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS metronidazole 500 mg intravenously, within the 120 minutes before surgical incision	

LLETZ = large loop excision of the transformation zone, STI = sexually transmitted infection

Surgical antibiotic prophylaxis: head and neck surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
debulking or reconstructive surgery for malignancy	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS for incisions through mucosal surfaces metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	Postoperative prophylactic doses can be considered, but prophylaxis should not continue beyond 24 hours—see Therapeutic Guidelines for discussion.
extensive neck dissection for malignancy	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS for incisions through mucosal surfaces metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	Postoperative prophylactic doses can be considered, but prophylaxis should not continue beyond 24 hours—see Therapeutic Guidelines for discussion.
parotidectomy	NO		
procedures involving insertion of prosthetic material	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS for incisions through mucosal surfaces metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	
simple lymph node excision	NO		Simple lymph node excision includes submandibular lymph node excision.
thyroidectomy	NO		

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
clean-contaminated procedures not listed above	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS for incisions through mucosal surfaces metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	For stratification of surgical wounds, see Therapeutic Guidelines .
clean procedures not listed above	NO		For stratification of surgical wounds, see Therapeutic Guidelines .

Surgical antibiotic prophylaxis: implantable cardiac device insertion

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
insertion of implantable cardiac devices other than a ventricular assist device	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	Examples of implantable cardiac devices include permanent pacemaker device, cardioverter defibrillator, and cardiac resynchronisation device. For risk factors for MRSA infection, see Therapeutic Guidelines .
insertion of a ventricular assist device	YES	Refer to local protocols or seek expert advice.	Choice of prophylaxis should be guided by local microbiology. The optimal duration of prophylaxis is unclear.

MRSA = methicillin-resistant *Staphylococcus aureus*

Surgical antibiotic prophylaxis: neurosurgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
craniotomy	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
external ventricular drain insertion	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
intracranial shunt insertion	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines . Vaccinate patients against <i>Streptococcus pneumoniae</i> , ideally before the procedure—see the Australian Immunisation Handbook for further information.
microsurgery	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
pressure monitor insertion	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
procedures involving insertion of prosthetic material	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
re-exploration procedures	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .

MRSA = methicillin-resistant *Staphylococcus aureus*

Surgical antibiotic prophylaxis: obstetric surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
assisted vaginal delivery	YES	amoxicillin+clavulanate 1+0.2 g intravenously, as a single dose as soon as possible after assisted vaginal delivery	The efficacy of prophylaxis administered to women less than 36 weeks' gestation or more than 6 hours after delivery is not known.
caesarean section (elective or nonelective)	YES	cefazolin 2 g intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For patients receiving intrapartum prophylaxis against <i>Streptococcus agalactiae</i> (group B streptococcus) or treatment for intra-amniotic infection (chorioamnionitis), additional surgical antibiotic prophylaxis is required, unless the antibiotic regimen has activity against the organism(s) most likely to cause postoperative infections. See Therapeutic Guidelines for more information. For risk factors for MRSA infection, see Therapeutic Guidelines .

MRSA = methicillin-resistant *Staphylococcus aureus*

Surgical antibiotic prophylaxis: oral maxillofacial surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
cleft lip and palate repairs	YES	benzylpenicillin 1.2 g (child: 30 mg/kg up to 1.2 g) intravenously, within the 60 minutes before surgical incision	
intraoral bone grafting procedures	YES	For surgical incision through the oral mucosa only , use: benzylpenicillin 1.2 g (child: 30 mg/kg up to 1.2 g) intravenously, within the 60 minutes before surgical incision	Postoperative doses can be considered following orthognathic surgery, but prophylaxis should not continue beyond 24 hours—see Therapeutic Guidelines for discussion.
open reduction and internal fixation of mandibular fractures or midfacial fractures		For surgical incision through the oral mucosa AND skin , use: cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision	
orthognathic surgery (major jaw realignment surgery)		PLUS metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision	
procedures involving insertion of prosthetic material other than dental implants			
procedures involving insertion of dental implants	NO		
clean or clean-contaminated procedures not listed above	NO		For stratification of surgical wounds, see Therapeutic Guidelines .

Surgical antibiotic prophylaxis: orthopaedic surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
internal fixation of fractures of large bones	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
procedures involving insertion of prosthetic or allograft material	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	For risk factors for MRSA infection, see Therapeutic Guidelines .
prosthetic large joint replacement	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	<p>Patients undergoing a joint arthroplasty procedure that is a reoperation (return to theatre or early revision) are at increased risk of being colonised or infected with MRSA. For other risk factors for MRSA infection, see Therapeutic Guidelines.</p> <p>For specific considerations for joint arthroplasty, see Therapeutic Guidelines.</p> <p>Postoperative prophylactic doses can be considered following total knee arthroplasty, but prophylaxis should not continue beyond 24 hours—see Therapeutic Guidelines for discussion.</p>

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
routine arthroscopy procedures not involving insertion of prosthetic material or avascular tissue	NO		

MRSA = methicillin-resistant *Staphylococcus aureus*

Surgical antibiotic prophylaxis: skin and soft tissue surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
ablative laser facial resurfacing procedures	CONSIDER perioperative antiviral prophylaxis, particularly for patients who have had previous orofacial HSV infection	If indicated, start prophylaxis the morning of the procedure: aciclovir 400 mg orally, 12-hourly for 10 days OR famciclovir 250 mg orally, 12-hourly for 10 days OR valaciclovir 500 mg orally, daily for 10 days	
blepharoplasty	NO		
breast surgery	see specific section in Therapeutic Guidelines .		
head and neck surgery	see specific section in Therapeutic Guidelines .		
oral maxillofacial surgery	see specific section in Therapeutic Guidelines .		
rhytidectomy	NO		
clean or clean-contaminated procedures not listed above	NO		For stratification of surgical wounds, see Therapeutic Guidelines . This advice also applies to procedures that breach the oral mucosa.

HSV = herpes simplex virus

Surgical antibiotic prophylaxis: spinal surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
spinal surgery	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .

MRSA = methicillin-resistant *Staphylococcus aureus*

Surgical antibiotic prophylaxis: thoracic surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
aneurysm repair	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .
brachiocephalic procedures not involving insertion of prosthetic material	NO		Brachiocephalic procedures include carotid endarterectomy, brachial artery repair.
intercostal catheter insertion	NO		
procedures involving insertion of prosthetic material	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .
thromboendarterectomy	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .
vein bypass	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
video-assisted thoracoscopic surgery (VATS)	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .
procedures associated with an increased risk of infection other than those listed above	YES	cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision PLUS if patient known to be or at increased risk of being colonised or infected with MRSA vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)	For risk factors for MRSA infection, see Therapeutic Guidelines .

MRSA = methicillin-resistant *Staphylococcus aureus*; VATS = video-assisted thoracoscopic surgery

Surgical antibiotic prophylaxis: urological surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
endoscopic intrarenal and ureteric stone procedures	YES	gentamicin (adult and child) 2 mg/kg intravenously over 3 to 5 minutes, within the 120 minutes before the procedure	Examples of these types of procedures are percutaneous nephrolithotomy and pyeloscopy for ureteric or kidney stones. If the patient is obese, use adjusted body weight to calculate the gentamicin dose.
extracorporeal shock-wave lithotripsy	NO		
open or laparoscopic urological procedures in which the urinary tract is entered, or where prosthetic material is implanted	YES	<p>If entry into the bowel lumen is not expected, use:</p> <p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS</p> <p>gentamicin (adult and child) 2 mg/kg intravenously over 3 to 5 minutes, within the 120 minutes before surgical incision</p> <p>In cases of inadvertent rectal injury, add immediately to the above regimen:</p> <p>metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, as a single dose</p> <p>If entry into the bowel lumen is expected, use:</p> <p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS</p> <p>metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision</p>	Examples of prosthetic material are penile prostheses, artificial urinary sphincters and mesh. If gentamicin is used and the patient is obese, use adjusted body weight to calculate the dose.

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
open or laparoscopic urological procedures in which the urinary tract is not entered and prosthetic material is not implanted	NO		Examples of open or laparoscopic urological procedures in which the urinary tract is not entered are vasectomy, scrotal surgery and varicocele ligation.
prostate biopsy	YES	For the transperineal route , use: cefazolin 2 g intravenously, within the 60 minutes before the procedure For the transrectal route , use: ciprofloxacin 500 mg orally, 120 minutes before the procedure	
prostate fiducial marker insertion	YES	If placed via the transperineal route , use: cefazolin 2 g intravenously, within the 60 minutes before the procedure If placed via the transrectal route , use: ciprofloxacin 500 mg orally, 120 minutes before the procedure	
transurethral resection of the prostate	YES	gentamicin (adult and child) 2 mg/kg intravenously over 3 to 5 minutes, within the 120 minutes before the procedure	If the patient is obese, use adjusted body weight to calculate the gentamicin dose.
uncomplicated cystoscopic diagnostic procedures	ONLY if there are risk factors for postoperative infection	gentamicin (adult and child) 2 mg/kg intravenously over 3 to 5 minutes, within the 120 minutes before the procedure	Risk factors for postoperative infection include urinary tract obstruction or abnormalities, urinary stones, and indwelling or externalised catheters. If the patient is obese, use adjusted body weight to calculate the gentamicin dose.
ureteroscopy procedures	YES	gentamicin (adult and child) 2 mg/kg intravenously over 3 to 5 minutes, within the 120 minutes before the procedure	If the patient is obese, use adjusted body weight to calculate the gentamicin dose.
urodynamic studies	NO		
endoscopic procedures other than those listed above	ONLY if there are risk factors for postoperative infection	gentamicin (adult and child) 2 mg/kg intravenously over 3 to 5 minutes, within the 120 minutes before the procedure	Risk factors for postoperative infection include urinary tract obstruction or abnormalities, urinary stones, and indwelling or externalised catheters.

Surgical antibiotic prophylaxis: vascular surgery

This table summarises information in *Therapeutic Guidelines* about the indications and first-line regimens for surgical antibiotic prophylaxis. See [Therapeutic Guidelines](#) for detailed and up-to-date information, including adjustment of antibiotic choice, dosing and timing based on specific patient factors.

Infective endocarditis prophylaxis may be required for patients with specific cardiac conditions who are undergoing a procedure for which surgical antibiotic prophylaxis is not required—see [Therapeutic Guidelines](#) for indications and regimens.

If surgical antibiotic prophylaxis is indicated, a single preoperative dose of antibiotic(s) is sufficient for the significant majority of procedures. In specific circumstances, a repeat intraoperative dose may also be necessary—see [Therapeutic Guidelines](#) for discussion.

For a small minority of procedures (see Notes column), there are inadequate data to show that a single dose of surgical antibiotic prophylaxis is as effective as 24 hours of prophylaxis. For these procedures, postoperative doses can be considered but prophylaxis should not continue beyond 24 hours.

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions).

Procedures	Is surgical antibiotic prophylaxis indicated?	Surgical antibiotic prophylaxis regimens	Notes
brachial or carotid artery procedures not involving insertion of prosthetic material	NO		
limb amputation	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if limb is ischaemic</p> <p>metronidazole 500 mg (child: 12.5 mg/kg up to 500 mg) intravenously, within the 120 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	<p>Patients undergoing a vascular procedure that is a reoperation (return to theatre or early revision) are at increased risk of being colonised or infected with MRSA. For other risk factors for MRSA infection, see Therapeutic Guidelines.</p> <p>If the patient is being treated with antibiotic therapy for an infected limb, additional antibiotic prophylaxis may not be required—see Therapeutic Guidelines for discussion.</p>
varicose vein procedures	NO		
vascular reconstructive surgery involving the abdominal aorta or lower limbs	YES	<p>cefazolin 2 g (child: 30 mg/kg up to 2 g) intravenously, within the 60 minutes before surgical incision</p> <p>PLUS if patient known to be or at increased risk of being colonised or infected with MRSA</p> <p>vancomycin (adult and child) 15 mg/kg intravenously, started within the 120 minutes before surgical incision (recommended infusion rate 10 mg/minute)</p>	<p>Patients undergoing a vascular procedure that is a reoperation (return to theatre or early revision) are at increased risk of being colonised or infected with MRSA. For other risk factors for MRSA infection, see Therapeutic Guidelines.</p>

MRSA = methicillin-resistant *Staphylococcus aureus*