

# SUMMARY OF ANTIMICROBIAL PRESCRIBING GUIDANCE

## MANAGING COMMON INFECTIONS (Adults)

Condition	Links
<b>Upper Respiratory Tract Infections</b>	
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Influenza	
Otitis Externa (Acute)	
Otitis Media (Acute)	
Scarlet Fever (GAS)	
Sinusitis	
<b>Lower Respiratory Tract Infections</b>	
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<b>Gastrointestinal Tract Infections</b>	
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Clostridioides Difficile Infection	
Helicobacter Pylori	
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Pelvic Inflammatory Disease	
Trichomoniasis	
Vaginal Candidiasis	

Condition	Links
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Tick Bites (Lyme Disease)	
Varicella Zoster / Chickenpox   Herpes Zoster / Shingles	
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**Links to relevant sections in document**

**Links to external visual summaries or information**

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**Adapted by the Birmingham Antibiotic Advisory Group**

- Consideration given to local resistance patterns, cost effectivity, and expert opinion.
- See BNF for appropriate use and dosing in specific populations, for example, hepatic impairment, renal impairment, pregnancy, and breastfeeding.
- In this guideline dose ranges have been removed to eliminate dosage choice. This is favourable from an antimicrobial resistance perspective without compromising antimicrobial treatment efficacy. Recommendations have been reviewed by a microbiology specialist and are in keeping with the evidence available.
- Penicillin allergy is defined as rash (mild) or angioedema/anaphylaxis (severe). Please seek specialist advice if unsure. GI upset is not defined as an allergy to penicillin.
- For further information on this topic please refer to the: College of General Dentistry and Faculty of Dental Surgery (FDS) of the Royal College of Surgeons of England - Antimicrobial Prescribing in Dentistry: Good Practice Guidelines.
- The available evidence is insufficient to confirm with certainty whether there is a small increased risk of malformations (birth defects) or miscarriage when macrolides are taken in early pregnancy.: <https://www.gov.uk/government/publications/public-assessment-report-safety-of-macrolide-antibiotics-in-pregnancy-a-review-of-the-epidemiological-evidence/safety-of-macrolide-antibiotics-in-pregnancy-a-review-of-the-epidemiological-evidence>

The microbiology processing of samples across the West Midlands will be performed by the local hospitals’ laboratories. The laboratories maintain their reporting standards in line with European testing criteria. As part of the accreditation process for the lab, we have updated the way that we report antibiotic sensitivities for bacteria and fungi recovered from clinical specimens.

**Sensitivities are reported qualitatively in three forms:**


- “S” – sensitive. This antibiotic has proven sensitive in vitro. The antibiotic may be used to treat the infection at standard dosing. The penetration of the drug and dose adjustment for patients’ weight and renal function should be considered before prescribing.
- “I” – sensitive, increased exposure. The antibiotic is less sensitive in vitro. The antibiotic may be used to treat the infection by adjusting the dose regimen or by adjusting its concentration at the site of infection. This can be achieved by higher doses or more frequent administration.
- “R” – resistant. The antibiotic is resistant in vitro. There is a high likelihood of therapeutic failure even when there is increased exposure.

Increasing dose adjustment should be within the dosing regimens listed in the BNF or within the Summary of product characteristics for each antibiotic.

**Abbreviations:**


BD: Twice a day	MALToma: Mucosa-Associated Lymphoid Tissue lymphoma	OD: Once daily
eGFR: Estimated glomerular filtration rate	m/r: Modified Release	QDS: 4 times a day.
IM: Intramuscular	MRSA: Methicillin-Resistant Staphylococcus Aureus	Stat: Given immediately
IV: Intravenous	MSM: Men who have sex with men	TDS: 3 times a day

**UPPER RESPIRATORY TRACT INFECTIONS**


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Acute Sore Throat</b>   <a href="#">Visual Summary</a>  <a href="#">Pharmacy First</a> (5 years and over)	Advise paracetamol, or if preferred and suitable, ibuprofen for pain.  Medicated lozenges may help pain in adults.  Use <a href="#">FeverPAIN</a> or <a href="#">Centor</a> to assess symptoms: <ul style="list-style-type: none"> <li>• FeverPAIN 0-1 or Centor 0-2: no antibiotic;</li> <li>• <b>FeverPAIN 2-3</b>: no or back-up antibiotic;</li> <li>• <b>FeverPAIN 4-5 or Centor 3-4</b>: immediate or back-up antibiotic.</li> </ul> <p><b>Systemically very unwell or high risk of complications:</b> immediate antibiotic.</p> <p>*5 days of phenoxymethylpenicillin may be enough for symptomatic cure; but a 10-day course may increase the chance of microbiological cure.</p>	<b>ADULT</b>		
		<b>First choice:</b>		
		Phenoxymethylpenicillin	500mg QDS	Please note 1000mg BD is also acceptable for compliance
<b>Penicillin allergy:</b>				
Clarithromycin <b>OR</b>	500mg BD		5 days	
Erythromycin (if macrolide needed in pregnancy; consider benefit/harm)	500mg QDS		5 days	

INFECTION	
<b>Influenza</b>	For management guidance please refer to <a href="#">UKHSA guidance on Influenza: treatment and prophylaxis using anti-viral agents</a> .  <p><b>Annual vaccination is essential for all those ‘at risk’ of influenza.</b> Antivirals are not recommended for healthy adults, if physician feels patient is at serious risk of developing complications, then treat.</p> <p>Treat ‘at risk’ patients with 5 days oseltamivir 75mg BD, when influenza is circulating in the community, and ideally within 48 hours of onset (36 hours for zanamivir treatment in children). Prescribing details can be found within UKHSA guideline for specific clinical scenarios.</p> <p><b>At risk:</b> see link above for definitions</p>


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Otitis Externa (Acute)</b>	<p><b>First line:</b> analgesia for pain relief, and apply localised heat (such as a warm flannel).</p> <p><b>Second line:</b> topical acetic acid or topical antibiotic +/- steroid: similar cure at 7 days</p> <p><b>If cellulitis or disease extends outside ear canal,</b> or systemic signs of infection, start oral flucloxacillin and refer to exclude malignant otitis externa.</p>	<b>ADULT</b>		
		<b>First choice:</b>		
		Analgesia for pain relief, and apply localised heat (such as a warm flannel).		
		<b>Second choice:</b>		
		Topical acetic acid 2% OR	1 spray TDS ( <a href="#">Earcalm®</a> )	7 days
		Topical neomycin sulphate with corticosteroid (consider safety issues if perforated tympanic membrane)	3 drops TDS ( <a href="#">various</a> ) or 1 spray TDS ( <a href="#">Otomize®</a> )	7 days (min) to 14 days (max)  7 days
<b>If cellulitis:</b>				
Flucloxacillin	If severe: 500mg QDS	7 days		


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Otitis Media (Acute)</b>   <a href="#">Visual Summary</a>  <a href="#">Pharmacy First</a> (1-17 years only)	Regular paracetamol or ibuprofen for pain (right dose for age or weight at the right time and maximum doses for severe pain). Consider ear drops containing an anaesthetic and an analgesic for pain if an immediate antibiotic is not given and there is no ear drum perforation or otorrhoea.  <b>Otorrhoea or under 2 years with infection in both ears:</b> no, back-up or immediate antibiotic. <b>Otherwise:</b> no or back-up antibiotic. <b>Systemically very unwell or high risk of complications:</b> immediate antibiotic.  <b>Macrolides in Pregnancy:</b> The available evidence is insufficient to confirm with certainty whether there is a small increased risk of malformations (birth defects) or miscarriage when macrolides are taken in early pregnancy. <a href="https://www.gov.uk/government/publications/public-assessment-report-safety-of-macrolide-antibiotics-in-pregnancy-a-review-of-the-epidemiological-evidence/safety-of-macrolide-antibiotics-in-pregnancy-a-review-of-the-epidemiological-evidence">https://www.gov.uk/government/publications/public-assessment-report-safety-of-macrolide-antibiotics-in-pregnancy-a-review-of-the-epidemiological-evidence/safety-of-macrolide-antibiotics-in-pregnancy-a-review-of-the-epidemiological-evidence</a>	<b>ADULT</b>		
		<b>First choice:</b>		
		Amoxicillin	500mg TDS	5 days
		<b>Penicillin allergy:</b>		
		Clarithromycin OR Erythromycin (if macrolide needed in pregnancy; consider benefit/harm – see left)	500mg BD  500mg QDS	5 days  5 days
<b>Second choice:</b>				
Co-amoxiclav	625mg TDS	5 days		


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Scarlet fever (GAS)</b>	<b>Prompt treatment</b> with appropriate antibiotics significantly reduces the risk of complications. Vulnerable individuals (immunocompromised, the comorbid, or those with skin disease) are at increased risk of developing complications.  For management guidance please refer to NICE/Clinical Knowledge Summaries: <a href="#">Scarlet Fever</a>  <b>Optimise analgesia and give safety netting advice</b>	<b>ADULT</b>		
		<b>First choice:</b>		
		Phenoxymethylpenicillin	500mg QDS	10 Days
		<b>Penicillin allergy:</b>		
Clarithromycin	500mg BD	5 Days		


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Sinusitis</b></p> <p> <a href="#">Visual Summary</a></p> <p><a href="#">Pharmacy First</a> (12 years and over)</p>	<p>Advise paracetamol or ibuprofen for pain. Little evidence that nasal saline or nasal decongestants help, but people may want to try them.</p> <p><b>Symptoms for 10 days or less:</b> no antibiotic. <b>Symptoms with no improvement for more than 10 days:</b> no antibiotic or back-up antibiotic depending on likelihood of bacterial cause. Consider high-dose nasal corticosteroid (if over 12 years).</p> <p><b>Systemically very unwell or high risk of complications:</b> immediate antibiotic.</p>	<b>ADULT</b>		
		<b>First choice:</b>		
		Phenoxymethylpenicillin	500mg QDS	5 days
		<b>Penicillin allergy:</b>		
		Doxycycline (not in under 12s) OR	200mg on day 1, then 100mg OD	5 days
		Clarithromycin OR	500mg BD	5 days
Erythromycin (if macrolide needed in pregnancy; consider benefit/harm)	500mg QDS	5 days		
<b>Second choice or first choice if systemically very unwell or high risk of complications:</b>				
Co-amoxiclav	500/125mg TDS	5 days		


**LOWER RESPIRATORY TRACT INFECTIONS**

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Acute Cough</b></p> <p> <a href="#">Visual Summary</a></p>	<p>Some people may wish to try honey (in over 1s), the herbal medicine pelargonium (in over 12s), cough medicines containing the expectorant guaifenesin (in over 12s) or cough medicines containing cough suppressants, except codeine, (in over 12s). These self-care treatments have limited evidence for the relief of cough symptoms.</p> <p><b>Acute cough with upper respiratory tract infection:</b> no antibiotic.  <b>Acute bronchitis:</b> no routine antibiotic.  <b>Acute cough and higher risk of complications (at face-to-face examination):</b> immediate or back-up antibiotic.  <b>Acute cough and systemically very unwell (at face to face examination):</b> immediate antibiotic.</p> <p>Higher risk of complications includes people with pre-existing comorbidity; young children born prematurely; people over 65 with 2 or more of, or over 80 with 1 or more of: hospitalisation in previous year, type 1 or 2 diabetes, history of congestive heart failure, current use of oral corticosteroids.</p> <p>Do not offer a mucolytic, an oral or inhaled bronchodilator, or an oral or inhaled corticosteroid unless otherwise indicated.</p>	<p><b>ADULT</b></p> <p><b>First choice:</b></p> <p>Doxycycline</p> <p><b>Alternative first choices:</b></p> <p>Amoxicillin (preferred if pregnant) OR Clarithromycin OR Erythromycin (if macrolide needed in pregnancy; consider benefit/harm)</p>	<p>200mg on day 1, then 100mg OD</p> <p>500mg TDS</p> <p>500mg BD</p> <p>500mg QDS</p>	<p>5 days</p> <p>5 days</p> <p>5 days</p> <p>5 days</p>


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Bronchiectasis: Acute Exacerbation (non-cystic fibrosis)</b></p> <p> <a href="#">Visual Summary</a></p>	<p>Send a sputum sample for culture and susceptibility testing. Offer an antibiotic.</p> <p>When choosing an antibiotic, take account of severity of symptoms and risk of treatment failure. People who may be at higher risk of treatment failure include people who have had repeated courses of antibiotics, a previous sputum culture with resistant or atypical bacteria, or a higher risk of developing complications.</p> <p>Course length is based on severity of bronchiectasis, exacerbation history, severity of exacerbation symptoms, previous culture and susceptibility results, and response to treatment. Do not routinely offer antibiotic prophylaxis to prevent exacerbations.</p> <p>Seek specialist advice for preventing exacerbations in people with repeated acute exacerbations. This may include a trial of antibiotic prophylaxis after a discussion of the possible benefits and harms, and the need for regular review.</p>	<b>ADULT</b>		
		<b>First choice:</b>		
		Amoxicillin (preferred if pregnant) OR	500mg TDS	7 days then review
		Doxycycline (not in under 12s) OR	200mg on day 1, then 100mg OD	
		Clarithromycin	500mg BD	7 days then review
		<b>Alternative choice empirical treatment: (if person at higher risk of treatment failure)</b>		
		Co-amoxiclav OR	500/125mg TDS	7 days then review
		Levofloxacin (adults only: with specialist advice if co-amoxiclav cannot be used; consider safety issues)	500mg OD	7 days then review
		<b>IV antibiotics:</b>		
		Seek specialist advice		
<b>When current susceptibility data available:</b>				
Choose antibiotics accordingly				

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>COPD: Acute Exacerbation</b></p> <p> <a href="#">Visual Summary</a></p>	<p>Many exacerbations are not caused by bacterial infections so will not respond to antibiotics.</p> <p>Consider an antibiotic, but only after taking into account</p> <ul style="list-style-type: none"> <li>• severity of symptoms (particularly sputum colour changes and increases in volume or thickness)</li> <li>• need for hospitalisation</li> <li>• previous exacerbations, hospitalisations, and risk of complications</li> <li>• previous sputum culture and susceptibility results</li> <li>• and risk of resistance with repeated courses.</li> </ul> <p>Some people at risk of exacerbations may have antibiotics to keep at home as part of their exacerbation action plan.</p>	<p><b>ADULT</b></p> <p><b>First choice:</b></p> <p>Amoxicillin <b>OR</b></p> <p>Doxycycline <b>OR</b></p> <p>Clarithromycin</p> <p><b>Second choice:</b></p> <p>Use alternative first choice</p> <p><b>Alternative choice (if person at higher risk of treatment failure):</b></p> <p>Co-amoxiclav <b>OR</b></p> <p>Co-trimoxazole <b>OR</b></p> <p>Levofloxacin (with specialist advice if co-amoxiclav or cotrimoxazole cannot be used; consider safety issues)</p> <p><b>IV antibiotics:</b></p> <p>Seek specialist advice</p>	<p>1000mg TDS (see BNF for <a href="#">prescribing in Hepatic / Renal impairment</a>)</p> <p>200mg on day 1, then 100mg OD</p> <p>500mg BD</p> <p>500/125mg TDS</p> <p>960mg BD</p> <p>500mg OD</p>	<p>5 Days</p> <p>5 Days</p> <p>5 Days</p> <p>5 Days</p> <p>5 Days</p> <p>5 Days</p>


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION		
<p><b>Pneumonia: Community Acquired</b></p> <p> <a href="#">Visual Summary</a></p> <p><a href="#">(Continued over the page)</a></p>	<p>Assess severity in adults based on clinical judgement and guided by a mortality risk score (CRB65 or CURB65) when these scores can be calculated:</p> <p><b>Low severity</b> – CRB65 0 or CURB65 0 or 1</p> <p><b>Moderate severity</b> – CRB65 1 or 2 or CURB65 2</p> <p><b>High severity</b> – CRB65 3 or 4 or CURB65 3 to 5.</p> <p>1 point for each parameter:</p> <ul style="list-style-type: none"> <li>• <b>confusion,</b></li> <li>• <b>respiratory rate</b> ≥30/min,</li> <li>• low systolic (&lt;90 mm Hg) or diastolic (≤60 mm Hg) <b>blood pressure,</b></li> <li>• <b>age</b> ≥65 years</li> <li>• <b>blood urea nitrogen</b> &gt;7 mmol/l (<i>CURB65 only</i>)</li> </ul> <p>Offer an antibiotic. Start treatment as soon as possible after diagnosis, within 4 hours (within 1 hour if sepsis suspected and person meets any high risk criteria – see the <a href="#">NICE guideline on sepsis</a>).</p> <p>When choosing an antibiotic, take account of severity, risk of complications, local antimicrobial resistance and surveillance data, recent antibiotic use, and microbiological results.</p> <p><b>NOTE: Stop antibiotics after 5 days unless microbiological results suggest a longer course is needed or the person is not clinically stable.</b></p>	<p><b>ADULT: Low Severity</b></p>				
			<p><b>First choice:</b></p>			
		Amoxicillin		500mg TDS (higher doses can be used, see BNF)	5 days (Key Points Note)	
		<p><b>Alternative First Choice:</b></p>				
		Doxycycline (not in under 12s) <b>OR</b>	200mg on day 1, then 100mg OD	5 days (Key Points Note)		
		Clarithromycin <b>OR</b>	500mg BD	5 days (Key Points Note)		
		Erythromycin (if macrolide needed in pregnancy; consider benefit/harm)	500mg QDS	5 days (Key Points Note)		
		<p><b>ADULT: Moderate Severity</b></p>				
		<p><b>First choice</b></p>				
		Amoxicillin <b>AND (if atypical pathogens suspected)</b>	1000mg TDS (see BNF for <a href="#">prescribing in Hepatic/Renal impairment</a> )	5 days (Key Points Note)		
Clarithromycin <b>OR</b>	500mg BD	5 days (Key Points Note)				
Erythromycin (if macrolide needed in pregnancy; consider benefit/harm)	500mg QDS	5 days (Key Points Note)				
<p><b>Alternative First choice:</b></p>						
Doxycycline <b>OR</b>	200mg on day 1, then 100mg OD	5 days (Key Points Note)				
Clarithromycin	500mg BD	5 days (Key Points Note)				


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Pneumonia: Community Acquired</b></p> <p> <a href="#">Visual Summary</a></p> <p><a href="#">(Continued from previous page)</a></p>	<p>See <a href="#">Keys Point</a> on previous page</p>	<p><b>ADULT: High Severity</b></p> <p><b>First choice:</b></p> <p>Co-amoxiclav <b>AND (if atypical pathogens suspected)</b></p> <p>Clarithromycin <b>OR</b></p> <p>Erythromycin (if macrolide needed in pregnancy; consider benefit/harm)</p> <p><b>Alternative First Choice:</b></p> <p>Levofloxacin (consider safety issues)</p> <p><b>IV antibiotics:</b></p> <p>Seek specialist advice</p>	<p>500/125mg TDS</p> <p>500mg BD</p> <p>500mg QDS</p> <p>500mg OD</p>	<p>5 days (Key Points Note)</p> <p>5 days (Key Points Note)</p> <p>5 days (Key Points Note)</p> <p>5 days (Key Points Note)</p>


INFECTION	
<p><b>COVID-19</b></p>	<p>If a person in the community has suspected or confirmed secondary bacterial pneumonia, start antibiotic treatment as soon as possible, see <a href="#">community-acquired pneumonia</a> for choices.</p> <p>In hospital, start empirical antibiotics if there is clinical suspicion of a secondary bacterial infection in people with COVID-19, see <a href="#">hospital-acquired pneumonia</a> for choices. Start antibiotics as soon as possible after establishing a diagnosis of secondary bacterial pneumonia, and certainly within 4 hours.</p> <p>Start treatment within 1 hour if the person has suspected sepsis and meets any of the high-risk criteria for this outlined in the <a href="#">NICE guideline on sepsis</a>.</p> <p><i>For detailed information, see the <a href="#">NICE guideline on managing COVID-19</a>.</i></p>


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION	
<p><b>Pneumonia: Hospital Acquired</b></p> <p> <a href="#">Visual Summary</a></p>	<p>If symptoms or signs of pneumonia start within 48 hours of hospital admission, see <a href="#">community acquired pneumonia</a>.</p> <p>Offer an antibiotic. Start treatment as soon as possible after diagnosis, within 4 hours (within 1 hour if sepsis suspected and person meets any high risk criteria – see the <a href="#">NICE guideline on sepsis</a>).</p> <p>When choosing an antibiotic, take account of severity of symptoms or signs, number of days in hospital before onset of symptoms, risk of developing complications, local hospital and ward-based antimicrobial resistance data, recent antibiotic use and microbiological results, recent contact with a health or social care setting before current admission, and risk of adverse effects with broad spectrum antibiotics.</p> <p>No validated severity assessment tools are available. Assess severity of symptoms or signs based on clinical judgement.</p> <p>Higher risk of resistance includes relevant comorbidity (such as severe lung disease or immunosuppression), recent use of broad spectrum antibiotics, colonisation with multi-drug resistant bacteria, and recent contact with health and social care settings before current admission.</p> <p>If symptoms or signs of pneumonia start within days 3 to 5 of hospital admission in people not at higher risk of resistance, consider following community acquired pneumonia for choice of antibiotic.</p>	<b>ADULT: (non-severe and not higher risk of resistance)</b>			
		<b>First choice:</b>			
		Co-amoxiclav	500/125 mg TDS	5 days then review	
		<b>Alternative First Choice</b>			
		Choice based on specialist microbiological advice and local resistance data. Options include:			
Doxycycline	200mg on day 1, then 100mg OD	5 days then review			
Co-trimoxazole	960mg BD	5 days then review			
Levofloxacin (only if switching from IV levofloxacin with specialist advice; consider safety issues)	500mg OD	5 days then review			
<b>For first choice IV antibiotics (severe or higher risk of resistance) and antibiotics to be added if suspected or confirmed MRSA infection see visual summary</b>					


**URINARY TRACT INFECTIONS**


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Lower urinary tract infection</b></p> <p> <a href="#">Visual Summary</a></p> <p><a href="#">Pharmacy First</a> (uncomplicated UTI in women 16-64 years, non-pregnant)</p> <p><a href="#">Continued over the page</a></p>	<p>Advise paracetamol or ibuprofen for pain and hydration.</p> <p><b>Non-pregnant women:</b> back up antibiotic (to use if no improvement in 48 hours or symptoms worsen at any time) or immediate antibiotic.</p> <p><b>Pregnant women, men, children, or young people:</b> immediate antibiotic.</p> <p>When considering antibiotics, take account of severity of symptoms, risk of complications, previous urine culture and susceptibility results, previous antibiotic use which may have led to resistant bacteria and local antimicrobial resistance data.</p> <p>If people have symptoms of pyelonephritis (such as fever) or a complicated UTI, see <a href="#">acute pyelonephritis</a> (upper urinary tract infection) for antibiotic choices.</p> <p><i>For detailed information click on the visual summary. See also the <a href="#">NICE guideline on urinary tract infection in under 16s: diagnosis and management</a> and the UK Health Security Agency <a href="#">urinary tract infection: diagnostic tools for primary care</a>.</i></p> <p><b>Consider differential diagnosis to infection in menopausal patients</b></p>	<b>ADULT: Non-Pregnant Women</b>		
		<b>First Choice:</b>		
		Nitrofurantoin (if eGFR ≥45 ml/minute) <b>OR</b>	100mg m/r BD (or if unavailable 50mg QDS)	3 days
		Trimethoprim (only if culture results available and susceptible)	200mg BD	3 days
		<b>Second choice:</b>		
		Pivmecillinam (a penicillin) <b>OR</b>	400mg initial dose, then 200mg TDS	3 days
		Fosfomycin	3g single dose sachet	Single dose
		<b>ADULT: Pregnant Women</b>		
		<b>First choice:</b>		
		Nitrofurantoin (avoid at term) – if eGFR ≥45 ml/minute	100mg m/r BD (or if unavailable 50mg QDS)	7 days
<b>Second choice:</b>				
Amoxicillin (only if culture results available and susceptible) <b>OR</b>	500mg TDS	7 Days		
Cefalexin	500mg BD	7 Days		
<b>Treatment of asymptomatic bacteriuria in pregnant women:</b>				
Choose from nitrofurantoin (avoid at term), amoxicillin or cefalexin based on recent culture and susceptibility results				

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Lower urinary tract infection</b>   <a href="#">Visual Summary</a>  <a href="#">Continued from previous page</a>	See <a href="#">Key Notes</a> Above	<b>ADULT: Men</b>		
		<b>First Choice:</b>		
		Nitrofurantoin (if eGFR ≥45 ml/minute) <b>OR</b>	100mg m/r BD (or if unavailable 50mg QDS)	7 days
		<b>Second choice:</b>		
		Consider alternative diagnoses basing antibiotic choice on recent culture and susceptibility results.		
		Trimethoprim (only if culture results available and susceptible) 200mg BD 7 days		

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Acute prostatitis</b>   <a href="#">Visual Summary</a>	Advise paracetamol (+/- low-dose weak opioid) for pain, or ibuprofen if preferred and suitable.  Offer antibiotic.  Review antibiotic treatment after 14 days and either stop antibiotics or continue for a further 14 days if needed (based on assessment of history, symptoms, clinical examination, urine, and blood tests).	<b>ADULT</b>		
		<b>First choice:</b>		
		Ciprofloxacin (consider safety issues) <b>OR</b>	500mg BD	14 days then review
		<b>Second choice (after discussion with specialist):</b>		
		Levofloxacin (consider safety issues) <b>OR</b>	500mg OD	14 days then review
		Co-trimoxazole	960mg BD	14 days then review
		<b>IV antibiotics</b>		
		See specialist advice		

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Acute pyelonephritis</b> (upper urinary tract)</p> <p> <a href="#">Visual Summary</a></p>	<p>Advise paracetamol (+/- low-dose weak opioid) for pain for people over 12.</p> <p>Offer an antibiotic.</p> <p>When prescribing antibiotics, take account of severity of symptoms, risk of complications, previous urine culture and susceptibility results, previous antibiotic use which may have led to resistant bacteria and local antimicrobial resistance data.</p> <p>Avoid antibiotics that don't achieve adequate levels in renal tissue, such as nitrofurantoin.</p> <p><i>For detailed information click on the visual summary. See also NICE guideline <a href="#">Pyelonephritis (acute): antimicrobial prescribing</a> and the UK Health Security Agency <a href="#">urinary tract infection: diagnostic tools for primary care</a>.</i></p> <p><i>Safety netting advice: if pregnant febrile immediate referral to secondary care services.</i></p>	<b>ADULT: Non-Pregnant Women and Men</b>		
		<b>First choice:</b>		
		Cefalexin <b>OR</b>	1000mg BD (up to 1.5g QDS for severe infections)	7 days
		Co-amoxiclav (only if culture results available and susceptible) <b>OR</b>	500/125mg TDS	7 days
		Trimethoprim (only if culture results available and susceptible) <b>OR</b>	200mg BD	14 days
		Ciprofloxacin (consider safety issues)	500mg BD	7 days
		<b>Second Line or IV antibiotics</b>		
		Seek specialist advice		
		<b>ADULT: Pregnant Women</b>		
		<b>First choice</b>		
Cefalexin  Give appropriate safety netting advice	1000mg BD (up to 1.5 QDS for severe infections)	7 Days		
<b>Second choice or IV antibiotics</b>				
See specialist advice				

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Recurrent urinary tract infection</b></p> <p> <a href="#">Visual Summary</a></p>	<p>First advise about behavioural and personal hygiene measures, and self-care (with D-mannose or cranberry products) to reduce the risk of UTI.</p> <p>For perimenopausal / menopausal / postmenopausal women, if no improvement, consider <b>vaginal oestrogen</b> (review within 12 months).</p> <p>For non-pregnant women, if no improvement, consider <b>single-dose antibiotic prophylaxis</b> for exposure to a trigger (review within 6 months).</p> <p>For non-pregnant women, if no improvement, consider <b>methenamine hippurate</b> as alternative to daily antibiotics (review within 6 months)</p> <p>For non-pregnant women (if no improvement) consider a trial of <b>daily antibiotic prophylaxis</b> (review within 3 months).</p> <p><b>Refer for specialist opinion, anyone with:</b></p> <ul style="list-style-type: none"> <li>recurrent UTI of unknown cause</li> <li>recurrent UTI and suspected cancer</li> <li>recurrent upper UTI</li> <li>recurrent lower UTI in: <ul style="list-style-type: none"> <li>men, trans women and non-binary people with a male genitourinary system, who are aged 16 and over</li> <li>pregnant women, and pregnant trans men and non-binary people</li> <li>children and young people.</li> </ul> </li> </ul> <p><i>For detailed information click on the visual summary (left). See also the <a href="#">NICE guideline on urinary tract infection in under 16s: diagnosis and management</a> and the UK Health Security Agency <a href="#">urinary tract infection: diagnostic tools for primary care</a>.</i></p> <p><i>For trans men and non-binary people with a female urinary system, treat as per guidance for women and refer to NICE guideline on recurrent UTI for when to refer.</i></p>	<p><b>ADULT:</b></p> <p><b>First choice antibiotic prophylaxis</b> <b>BUT SEE LEFT FOR WHEN TO CONSIDER ANTIBIOTICS</b></p> <p>Trimethoprim (avoid in pregnancy) <b>OR</b></p> <p>Nitrofurantoin (avoid at term) - if eGFR <math>\geq</math>45 ml/minute</p> <p><b>Second choice antibiotic prophylaxis:</b></p> <p>Amoxicillin <b>OR</b></p> <p>Cefalexin</p>	<p>200mg single dose when exposed to a trigger or 100mg at night</p> <p>100mg single dose when exposed to a trigger or 50 to 100mg at night</p> <p>500mg single dose when exposed to a trigger or 250mg at night</p> <p>500mg single dose when exposed to a trigger or 125mg at night</p>	<p>Review in 3 months (BAAG opinion)</p> <p>Review in 3 months (BAAG opinion)</p> <p>Review in 3 months (BAAG opinion)</p> <p>Review in 3 months (BAAG opinion)</p>

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Catheter associated urinary tract infection</b></p> <p> <a href="#">Visual Summary</a></p>	<p>Antibiotic treatment is not routinely needed for asymptomatic bacteriuria in people with a urinary catheter.</p> <p>Consider removing or, if not possible, changing the catheter if it has been in place for more than 7 days. But do not delay antibiotic treatment.</p> <p>Advise paracetamol for pain.</p> <p>Advise drinking enough fluids to avoid dehydration.</p> <p>Offer an antibiotic for a symptomatic infection. When prescribing antibiotics, take account of severity of symptoms, risk of complications, previous urine culture and susceptibility results, previous antibiotic use which may have led to resistant bacteria and local antimicrobial resistance data.</p> <p>Do not routinely offer antibiotic prophylaxis to people with a short-term or long-term catheter.</p> <p><i>For detailed information click on the visual summary. See also the <a href="#">UK Health Security Agency urinary tract infection: diagnostic tools for primary care</a>.</i></p>	<b>ADULT: Non-Pregnant Women and Men</b>		
		<b>First Choice if no upper UTI symptoms:</b>		
		Nitrofurantoin (if eGFR ≥45 ml/minute) <b>OR</b>	100mg m/r BD (or if unavailable 50mg QDS)	7 days
		Trimethoprim (only if culture results available and susceptible) <b>OR</b>	200mg BD	7 days
		Amoxicillin (only if culture results available and susceptible)	500mg TDS	7 days
		<b>Second Choice if no upper UTI symptoms:</b>		
		Pivmecillinam (a penicillin)	400mg initial dose, then 200mg TDS	7 days
		<b>First Choice if upper UTI symptoms</b>		
		Cefalexin <b>OR</b>	1000mg BD (up to 1.5g QDS for severe infections)	7 Days
		Co-amoxiclav (only if culture results available and susceptible) <b>OR</b>	500/125mg TDS	7 Days
		trimethoprim (only if culture results available and susceptible) <b>OR</b>	200mg BD	14 Days
		ciprofloxacin (consider safety issues)	500mg BD	7 Days
		<b>IV Antibiotics</b>		
		See specialist advice		
<b>ADULT: Pregnant Women</b>				
<b>First Choice:</b>				
Cefalexin	1000mg BD (up to 1.5g QDS for severe infections)	7 Days		
<b>Second choice or IV antibiotics:</b>				
Seek specialist advice				

**MENINGITIS**


**INFECTION**

<p><b>Suspected meningococcal disease</b></p>	<p>For management guidance please refer to <a href="https://www.gov.uk/government/guidance/meningococcal-disease-guidance-on-public-health-management">Meningococcal disease: guidance on public health management - GOV.UK (www.gov.uk)</a></p> <p>Transfer all patients to hospital immediately. If time before hospital admission, if suspected meningococcal septicaemia or non-blanching rash, give IV benzylpenicillin as soon as possible. Do not give IV antibiotics if there is a definite history of anaphylaxis; rash is not a contraindication. Penicillin allergic, immediate transfer.</p> <p>IM / IV benzylpenicillin - Child &lt;1 year: 300mg Child 1 to 9 years: 600mg Adult/child 10+ years: 1.2g. Stat dose; give IM, if vein cannot be accessed</p>
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**INFECTION**

<p><b>Prevention of secondary case of meningitis</b></p>	<p>For management guidance please refer to <a href="https://www.gov.uk/government/guidance/meningococcal-disease-guidance-on-public-health-management">Meningococcal disease: guidance on public health management - GOV.UK (www.gov.uk)</a></p> <p>Only prescribe following advice from your local <a href="#">health protection specialist/consultant</a>: Call 0344 2253560 (option 2)</p> <p><b>West Midlands HPTeam</b></p> <p>Out of hours: contact on-call doctor: 01384 679 031</p> <p>Expert advice is available for managing clusters of meningitis. Please alert the appropriate organisation to any cluster situation.</p> <p><a href="#">UKHSA Infectious Disease</a> - Tel: 0208 200 4400</p>
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**GASTROINTESTINAL TRACT INFECTIONS**


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Acute diverticulitis</b></p> <p> <a href="#">Visual Summary</a></p>	<p><b>Acute diverticulitis and systemically well:</b> Consider no antibiotics, offer simple analgesia (for example paracetamol), advise to re-present if symptoms persist or worsen.</p> <p><b>Acute diverticulitis and systemically unwell, immunosuppressed or significant comorbidity:</b> offer an antibiotic. Give oral antibiotics if person not referred to hospital for suspected complicated acute diverticulitis. Give IV antibiotics if admitted to hospital with suspected or confirmed complicated acute diverticulitis (including diverticular abscess). If CT-confirmed uncomplicated acute diverticulitis, review the need for antibiotics.</p> <p>* A longer course may be needed based on clinical assessment.</p>	<p><b>ADULT</b></p> <p><b>First Choice if no upper UTI symptoms:</b></p> <p>Co-amoxiclav</p> <p><b>Penicillin allergy or co-amoxiclav unsuitable:</b></p> <p>Cefalexin (caution in penicillin allergy) <b>AND</b> Metronidazole</p> <p><b>Severe penicillin allergy:</b></p> <p>Ciprofloxacin <b>AND</b> Metronidazole</p> <p><b>For IV antibiotics in complicated acute diverticulitis (including diverticular abscess)</b></p> <p>See specialist advice</p>	<p>500/125mg TDS</p> <p>1000mg BD (up to 1.5g QDS for severe infections)</p> <p>400mg TDS</p> <p>500mg BD</p> <p>400mg TDS</p>	<p>5 days* (see Key Points)</p> <p>5 days* (see Key Points)</p> <p>5 days* (see Key Points)</p> <p>5 days* (see Key Points)</p> <p>5 days* (see Key Points)</p>

INFECTION	
<b>Infectious diarrhoea</b>	<p><b>Antibiotic therapy is not usually indicated unless patient is systemically unwell.</b> If systemically unwell and campylobacter suspected (such as undercooked meat and abdominal pain), consider clarithromycin 500mg BD for 5 days, if treated early (within 3 days).</p> <p>Note - Refer previously healthy children with acute painful or bloody diarrhoea, to exclude <i>E. coli</i> O157 infection.</p> <p>If giardia is confirmed or suspected – Tinidazole 2g single dose is the treatment of choice, seek specialist advice.</p> <p>Access the supporting evidence and rationales on the <a href="#">PHE website</a>.</p> <p>For management guidance please refer to NICE/Clinical Knowledge Summaries: <a href="#">Gastroenteritis</a></p>

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Oral candidiasis</b>	<p><b>Topical azoles</b> are more effective than topical nystatin.1A+</p> <p>Oral candidiasis is rare in immunocompetent adults; consider undiagnosed risk factors, including HIV.</p> <p>Use 50mg fluconazole if extensive/severe candidiasis; if HIV or immunocompromised, use 100mg fluconazole.</p> <p>For management guidance please refer to NICE/Clinical Knowledge Summaries: <a href="#">Candida oral</a></p>	<b>ADULT:</b>		
		<b>First choice:</b>		
		Miconazole oral gel	2.5ml of 24mg/ml QDS (hold in mouth after food)	7 days; continue for 7 days after resolved
		<b>If not tolerated:</b> nystatin suspension	1ml; 100,000units/ml QDS (half in each side)	7 days; continue for 2 days after resolved
		Fluconazole capsules	100mg OD	7 days (14 days if HIV / immunocompromised)

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Threadworm</b>	<p><b>Treat all household contacts at the same time.</b></p> <p><b>Advise hygiene measures for 2 weeks.</b></p> <p>Hand hygiene; pants at night; morning shower, including perianal area.</p> <p>Wash sleepwear, bed linen, and dust and vacuum.</p> <p>See <a href="#">UKTIS advice</a> for use of mebendazole in pregnancy.</p> <p>For management guidance please refer to NICE/Clinical Knowledge Summaries: <a href="#">Threadworm</a></p>	<b>ADULT: Non-Pregnant Women and Men</b>		
		<b>First Choice</b>		
		Mebendazole	100mg stat	1 dose - repeat in 2 weeks if persistent
		<b>ADULT: Pregnant Women (at least in first trimester)</b>		
		<b>First Choice:</b>		
		Only hygiene measure for 6 weeks		

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Traveller's diarrhoea</b>	<p>Prophylaxis rarely, if ever, indicated.</p> <p>Consider <b>standby</b> antimicrobial only for patients at high risk of severe illness, or visiting high-risk areas.</p> <p>For management guidance please refer to NICE/Clinical Knowledge Summaries: <a href="#">Diarrhoea - prevention and advice for travellers</a></p>	<b>ADULT:</b>		
		<b>Standby</b>		
		Private prescription azithromycin	500mg OD	1 to 3 days

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Clostridioides difficile infection</b>   <a href="#">Visual Summary</a>	<p>For suspected or confirmed <i>C. difficile</i> infection, see <a href="#">UK Health Security Agency's guidance on diagnosis and reporting</a>.</p> <p><b>Assess:</b> whether it is a first or further episode, severity of infection, individual risk factors for complications or recurrence (such as age, frailty, or comorbidities).</p> <p><b>Existing antibiotics:</b> review and stop unless essential. If still essential, consider changing to one with a lower risk of <i>C. difficile</i> infection. Review the need to continue: proton pump inhibitors, other medicines with gastrointestinal activity or adverse effects (such as laxatives), medicines that may cause problems if people are dehydrated (such as NSAIDs).</p> <p>Do not offer antimotility medicines such as loperamide.</p> <p>Offer an oral antibiotic to treat suspected or confirmed <i>C. difficile</i> infection.</p> <p>For adults, consider seeking prompt specialist advice from a microbiologist or infectious diseases specialist before starting treatment.</p> <p>If antibiotics have been started for suspected <i>C. difficile</i> infection, and subsequent stool sample tests do not confirm infection, consider stopping these antibiotics.</p>	<b>ADULT</b>		
		<b>First-line for first episode of mild, moderate, or severe</b>		
		Vancomycin	125mg QDS	10 days
		<b>Second-line for first episode of mild, moderate, or severe if vancomycin ineffective</b>		
		Fidaxomicin	200mg BD	10 days
		<b>For further episode within 12 weeks of symptom resolution (relapse)</b>		
		Fidaxomicin	200mg BD	10 Days
		<b>For further episode more than 12 weeks after symptom resolution (recurrence)</b>		
		Vancomycin <b>OR</b>	125mg QDS	10 days
		Fidaxomicin	200mg BD	10 days
<b>For alternative antibiotics if first- and second-line antibiotics are ineffective or for life-threatening infection</b>				
Seek specialist advice				

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION																
<p><b>Helicobacter pylori</b></p> <p>Always test for H.pylori before giving antibiotics. Treat all positives, if known DU, GU, or low-grade MALToma. NNT in non-ulcer dyspepsia.</p> <p>Do not offer eradication for GORD.</p> <p>Do not use clarithromycin, metronidazole or quinolone if used in the past year for any infection.</p> <p>Penicillin allergy: use PPI PLUS clarithromycin PLUS metronidazole. If previous clarithromycin, use PPI PLUS metronidazole PLUS tetracycline hydrochloride.</p> <p>Relapse and no penicillin allergy use PPI PLUS amoxicillin PLUS clarithromycin or metronidazole (whichever was not used first line)</p> <p>Relapse and previous metronidazole and clarithromycin: use PPI PLUS amoxicillin PLUS either tetracycline OR levofloxacin (if tetracycline not tolerated).</p> <p>Relapse and penicillin allergy (no exposure to quinolone): use PPI PLUS metronidazole PLUS levofloxacin.</p> <p>Relapse and penicillin allergy (with exposure to quinolone): use PPI PLUS bismuth salt PLUS metronidazole PLUS tetracycline.</p> <p>Retest for H. pylori: post DU/GU, or relapse after second-line therapy, using UBT or SAT, consider referral for endoscopy and culture.</p> <p>For management guidance please refer to NICE/BNF treatment summaries: <a href="#">Helicobacter pylori infection</a></p>	<p><b>ADULT</b></p> <p><b>Always use PPI First line and first relapse and no penicillin allergy</b></p> <p>PPI <b>PLUS</b> 2 antibiotics</p> <table border="1" data-bbox="1218 379 1836 539"> <tr> <td>Amoxicillin <b>PLUS</b></td> <td>1000mg BD</td> <td rowspan="3">7 days MALToma 14 days</td> </tr> <tr> <td>Clarithromycin <b>OR</b></td> <td>500mg BD</td> </tr> <tr> <td>Metronidazole</td> <td>400mg BD</td> </tr> </table> <p><b>Penicillin allergy:</b></p> <p>PPI <b>PLUS</b> 2 antibiotics</p> <table border="1" data-bbox="1218 643 1836 802"> <tr> <td>Metronidazole <b>PLUS</b></td> <td>400mg BD</td> <td rowspan="2">7 days MALToma 14 days</td> </tr> <tr> <td>Clarithromycin</td> <td>500mg BD</td> </tr> </table> <p><b>Relapse and previous metronidazole and clarithromycin:</b></p> <p>PPI <b>PLUS</b> 2 antibiotics</p> <table border="1" data-bbox="1218 906 1836 1177"> <tr> <td>Amoxicillin <b>PLUS</b></td> <td>1000mg BD</td> <td rowspan="3">7 days MALToma 14 days</td> </tr> <tr> <td>Tetracycline <b>OR</b></td> <td>500mg QDS</td> </tr> <tr> <td>Levofloxacin (if tetracycline cannot be used - consider safety issues)</td> <td>250mg BD</td> </tr> </table> <p><b>Third line:</b></p> <p>Consider specialist advice</p>	Amoxicillin <b>PLUS</b>	1000mg BD	7 days MALToma 14 days	Clarithromycin <b>OR</b>	500mg BD	Metronidazole	400mg BD	Metronidazole <b>PLUS</b>	400mg BD	7 days MALToma 14 days	Clarithromycin	500mg BD	Amoxicillin <b>PLUS</b>	1000mg BD	7 days MALToma 14 days	Tetracycline <b>OR</b>	500mg QDS	Levofloxacin (if tetracycline cannot be used - consider safety issues)	250mg BD
		Amoxicillin <b>PLUS</b>	1000mg BD		7 days MALToma 14 days															
		Clarithromycin <b>OR</b>	500mg BD																	
		Metronidazole	400mg BD																	
		Metronidazole <b>PLUS</b>	400mg BD	7 days MALToma 14 days																
		Clarithromycin	500mg BD																	
		Amoxicillin <b>PLUS</b>	1000mg BD	7 days MALToma 14 days																
		Tetracycline <b>OR</b>	500mg QDS																	
		Levofloxacin (if tetracycline cannot be used - consider safety issues)	250mg BD																	

**GENITAL TRACT INFECTIONS**

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION						
<p><b>Chlamydia trachomatis/ urethritis</b></p>	<p>Opportunistically screen all sexually active patients aged 15 to 24 years for chlamydia annually and on change of sexual partner. If positive, treat index case, refer to GUM and initiate partner notification, testing and treatment. <b>Consider STI screening</b> as per local laboratory guidelines.</p> <p>As single dose azithromycin has led to increased resistance in GU infections, doxycycline should be used first line for chlamydia and urethritis.</p> <p>Advise patient with chlamydia to abstain from sexual intercourse until doxycycline is completed or for 7 days after treatment with azithromycin (14 days after azithromycin started and until symptoms resolved if urethritis). If chlamydia, test for reinfection at 3 to 6 months following treatment if under 25 years; or consider if over 25 years and high risk of re-infection.</p> <p><b>Second line, pregnant, breastfeeding, allergy, or intolerance:</b> azithromycin is most effective. As lower cure rate in pregnancy, test for cure at least 3 weeks after end of treatment.</p> <p>Consider referring all patients with symptomatic urethritis to GUM as testing should include <i>Mycoplasma genitalium</i> and Gonorrhoea. If <i>M. genitalium</i> is proven, use doxycycline followed by azithromycin using the same dosing regimen and advise to avoid sex for 14 days after start of treatment and until symptoms have resolved.</p> <p><i>For management guidance please refer to the <a href="#">BASHH United Kingdom guideline for the management of Chlamydia</a></i></p>	<p><b>ADULT:</b></p> <p><b>First Choice:</b></p> <table border="1" data-bbox="1220 414 1527 470"> <tr> <td>Doxycycline</td> <td>100mg BD</td> <td>7 days</td> </tr> </table> <p><b>Second Choice / Pregnant / Breastfeeding / Allergy / Intolerance:</b></p> <table border="1" data-bbox="1220 518 1527 646"> <tr> <td>Azithromycin</td> <td>1000mg Stat then 500mg OD for 2 Days</td> <td>Total 3 Days</td> </tr> </table> <p><b>Second choice or IV antibiotics</b></p> <p>See specialist advice</p>	Doxycycline	100mg BD	7 days	Azithromycin	1000mg Stat then 500mg OD for 2 Days	Total 3 Days		
Doxycycline	100mg BD	7 days								
Azithromycin	1000mg Stat then 500mg OD for 2 Days	Total 3 Days								

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Epididymitis</b>	Usually due to Gram-negative enteric bacteria in men over 35 years with low risk of STI.  If under 35 years or STI risk, refer to GUM.  <i>For management guidance please refer to the BASHH United Kingdom: <a href="#">guideline for the management of Epididymo-orchitis</a></i>	<b>ADULT</b>		
		<b>First Choice</b>		
		Doxycycline <b>OR</b> Ciprofloxacin	100mg BD  500mg BD	14 days  10 days

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Vaginal candidiasis</b>	All topical and oral azoles give over 80% cure.  <b>Pregnant:</b> avoid oral azoles, the 7 day courses are more effective than shorter ones.  <b>Recurrent (&gt;4 episodes per year):</b> 150mg oral fluconazole every 72 hours for 3 doses induction, followed by 1 dose once a week for 3 months maintenance (BAAG opinion)  <i>For management guidance please refer to the BASHH United Kingdom <a href="#">guideline for the management of Vulvovaginal candidiasis</a></i>	<b>ADULT</b>		
		<b>First Choice</b>		
		Clotrimazole Fluconazole	500mg Pessary 150mg Oral	Stat Stat
		<b>If recurrent</b>		
		Fluconazole (Induction / Maintenance)	150mg every 72 hours <b>THEN</b> 150mg once a week	3 doses  3 months (BAAG opinion) and refer to specialist if still symptomatic

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Bacterial vaginosis</b>	<p>Oral <a href="#">metronidazole</a> is as effective as topical treatment, and is cheaper. 7 days results in fewer relapses than 2g stat at 4 weeks.</p> <p><b>Pregnant/breastfeeding:</b> avoid 2g dose.</p> <p>Treating partners does not reduce relapse.</p> <p><i>For management guidance please refer to the <a href="#">BASHH United Kingdom guideline for the management of Bacterial vaginosis</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Metronidazole	400mg BD (Oral) <b>OR</b> 2000mg (Oral)	7 Days Stat
		<b>OR</b>		
		Clindamycin 2% cream	5g applicator at night	7 Nights


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Gonorrhoea</b>	<p>Antibiotic resistance is now very high.</p> <p>Use IM ceftriaxone if susceptibility not known prior to treatment.</p> <p>Refer to GUM. Test of cure is essential.</p> <p><i>For management guidance please refer to the <a href="#">BASHH United Kingdom guideline for the management of Gonorrhoea</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Ceftriaxone	1000mg IM	Stat
		<b>where possible REFER to GUM</b>		


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Genital herpes</b>	<p><b>Advise:</b> saline bathing, analgesia, or topical lidocaine for pain, and discuss transmission.</p> <p><b>First episode:</b> treat within 5 days if new lesions or systemic symptoms, and refer to GUM.</p> <p><b>Recurrent:</b> self-care if mild, or immediate short course antiviral treatment, or suppressive therapy if more than 6 episodes per year.</p> <p><i>For management guidance please refer to the <a href="#">BASHH United Kingdom guideline for the management of Anogenital herpes</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Aciclovir	400mg TDS <b>OR</b> 800mg TDS (if recurrent)	5 Days 2 Days
		<b>OR</b>		
		Valaciclovir	500mg BD	5 Days


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Trichomoniasis</b>	<p>Oral treatment needed as extrvaginal infection common.</p> <p>Treat partners, and refer to GUM for other STIs.</p> <p><b>Pregnant/breastfeeding:</b> avoid 2g single dose <a href="#">metronidazole</a>; <a href="#">clotrimazole</a> for symptom relief (not cure) if metronidazole declined.</p> <p><i>For management guidance please refer to the BASHH United Kingdom <a href="#">guideline on the management of Trichomonas vaginalis</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Metronidazole	400mg BD	7 Days
			2g (more adverse effects)	Stat
		<b>Pregnancy to treat symptoms:</b>		
	Clotrimazole	100mg pessary at night	6 nights	


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Pelvic inflammatory disease</b>	<p><b>Refer</b> women and sexual contacts to GUM.</p> <p><b>Raised CRP</b> supports diagnosis, absent pus cells in HVS smear good negative predictive value.</p> <p><b>Exclude:</b> ectopic pregnancy, appendicitis, endometriosis, UTI, irritable bowel, complicated ovarian cyst, functional pain.</p> <p>Moxifloxacin has greater activity against likely pathogens, but always test for gonorrhoea, chlamydia, and M. genitalium.</p> <p>If M. genitalium tests positive use moxifloxacin.</p> <p><i>For management guidance please refer to the BASHH United Kingdom <a href="#">guideline on the management of Pelvic inflammatory disease</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Ceftriaxone	1000mg IM	Stat
		<b>PLUS</b>		
		Metronidazole	400mg BD	14 Days
		<b>PLUS</b>		
Doxycycline	100mg BD	14 Days		
<b>Second Choice</b>				
Metronidazole	400mg BD	14 Days		
<b>PLUS</b>				
Ofloxacin (Consider safety issues)	400mg BD	14 Days		


**SKIN AND SOFT TISSUE INFECTIONS**  
 Note: Refer to [RCGP Skin Infections](#) online training. For MRSA, discuss therapy with microbiologist.


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Eczema (Bacterial Infection)</b></p> <p> <a href="#">Visual Summary</a></p>	<p>Manage underlying eczema and flares with treatments such as emollients and topical corticosteroids, whether antibiotics are given or not.</p> <p>Symptoms and signs of secondary bacterial infection can include: weeping, pustules, crusts, no response to treatment, rapidly worsening eczema, fever, and malaise.</p> <p>Not all flares are caused by a bacterial infection, so will not respond to antibiotics.</p> <p>Eczema is often colonised with bacteria but may not be clinically infected.</p> <p>Do not routinely take a skin swab.</p> <p><b>Not systemically unwell:</b> Do not routinely offer either a topical or oral antibiotic.</p> <p>If an antibiotic is offered, when choosing between a topical or oral antibiotic, take account of patient preferences, extent and severity of symptoms or signs, possible adverse effects, and previous use of topical antibiotics because antimicrobial resistance can develop rapidly with extended or repeated use.</p> <p><b>Systemically unwell:</b> Offer an oral antibiotic.</p> <p>If there are symptoms or signs of cellulitis, <b>see cellulitis and erysipelas</b> section.</p>	<p><b>ADULT: If not systemically unwell, do not routinely offer either a topical or oral antibiotic</b></p>		
		<p><b>Topical antibiotic (if topical is appropriate), for localised infections only</b></p>		
		<p><b>First Choice</b></p>		
		Fusidic acid 2%	TDS	5 days
		<p><b>Oral antibiotic:</b></p>		
		<p><b>First Choice</b></p>		
		Flucloxacillin	500mg QDS	5 Days
		<p><b>Penicillin allergy or flucloxacillin unsuitable:</b></p>		
		Clarithromycin <b>OR</b>	500mg BD	5 days
		Erythromycin (if macrolide needed in pregnancy; consider benefit/harm)	500mg QDS	5 days
<p><b>If MRSA suspected or confirmed</b></p>				
<p>Consult local microbiologist</p>				

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Cellulitis and erysipelas</b></p> <p> <a href="#">Visual Summary</a></p>	<p>Exclude other causes of skin redness (inflammatory reactions or non-infectious causes).</p> <p>Consider marking extent of infection with a single-use surgical marker pen. Offer an antibiotic. Take account of severity, site of infection, risk of uncommon pathogens, any microbiological results and MRSA status. Infection around eyes or nose is more concerning because of serious intracranial complications.</p> <p>Do not routinely offer antibiotics to prevent recurrent cellulitis or erysipelas.</p> <p>*A longer course (up to 14 days in total) may be needed but skin takes time to return to normal, and full resolution at 5 to 7 days is not expected. Do not routinely offer antibiotics to prevent recurrent cellulitis or erysipelas.</p> <p><i>For detailed information click on the visual summary.</i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Flucloxacillin	1g QDS	5 days
		<b>Penicillin allergy or if flucloxacillin unsuitable:</b>		
		Clarithromycin <b>OR</b>	500mg BD	5 days
		Erythromycin (if macrolide needed in pregnancy; consider benefit/harm) <b>OR</b>	500mg QDS	5 days
		Doxycycline <b>OR</b>	200mg on day 1, then 100mg OD	5 days
		<b>If infection near eyes or nose:</b>		
		Co-amoxiclav <b>OR</b>	500/125mg TDS	7 Days * (See Key Points)
		<b>If infection near eyes or nose (penicillin allergy):</b>		
Clarithromycin <b>AND</b>	500mg BD	7 Days * (See Key Points)		
Metronidazole	400mg TDS	7 Days * (See Key Points)		
<b>For alternative choice antibiotics for severe infection, suspected or confirmed MRSA infection and IV antibiotics click on the visual summary. Seek specialist advice</b>				

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION	
<p><b>Diabetic foot infection</b></p> <p> <a href="#">Visual Summary</a></p>	<p>In diabetes, all foot wounds are likely to be colonised with bacteria.</p> <p>Diabetic foot infection has at least 2 of</p> <ul style="list-style-type: none"> <li>Local swelling or induration; erythema; local tenderness or pain; local warmth; purulent discharge.</li> </ul> <p>Severity is classified as:</p> <ul style="list-style-type: none"> <li><b>Mild:</b> local infection with 0.5 to less than 2cm erythema</li> <li><b>Moderate:</b> local infection with more than 2cm erythema or involving deeper structures (such as abscess, osteomyelitis, septic arthritis, or fasciitis)</li> <li><b>Severe:</b> local infection with signs of a systemic inflammatory response.</li> </ul> <p>Start antibiotic treatment as soon as possible.</p> <p>Take samples for microbiological testing before, or as close as possible to, the start of treatment. When choosing an antibiotic, take account of severity, risk of complications, previous microbiological results and antibiotic use, and patient preference.</p> <p>Do not offer antibiotics to prevent diabetic foot infection.</p> <p><i>*A longer course (up to a further 7 days) may be needed based on clinical assessment. However, skin does take time to return to normal, and full resolution at 7 days is not expected.</i></p>	<b>ADULT</b>			
		<b>First Choice: Mild Infection</b>			
		Flucloxacillin	1g QDS	7 Days * (See Key Points)	
		<b>Penicillin allergy</b>			
		Clarithromycin <b>OR</b>	500mg BD	7 Days * (See Key Points)	
Erythromycin (if macrolide needed in pregnancy; consider benefit/harm) <b>OR</b>	500mg QDS	7 Days * (See Key Points)			
Doxycycline	200mg on day 1, then 100mg OD (can be increased to 200mg daily)	7 Days * (See Key Points)			
<b>For antibiotic choices for moderate or severe infection, infections where <i>Pseudomonas aeruginosa</i> or MRSA is suspected or confirmed, and IV antibiotics click on the visual summary</b>					
Seek specialist advice					

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION			
<p><b>Human and animal bites</b></p> <p> <a href="#">Visual Summary</a></p>	<p>Offer an antibiotic for a human or animal bite if there are symptoms or signs of infection, such as increased pain, inflammation, fever, discharge, or an unpleasant smell. Take a swab for microbiological testing if there is discharge (purulent or non-purulent) from the wound.</p> <p>Do not offer antibiotic prophylaxis if a human or animal bite has not broken the skin.</p> <p><b>Human bite:</b> Offer antibiotic prophylaxis if the human bite has broken the skin and drawn blood. Consider antibiotic prophylaxis if the human bite has broken the skin but not drawn blood if it is in a high-risk area or person at high risk.</p> <p><b>Cat bite:</b> Offer antibiotic prophylaxis if the cat bite has broken the skin and drawn blood. Consider antibiotic prophylaxis if the cat bite has broken the skin but not drawn blood if the wound could be deep.</p> <p><b>Dog or other traditional pet bite (excluding cat bite)</b> Do not offer antibiotic prophylaxis if the bite has broken the skin but not drawn blood. Offer antibiotic prophylaxis if the bite has broken the skin and drawn blood if it has caused considerable, deep tissue damage or is visibly contaminated (for example, with dirt or a tooth). Consider antibiotic prophylaxis if the bite has broken the skin and drawn blood if it is in a high risk area or person at high risk.</p> <p>*Course length can be increased to 7 days (with review) based on clinical assessment of the wound.</p>	<p><b>ADULT</b></p>					
					<p><b>First Choice:</b></p>		
					<p>Co-amoxiclav</p>	<p>500/125mg TDS</p>	<p>3 days for prophylaxis</p> <p>5 days for treatment* * (See Key Points)</p>
					<p><b>Penicillin allergy or co-amoxiclav unsuitable:</b></p>		
					<p>Doxycycline</p> <p><b>AND</b></p> <p>Metronidazole</p>	<p>200mg on day 1, then 100mg daily</p> <p>400mg TDS</p>	<p>3 days for prophylaxis</p> <p>5 days for treatment* * (See Key Points)</p>
					<p><b>Pregnancy</b></p>		
<p>Seek specialist advice</p>							
<p><b>IV antibiotics</b></p>							
<p>Seek specialist advice</p>							

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Impetigo</b></p> <p> <a href="#">Visual Summary</a></p> <p><a href="#">Pharmacy First</a> (1 year and over)</p>	<p><b>Localised non-bullous impetigo:</b> Hydrogen peroxide 1% cream (other topical antiseptics are available but no evidence for impetigo). If hydrogen peroxide unsuitable or ineffective, short-course topical antibiotic.</p> <p><b>Widespread non-bullous impetigo:</b> Short-course topical or oral antibiotic. Take account of person's preferences, practicalities of administration, previous use of topical antibiotics because antimicrobial resistance can develop rapidly with extended or repeated use, and local antimicrobial resistance data.</p> <p><b>Bullous impetigo, systemically unwell, or high risk of complications:</b> Short-course oral antibiotic. Do not offer combination treatment with a topical and oral antibiotic to treat impetigo.</p> <p>*5 days is appropriate for most, can be increased to 7 days based on clinical judgement.</p> <p>For detailed information click on the visual summary.</p>	<b>ADULT:</b>		
		<b>Topical antiseptic</b>		
		<b>First Choice</b>		
		hydrogen peroxide 1%	TDS	5 days
		<b>Topical antibiotic</b>		
		<b>First Choice</b>		
		Fusidic acid 2%	TDS	5 Days * (See Key Points)
		<b>Fusidic acid resistance suspected or confirmed:</b>		
		Mupirocin 2%	TDS	5 days
		<b>Oral antibiotic</b>		
		<b>First Choice</b>		
		Flucloxacillin	500mg QDS	5 Days * (See Key Points)
		<b>Penicillin allergy or flucloxacillin unsuitable:</b>		
		Clarithromycin	500mg BD	5 Days * (See Key Points)
<b>OR</b>				
Erythromycin (if macrolide needed in pregnancy; consider benefit/harm)	500mg QDS	5 Days * (See Key Points)		
<b>If MRSA suspected or confirmed</b>				
Consult local microbiologist				

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<p><b>Leg ulcer infection</b></p> <p> <a href="#">Visual Summary</a></p>	<p>Manage any underlying conditions to promote ulcer healing.</p> <p>Only offer an antibiotic when there are symptoms or signs of infection (such as redness or swelling spreading beyond the ulcer, localised warmth, increased pain, or fever). Few leg ulcers are clinically infected, but most are colonised by bacteria.</p> <p>When prescribing antibiotics, take account of severity, risk of complications and previous antibiotic use.</p> <p>For detailed information click on the visual summary.</p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Flucloxacillin	1g QDS	7 days
		<b>Penicillin allergy or if flucloxacillin unsuitable:</b>		
		Doxycycline <b>OR</b>	200mg on day 1, then 100mg OD (can be increased to 200mg daily)	7 Days
		Clarithromycin <b>OR</b>	500mg BD	
		Erythromycin (if macrolide needed in pregnancy; consider benefit/harm)	500mg QDS	
		<b>Second Choice</b>		
		co-amoxiclav <b>OR</b>	500/125mg TDS	7 Days
		co-trimoxazole (in penicillin allergy)	960mg BD	
<b>For antibiotic choices if severely unwell or MRSA suspected or confirmed</b>				
Seek specialist advice				

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Mastitis</b>	<p>S. aureus is the most common infecting pathogen. Suspect if woman has: a painful breast; fever and/or general malaise; a tender, red breast.</p> <p><b>Breastfeeding:</b> oral antibiotics are appropriate, where indicated. Women should continue feeding, including from the affected breast.</p> <p><i>For management guidance please refer to NICE/Clinical Knowledge Summaries: <a href="#">Mastitis and breast abscess</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Flucloxacillin	500mg QDS	10 Days
		<b>Penicillin allergy</b>		
		Erythromycin <b>OR</b> Clarithromycin	500mg QDS	10 Days
			500mg BD	10 Days

INFECTION	
<b>PVL-SA</b>	<p>Panton-Valentine leukocidin (PVL) is a toxin produced by 20.8 to 46% of S. aureus from boils/abscesses. PVL strains are rare in healthy people, but severe.</p> <p><b>Suppression therapy</b> should only be started after primary infection has resolved, as ineffective if lesions are still leaking.</p> <p><b>Risk factors for PVL:</b> recurrent skin infections; invasive infections; MSM; if there is more than one case in a home or close community (school children; military personnel; nursing home residents; household contacts).</p> <p>Access supporting evidence and rationales on the <a href="#">UKHSA</a> website.</p>


INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Scabies</b>	<p><b>First choice permethrin:</b> Treat whole body from ear/chin downwards, and under nails.</p> <p><b>If using permethrin</b> and patient is under 2 years, elderly or immunosuppressed, or, <b>if treating with malathion:</b> also treat face and scalp.</p> <p><b>Home/sexual contacts:</b> treat within 24 hours.</p> <p><i>For management guidance please refer to the BASHH United Kingdom <a href="#">guideline on the management of Scabies</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Permethrin	5% cream	2 applications, 1 week apart
		<b>Permethrin allergy</b>		
		Malathion	0.5% aqueous liquid	2 applications, 1 week apart

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
Acne vulgaris	<p><b>First-line treatment options:</b></p> <p><b>Offer a course of 1 of the options, taking account of severity, preferences, and advantages/disadvantages of each option.</b> Completing the course is important because positive effects can take 6 to 8 weeks.</p> <p><b>Consider topical benzoyl peroxide monotherapy as an alternative if first-line treatment options are contraindicated, or to avoid topical retinoids or an antibiotic (topical or oral).</b></p> <p><b>Do not use: Monotherapy with a topical antibiotic, monotherapy with an oral antibiotic, or a combination of a topical antibiotic and an oral antibiotic.</b></p> <p><b>Review first-line treatment at 12 weeks.</b></p> <p><b>Only continue a topical or oral antibiotic for more than 6 months in exceptional circumstances. Review at 3 monthly intervals, and stop the antibiotic as soon as possible.</b></p> <p><i>For detailed information see the <a href="#">NICE guideline on acne vulgaris</a>.</i></p>	<p><b>ADULT</b></p> <p><b>First Choices</b></p> <p><b>Fixed combination of topical adapalene with topical benzoyl peroxide</b> (any acne severity)</p> <p>0.1% adapalene/ 2.5% benzoyl peroxide <b>OR</b> 0.3% adapalene/2.5% benzoyl peroxide</p> <p><b>Fixed combination of topical tretinoin with topical clindamycin</b> (any acne severity)</p> <p>0.025% tretinoin / 1% clindamycin</p> <p><b>Fixed combination of topical benzoyl peroxide with topical clindamycin</b> (mild to moderate acne)</p> <p>3% benzoyl peroxide/1% clindamycin <b>OR</b> 5% benzoyl peroxide/1% clindamycin</p> <p><b>Fixed combination of topical adapalene with topical benzoyl peroxide AND either oral lymecycline or oral doxycycline</b> (moderate to severe acne)</p> <p>0.1% adapalene/ 2.5% benzoyl peroxide <b>OR</b> 0.3% adapalene/2.5% benzoyl peroxide</p> <p><b>AND either</b></p> <p>Oral lymecycline <b>OR</b> Oral doxycycline</p> <p><b>ALTERNATIVE COMBINATION</b></p> <p>15% <b>OR</b> 20% topical azelaic acid</p> <p><b>AND either</b></p> <p>Oral lymecycline <b>OR</b> Oral doxycycline</p> <p><b>Alternative Choice: Topical benzoyl peroxide</b></p> <p>Topical 5% benzoyl peroxide</p>	<p>OD thinly in evening</p> <p>OD thinly in evening</p> <p>OD in the evening</p> <p>OD in the evening</p> <p>408mg OD</p> <p>100mg OD</p> <p>BD</p> <p>408mg OD</p> <p>100mg OD</p> <p>OD to BD</p>	<p>12 Weeks</p> <p>12 Weeks</p> <p>12 weeks</p> <p>12 weeks</p> <p>12 weeks</p> <p>12 weeks</p> <p>12 weeks</p> <p>12 weeks</p> <p>12 weeks</p>

INFECTION	
<b>Cold sores</b>	<p><b>Most resolve after 5 days without treatment.</b> Topical antivirals applied prodromally can reduce duration by 12 to 18 hours.</p> <p><b>If frequent, severe, and predictable triggers: consider oral prophylaxis:</b> aciclovir 400mg, twice daily, for 5 days.</p> <p>Access supporting evidence and rationales on the <a href="#">CKS</a> website</p>

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Tick bites (Lyme disease)</b>	<p><b>Treatment:</b> Treat erythema migrans <b>empirically</b>; serology is often negative early in infection.</p> <p>For other suspected Lyme disease such as neuroborreliosis (CN palsy, radiculopathy) seek advice.</p> <p><i>For management guidance please refer to NICE <a href="#">NG95: Lyme disease</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Doxycycline	100mg BD	21 Days
		<b>Alternative:</b>		
		Amoxicillin	1g TDS	21 Days

INFECTION	
<b>Insect Bites and Stings</b>	<p>Most insect bites or stings will not need antibiotics. Do not offer an antibiotic if there are no symptoms or signs of infection.</p> <p>If there are symptoms or signs of infection, see <b>cellulitis and erysipelas</b>.</p> <p><a href="#">Pharmacy First</a> (1 year and over) – infected insect bites only</p>

 [Visual Summary](#)

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Dermatophyte infection: skin</b>	<p><b>Most cases:</b> use terbinafine as fungicidal, treatment time shorter and more effective than with fungistatic imidazoles or undecenoates.</p> <p>If candida possible, use imidazole.</p> <p><b>If intractable, or scalp:</b> send skin scrapings, and if infection confirmed: use oral terbinafine or itraconazole.</p> <p><i>For management guidance please refer to NICE/Clinical Knowledge Summaries: <a href="#">Fungal skin infection - body and groin</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Topical terbinafine	1% BD	1 to 2 Weeks
		Topical imidazole	1% BD	1 to 4 Weeks
		<b>Alternative in athlete's foot:</b>		
		Topical undecenoates (such as Mycota®)	BD	4 to 6 Weeks

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Dermatophyte infection: nail</b>	<p><b>Take nail clippings;</b> start therapy only if infection is confirmed. Oral terbinafine is more effective than oral azole.</p> <p>Liver reactions 0.1 to 1% with oral antifungals.</p> <p>If candida or non-dermatophyte infection is confirmed, use oral itraconazole. Topical nail lacquer is not as effective.</p> <p><b>To prevent recurrence:</b> apply weekly 1% topical antifungal cream to entire toe area.</p> <p><i>For management guidance please refer to NICE/Clinical Knowledge Summaries: <a href="#">Fungal nail infection</a></i></p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Terbinafine	250mg OD	Fingers: 6 weeks Toes: 12 weeks
		<b>Second Choice</b>		
		Itraconazole	200mg BD	1 week a month Fingers: 2 courses Toes: 3 courses
Stop treatment when continual, new, healthy, proximal nail growth.				

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Varicella zoster/ chickenpox</b>	<p><b>Pregnant/immunocompromised/ neonate:</b> seek urgent specialist advice.</p> <p><b>Chickenpox:</b> consider aciclovir if: onset of rash &lt;24 hours, and 1 of the following: &gt;14 years of age; severe pain; dense/oral rash; taking steroids; smoker. Give paracetamol for pain relief.</p>	<b>ADULT</b>		
		<b>First Choice for chicken pox and shingles:</b>		
<b>Herpes zoster/ shingles</b> <a href="#">Pharmacy First</a> (18 years and over-shingles)	<p><b>Shingles:</b> treat if &gt;50 years (PHN rare if &lt;50 years) and within 72 hours of rash, or if 1 of the following: active ophthalmic; Ramsey Hunt; eczema; non-truncal involvement; moderate or severe pain; moderate or severe rash.</p> <p><b>Shingles treatment if not within 72 hours:</b> consider starting antiviral drug up to 1 week after rash onset, if high risk of severe shingles or continued vesicle formation, older age; immunocompromised; or severe pain.</p>	Aciclovir	800mg 5 times daily	7 Days
		<b>Second Choice for shingles if poor compliance:</b>		
		Valaciclovir	1g TDS	7 Days

**EYE INFECTIONS**

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Blepharitis</b>	<p><b>First line:</b> lid hygiene for symptom control, including: warm compresses; lid massage and scrubs; gentle washing; avoiding cosmetics.</p> <p><b>Second line:</b> topical antibiotics if hygiene measures are ineffective after 2 weeks.</p> <p><b>Signs of meibomian gland dysfunction, or acne rosacea:</b> consider oral antibiotics.</p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Lid hygiene for symptom control, including: warm compresses; lid massage and scrubs; gentle washing; avoiding cosmetics.		
		<b>Second Choice</b>		
		Topical chloramphenicol	1% ointment BD	6 Week Trial
<b>Third Choice</b>				
Oral doxycycline	100mg OD 50mg OD	4 weeks (initial) 8 weeks (maintenance)		

INFECTION	KEY POINTS	MEDICINE	DOSE	DURATION
<b>Conjunctivitis</b>	<p><b>First line:</b> bath/clean eyelids with cotton wool dipped in sterile saline or boiled (cooled) water, to remove crusting.</p> <p><b>Treat only if severe,</b> as most cases are viral or self-limiting.</p> <p><b>Bacterial conjunctivitis:</b> usually unilateral and also self-limiting. It is characterised by red eye with mucopurulent, not watery discharge. 65% and 74% resolve on placebo by days 5 and 7.</p> <p><b>Third line:</b> fusidic acid as it has less Gram-negative activity.</p>	<b>ADULT</b>		
		<b>First Choice</b>		
		Bath/clean eyelids with cotton wool dipped in sterile saline or boiled (cooled) water, to remove crusting.		
		<b>Second Choice</b>		
		Chloramphenicol 0.5% eye drops	2 hourly for 2 days, then reduce frequency to 3 to 4 times daily.	48 hours after resolution
Chloramphenicol 1% eye ointment	3 to 4 times daily or once daily at night if using antibiotic eye drops during the day.	48 hours after resolution		
<b>Third Choice</b>				
Fusidic acid 1% eye drops	BD	48 hours after resolution		