NHS Fife Antibiotic Guidance for the Treatment of Community Managed Infections in Adults

- See BNF for interactions, as well as appropriate use and dosing in specific populations, for example, hepatic impairment, renal impairment, pregnancy and breastfeeding. Unless specifically mentioned, this guidance does not cover prescribing in pregnancy.
- Clostridium difficile is associated with the use of all antibiotics but most strongly with cephalosporins, co-amoxiclav, clindamycin and quinolones. Avoid these agents if possible unless they are specifically recommended.
- **Fluoroquinolone warning**: these antibiotics (usually ciprofloxacin) have been reported to cause serious side effects involving tendons, muscles, joints, and the nerves, and mental health effects which may include, but are not necessarily limited to, anxiety, panic attacks, and memory impairment – in a small proportion of patients, these side effects caused long-lasting or permanent disability. Please review the MHRA Safety Advice before prescribing. If these are prescribed, consider providing the patient with an information leaflet like this one from the MHRA. If any of these side-effects are noted, treatment should cease. Do not prescribe ciprofloxacin for uncomplicated cystitis, or for minor or self-limiting infections, unless there is no clear alternative.
- Use antibiotics only when there is evidence of bacterial infection.
- Empirical treatment targets the most likely pathogens; review treatment once any culture and sensitivity results are known, or if the patient fails to respond.
- Use a narrow spectrum agent where possible, and prescribe the shortest appropriate duration of treatment.
- If antibiotics have been started inappropriately, stop – don't complete a course just because it has been started, if there is a clear alternative diagnosis.
- There are separate guidelines available for infections in children.
- Further information is available for some conditions via the NICE website. NB: for antibiotic choice, strength and duration please adhere to those detailed in the guidance.

Jump to section on: Upper RTI | Lower RTI | UTI | Meningitis | GI | Genital | Skin | Eye | Dental

Issued by: NHS Fife Antimicrobial Management Team
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Infection	Key points	Medicine	Doses	Length	Additional Comments
▼ Upper respiratory tract infections					
Acute sore throat	Advise paracetamol, or if preferred and suitable, ibuprofen for pain. Use FeverPAIN* to assess symptoms: **FeverPAIN 0-1 :** no antibiotic; **FeverPAIN 2-3:** no or back-up antibiotic; **FeverPAIN 4-5:** immediate or back-up antibiotic. [***Fever** in last 24 hours; **P**urulence; **A**ttend rapidly under three days; severely **I**nflamed tonsils; **N**o cough or coryza.] **Systemically very unwell or high risk of complications:** immediate antibiotic. The vast majority of respiratory tract illness is self–limiting and it is recommended that the term "infection" is avoided. Cephalosporins are not appropriate as they do not penetrate lung tissue.	**First choice:** Phenoxymethylpenicillin	500mg QDS or 1000mg BD	5-10* days	***10 day course** of penicillin or clarithromycin is needed only if Streptococcus pyogenes (Grp A Strep) is confirmed or strongly suspected; otherwise 5 days is sufficient
		Penicillin allergy: Clarithromycin ***OR***	500mg BD	5 -10* days	
		Erythromycin (preferred if pregnant)	500mg QDS or 1000mg BD	5 days	
Influenza	**Guidance about the management of Influenza can be accessed here:** **Adult Treatment of Influenza**				
Scarlet fever (GAS)	**Prompt treatment** with appropriate antibiotics significantly reduces the risk of complications. Vulnerable individuals (immunocompromised, those with comorbidities, or those with skin disease) are at increased risk of developing complications.	Phenoxymethylpenicillin	500mg QDS or 1000mg BD	10 days	
		Penicillin allergy: Clarithromycin	500mg BD	10 days	
		Optimise analgesia and give safety netting advice			
Acute otitis media	Regular paracetamol or ibuprofen for pain (right dose for age or weight at the right time and maximum doses for severe pain). **Otorrhoea with infection in both ears:** no, back-up or immediate antibiotic. **Otherwise:** no or back-up antibiotic. **Systemically very unwell or high risk of complications:** immediate antibiotic.	**First choice:** amoxicillin	500mg TDS	5 days	
		Penicillin allergy: doxycycline ***OR***	200mg on day one, then 100mg OD	5 days in total	
		Erythromycin (preferred if pregnant)	500mg QDS or 1000mg BD	5 days	

<table>
<tr><th>Infection</th><th>Key points</th><th>Medicine</th><th>Doses</th><th>Length</th><th>Additional Comments</th></tr>
<tr><td rowspan="4">Acute otitis externa</td><td rowspan="4">First line: analgesia for pain relief, and apply localised heat (such as a warm flannel).
Second line: if no perforation, topical acetic acid or topical antibiotic +/- steroid: similar cure at 7 days.
If cellulitis or disease extends outside ear canal, or systemic signs of infection, start oral flucloxacillin and refer to exclude malignant otitis externa.
These products should not be used in patients where a perforated tympanic membrane has been diagnosed or is suspected or where a tympanostomy tube (grommet) is in situ
If no response after 7 days, consider referral to ENT.
Remove hearing aids for duration if treatment if feasible (if not, ensure daily cleaning).
If fungal infection Clotrimazole 1% solution should be applied every 8-12 hours for at least 14 days after disappearance of infection.</td><td>Second line:
topical acetic acid 2% OR</td><td>1 spray TDS</td><td>7 days</td><td rowspan="4">Topical acetic acid (2%) may also be used for chronic otitis externa with itch.</td></tr>
<tr><td>Otomize Ear Spray</td><td>1 spray TDS</td><td>7 days</td></tr>
<tr><td>Cellulitis:
Flucloxacillin</td><td>1g QDS</td><td>7days</td></tr>
<tr><td>Penicillin allergy:
Doxycycline</td><td>200mg on day one, then 100mg OD</td><td>5 days in total</td></tr>
<tr><td rowspan="4">Sinusitis</td><td rowspan="4">First line: Advise paracetamol or ibuprofen for pain. Little evidence that nasal saline or nasal decongestants help, but advise can be bought over the counter.
Symptoms for 10 days or less: no antibiotic.
Symptoms with no improvement for more than 10 days: no antibiotic or back-up antibiotic depending on likelihood of bacterial cause – suggested by purulent unilateral nasal discharge; severe unilateral pain; fever; marked deterioration after initial mild phase.
Consider high-dose nasal corticosteroid .
Systemically very unwell or high risk of complications: immediate antibiotic.</td><td>Second line:
Beclomethasone 50mcg/dose nasal spray</td><td>2 sprays every 12 hrs into each nostril</td><td></td><td rowspan="4"></td></tr>
<tr><td>Third line:
Phenoxymethylpenicillin OR</td><td>500mg QDS or 1G BD</td><td>5 days</td></tr>
<tr><td>Penicillin allergy:
Doxycycline OR</td><td>200mg on day 1, then 100mg OD</td><td>5 days in total</td></tr>
<tr><td>Erythromycin (preferred if pregnant and allergic to penicillin)</td><td>500mg QDS or 1000mg BD</td><td>5 days</td></tr>
</table>

▼ Lower respiratory tract infections

Note: Low doses of penicillins are more likely to select for resistance. Do not use fluoroquinolones (ciprofloxacin) first line as they may have long-term side effects and there is poor anti-pneumococcal activity. Reserve all fluoroquinolones (including levofloxacin) for organisms resistant to other antibiotics – see MHRA Safety Advice.

For exacerbations of bronchiectasis, please refer to the ERF Guidance

Acute exacerbation of COPD	Treat with antibiotics only if purulent sputum **and** increased shortness of breath **and/or** increased sputum volume.	Doxycycline	200mg stat, then 100mg OD	5 days	
		Amoxicillin	1g TDS		
		Allergy/Intolerance to doxycycline: Clarithromycin	500mg BD	5 days	
		If clinical failure: Co-amoxiclav	625mg TDS	5 days	
Acute cough and bronchitis	Antibiotics of little benefit if no comorbidity. **First line:** self-care and safety netting advice. **Second line:** 7 day delayed antibiotic, safety net, and advise that symptoms can last 3 weeks. **Consider immediate antibiotics** if >80 years of age and 1 of: hospitalisation in past year; taking oral steroids; insulin-dependent diabetic; congestive heart failure; serious neurological disorder/stroke or >65 years with 2 of the above.	**Second line:** Amoxicillin	500mg TDS *	5 days	* higher dose of amoxicillin (1g every 8 hours) may be required for haemophyllus infections, consult any susceptibility reports
		Penicillin allergy or no response to amoxicillin: Doxycycline	200mg stat then 100mg OD		

Community-acquired pneumonia	Use CRB65 score to guide mortality risk, place of care, and antibiotics. Each CRB65 parameter scores one: **C**onfusion (AMT<8 or new disorientation in person, place or time); **R**espiratory rate >30/minute; **B**P systolic <90, or diastolic <60; age >**65**. **Score 0:** low risk, consider home-based care; **1–2:** intermediate risk, consider hospital assessment; **3–4:** urgent hospital admission. **Give safety net advice** and likely duration of different symptoms, such as cough up to 6 weeks. Clinically assess need for dual therapy for atypicals. Mycoplasma infection is rare in over 65s. iHypoxia is also an indicator for admission. Aim for > 94%, or if at risk of hypercapnic respiratory failure, 88-92%. Pneumonia with or following influenza may be due to Staph aureus and should be treated accordingly. **Doxycycline, clarithromycin, co-trimoxazole or co-amoxiclav may be considered.** Co-amoxiclav should be avoided in the over 65 age group when possible. If admission is delayed or illness appears life-threatening, and no known penicillin allergy, give immediate antibiotics.	**CRB65 = 0 and 1-2 if to be treated at home:** Doxycycline ***OR***	200mg stat then 100mg OD	5 days	*higher dose of amoxicillin (1g every 8 hours) may be required, consult any susceptibility reports
		Amoxicillin*	500mg TDS		
		Allergy/Intolerance to doxycycline: Clarithromycin	500mg BD		
		MRSA Chest Infection: Doxycycline	100mg BD		

▼ Urinary tract infections

See local Guidance at Algorithms for diagnosis and management of urinary tract infections

UTI in patients with catheters: antibiotics will not eradicate asymptomatic bacteriuria; only treat if systemically unwell or pyelonephritis likely.Do not use prophylactic antibiotics for catheter change unless there is a history of catheter-change-associated UTI or trauma. Take sample if new onset of delirium, or one or more symptoms of UTI. ***See local guidance***:

Antibiotic choice should be as per upper or lower UTI in non-catheterised patients

Infection	Key points	Medicine	Dose	Duration	
Lower urinary tract infection	Advise paracetamol or ibuprofen for pain. **Refer to prescribing notes in formulary for full guidance on choice.** **Non-pregnant women:** back up antibiotic (to use if no improvement in 48 hours or symptoms worsen at any time) or immediate antibiotic. **Pregnant women and men :** immediate antibiotic 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. ***Do NOT prescribe Nitrofurantoin unless eGFR ≥45 ml/minute*** *****Consult Trimethoprim SPC if eGFR <30ml/minute for dose adjustment*** ****** If no improvement in UTI symptoms on first-choice taken for at least 48 hours, or when first-choice not suitable***	**Non-pregnant women first choice:** Nitrofurantoin* ***OR***	100mg m/r BD	3 days	
		Trimethoprim **(if low risk of resistance)	200mg BD	3 days	
		Cefalexin***	500mg BD	3 days	
		Pregnant women first choice: Nitrofurantoin* (avoid at term)	100mg m/r BD	7 days	
		Pregnant women second choice: Cefalexin	500mg BD	7 days	
		Pregnant women third choice: Amoxicillin(**only if culture results available and susceptible**)	500mg TDS	7 days	
		Treatment of asymptomatic bacteriuria in pregnant women: choose from Nitrofurantoin (avoid at term), Amoxicillin or Cefalexin based on recent culture and susceptibility results			
		Men first choice: Trimethoprim*****OR***	200mg BD	7 days	
		Nitrofurantoin *	100mg m/r BD	7 days	
		Men second choice: consider alternative antibiotic choice according to recent culture and susceptibility results			

Acute pyelonephritis (upper urinary tract)	If evidence of systemic infection e.g. fevers, rigors, loin pain, vomiting, consider hospital assessment. Advise paracetamol (+/- low-dose weak opioid) for pain. Offer an antibiotic. 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. **** NB if co-trimoxazole is an unsuitable empirical choice and there are no previous isolates for guidance consider using ciprofloxacin review** MHRA Safety Advice **before prescribing.***	**Non-pregnant women and men first choice:** Co-trimoxazole	960mg BD	7 days	For dosing in renal impairment see SPC at EMC
		Co-amoxiclav (if known renal impairment or trimethoprim intolerance) ***OR***	625mg TDS	7 days	
		Ciprofloxacin* (if neither of the above are suitable; consider safety issues)	500mg BD	7 days	
		Pregnant women first choice: Cefalexin			**Discuss with obstetrics**
Recurrent urinary tract infection	A recurrent UTI is defined as two positive MSU in last 6 months or three positive MSU in last 12 months. If MSU is not possible then ALL of the symptoms (frequency, dysuria, urgency +/- bladder pain and prompt resolution with antibiotics). Advise simple measures including hydration and analgesics. Try additional steps (**see ERF Guidance for Recurrent UTI for full details**). When ongoing UTI recurrent then consider post trigger treatment doses, self-start antibiotics (3 day course depending on recent sensitivities or short term prophylaxis).				
Acute prostatitis	Advise paracetamol (+/- low-dose weak opioid) for pain, or ibuprofen if preferred and suitable. Review MHRA Safety Advice before prescribing. Offer antibiotic. Refer to NICE Guideline NG110– Prostatitis (acute): antimicrobial prescribing. Send MSU for culture and start treatment	Ciprofloxacin	500mg BD	14 days	Reassess at 14 days, if symptoms completely resolved stop otherwise complete 28 days total.
		If culture shows sensitivity: Trimethoprim	200mg BD	14 days	

▼ Meningitis

Suspected meningococcal disease	**Transfer all patients to hospital immediately.** If time before hospital admission, and non-blanching rash, give IV or IM benzylpenicillin or IV or IM cefotaxime. If definite history of anaphylaxis giving penicillin or an alternative antibiotic may carry increased risk of anaphylactic reactions. Patients with mild allergy (i.e. rash, not anaphylaxis) may be given cefotaxime. Prescribe secondary prevention only following advice from your local health protection specialist/consultant	IV or IM Benzylpenicillin ***OR***	Adult/child 10+ years: 1.2g	Stat dose; give IM, if vein cannot be accessed
		IV or IM Cefotaxime	IV: 1g IM: 1g	

▼ Gastrointestinal tract infections

Oral candidiasis	**Topical azoles** are more effective than topical nystatin. Avoid miconazole with warfarin. Oral candidiasis is rare in immunocompetent adults; consider undiagnosed risk factors, including HIV. *Use 50mg fluconazole if extensive/severe candidiasis. For first occurrence in HIV or other immunocompromise, use 100mg fluconazole. Treat for 7 days initially and further 7 days if symptoms persist; for recurrent or severe disease in these patients, use 200mg fluconazole as per BHIVA GUIDELINES .	**First line:** Nystatin suspension	1ml; 100,000units / mL QDS (half in each side)	7 days; continue for 2 days after resolved	
		Second line: Miconazole oromucosal gel sugar free	2.5ml of 20mg/g QDS (hold in mouth after food)	7 days; continue for 7 days after resolved	
		Fluconazole capsules*	50mg/100mg OD	7 to 14 days	
Infectious diarrhoea	**Antibiotic therapy is not usually indicated unless patient is systemically unwell.**				
***H. pylori* eradication**	See ERF Gastrointestinal Chapter for eradication regimes.				
Clostridium difficile	**For full information see** Health Protection Scotland guidance. Patients identified as *C. difficile* cases should be fully assessed by a doctor. Review need for currently prescribed antibiotics, PPIs, laxatives, and antimotility agents - discontinue use where possible. Asymptomatic patients may not require treatment.	**First episode (non severe):** Metronidazole	400mg TDS	10 days	If no better at day 5, change to vancomycin for another 10 days

	If severe (T>38.5, WCC>15, creatinine rising acutely or > 1.5x baseline, or signs/symptoms of severe colitis such as blood / mucus in stool or abdominal distension, acute abdomen or evidence of dehydration : treat with oral vancomycin, review progress closely, and consider hospital referral. Treat immunocompromised patients as severe cases. **Recurrent or severe cases should be discussed with Microbiology.** Clearance samples should not be sent.	**Severe, recurrent or in metronidazole intolerance / pregnancy / breastfeeding:** oral Vancomycin	125mg QDS	10 days	
Mild Diverticulitis	Uncomplicated acute diverticulitis may respond to analgesia and dietary modification.	**First Line:** Cotrimoxazole ***PLUS*** Metronidazole	960mg BD 400mg TDS	5 days	
		If renal impairment: Doxycycline ***PLUS*** Metronidazole	100mg BD 400mg TDS		
Giardiasis	Recurrence of giardiasis is high even with optimal treatment, therefore follow-up with a stool sample is advised.	Metronidazole	5x400mg OD **OR**	3 days	
			400mg TDS	5 days	
Traveller's diarrhoea	Prophylaxis rarely, if ever, indicated. Consider **standby** antimicrobial only for patients at high risk of severe illness, or visiting high-risk areas.	**Standby:** Azithromycin **(private prescription)**	500mg OD	3 days	
		Prophylaxis/treatment: Bismuth subsalicylate	2 tablets QDS	2 days	
Threadworm	**Treat all household contacts at the same time.** **Advise hygiene measures for 2 weeks** (hand hygiene; pants at night; morning shower, including perianal area). Wash sleepwear, bed linen, and dust and vacuum. **<6 months**, add perianal wet wiping or washes 3 hourly.	**>6 months:** Mebendazole	100mg stat	1 dose; repeat in 2 weeks if persistent	
		<6 months or pregnant (at least in 1st trimester): only hygiene measures for 6 weeks			
Genital tract infections					
	STI's are conditions that may indicate HIV infection. Please offer an HIV test in line with national guidance (see BHIVA GUIDELINES)				
Chlamydia trachomatis/	Opportunistically screen all patients aged 15–24 years. Treat partners and refer to GUM. Test positives for reinfection at 3 months.	**First line:** Doxycycline ***OR***	100mg BD	7 days	

urethritis	Refer to BASHH Guidelines for further information. **Pregnant/breastfeeding:** azithromycin is most effective option. **Do not prescribe doxycycline in pregnancy.** Seek advice from GUM regarding test of cure for pregnant women.	**If doxycycline contraindicated/not tolerated /Pregnant**: Azithromycin	1000mg stat, then 500mg OD for 2 further days		
Genital Warts	Podophyllotoxin is contra-indicated in pregnancy. For small numbers of discrete warts use liquid nitrogen administered every 2-3 weeks. Repeat podophyllotoxin treatment weekly if necessary for 4-5 courses depending on product used.	Podophyllotoxin 0.5% soln or 0.15% cream	Applied every 12 hours	3 days	
Epididymo-orchitis	Send an MSU in all patients and consider a urine NAAT to exclude chlamydia and/or gonorrhoea - consider referral to GUM for full assessment.In patients with no sexual risk factors, older patients, or catheter in situ treatment choice is based on urine culture, see formulary for more information. Review MHRA Safety Advice before prescribing Ofloxacin.	**STI suspected:** Doxycycline	100mg BD	14 days	
		UTI cause suspected Trimethoprim ***OR***	200mg BD	14 days	
		Ofloxacin	200mg BD	14 days	
Vaginal candidiasis	There is no evidence that treating the partner of women suffering from candidiasis is helpful. Patients who are inserting intravaginal cream or pessaries into the vagina, may also apply topical clotrimazole cream to the vulva.	First line: oral Fluconazole	150mg	Stat	
		Second line/Pregnancy: Clotrimazole	500mg to be inserted vaginally at night	for 1 night	
Bacterial vaginosis	Oral metronidazole is as effective as topical treatment, and is cheaper. 7 days results in fewer relapses than 2g stat at 4 weeks. **Pregnant/breastfeeding:** avoid 2g dose. Treating partners does not reduce relapse.	Oral Metronidazole ***OR***	400mg BD ***OR*** 2000mg	7 days ***OR*** Stat	
		Metronidazole 0.75% vaginal gel ***OR***	5g applicator at night	5 nights	
		Clindamycin 2% vaginal cream	One applicatorful daily at night	7 nights	
Gonorrhoea	Refer to GUM.				
Nonspecific urethritis (NSU)	If first episode of NSU, refer to sexual health service. Avoid doxycycline in pregnancy.	Doxycycline	100mg BD	7 days	
		If doxycycline contraindicated/not tolerated /Pregnant: Azithromycin	1g (4 x 250mg) single dose followed by 500mg daily for 2 days		

Genital herpes	**Advise:** saline bathing, analgesia, or topical lidocaine for pain, and discuss transmission. **First episode:** treat within 5 days if new lesions or systemic symptoms, and refer to GUM. **Recurrent:** self-care if mild, or initiate aciclovir 800mg TDS - treatment is symptom driven see BASHH Guidelines; review patient regularly and refer to GUM if necessary.	Oral Aciclovir	400mg TDS	5 days	
			800mg TDS (if recurrent)	2 days	
Trichomoniasis	Oral treatment needed as extravaginal infection common. Treat partners, and refer to GUM for other STIs. **Pregnant/breastfeeding:** avoid 2g single dose metronidazole; clotrimazole for symptom relief (not cure) if metronidazole declined.	Metronidazole	400mg BD ***OR*** 2g (more adverse effects)	7 days Stat	
		Pregnancy to treat symptoms: Clotrimazole	100mg pessary at night	6 nights	
Pelvic inflammatory disease	**Refer** women and sexual contacts to GUM. Test for gonorrhoea and chlamydia. If **gonorrhoea** likely (partner has it; sex abroad; severe symptoms) then refer to GUM for treatment.	Metronidazole ***AND***	400mg BD	14 days	
		Doxycycline	100mg BD	14 days	
▼ Skin and soft tissue infections					
Note: Refer to RCGP Skin Infections online training. For MRSA, check sensitivities and if necessary, discuss therapy with microbiologist.					
Impetigo	Topical antiseptic (Crystacide) should be used for localised lesions only. Reserve topical antibiotics for very localised lesions to reduce risk of bacteria becoming resistant. **Only use mupirocin if caused by MRSA.** **Extensive, severe, or bullous:** oral antibiotics.	Crystacide 1% **OR** Topical Fusidic acid	Thinly TDS	5 days	
		If MRSA: topical Mupirocin	2% ointment TDS	5 days	
		More severe: oral Flucloxacillin	1g QDS	5 days	
		Penicillin allergy: oral Clarithromycin	500mg BD	7 days	
Diabetic Foot infection	All diabetic patients with active ulceration must be referred as an emergency to a member of the multidisciplinary foot team.	Refer to "Diabetic Foot Guidance"			
Leg ulcer	Ulcers are always colonised. Antibiotics do not improve healing unless active infection (only consider if purulent exudate/odour; increased pain; cellulitis; pyrexia).	As for cellulitis.			

Acne	Refer to ERF Chapter on Skin				
Eczema	Topical antibiotics (eg Fucidin®) are not recommended as they encourage resistance and do not improve healing. If visisble signs of infection, treat as for impetigo.				
Cellulitis and erysipelas	Afebrile and healthy other than cellulitis: use oral flucloxacillin alone. **If river or sea water exposure:** seek advice from Microbiology. Febrile and systemically unwell: admit for possible IV treatment, **Erysipelas:** often facial and unilateral. Use flucloxacillin for non-facial erysipelas. Orbital or preseptal cellulitis should be urgently assessed in hospital.	Flucloxacillin* **Penicillin allergy:** Doxycycline **If allergic to / intolerant of Doxycycline**: Clarithromycin **Facial:** Co-amoxiclav	1g QDS 100mg BD 500mg BD 625mg TDS	5 days	* If slow response, continue for a further 5 days
Bites	**Human:** thorough irrigation is important. Antibiotic prophylaxis is advised. Assess risk of tetanus, rabies, HIV, and hepatitis B and C. **Cat:** always give prophylaxis. **Dog:** give prophylaxis if: puncture wound; bite to hand, foot, face, joint, tendon, or ligament; immunocompromised, cirrhotic, asplenic, or presence of prosthetic valve/joint. **Penicillin allergy**: Review all at 24 and 48 hours, as not all pathogens are covered.	**Prophylaxis/treatment all:** Co-amoxiclav **Penicillin allergy :** Metronidazole ***PLUS*** Doxycycline	625mg TDS 400mg TDS 100mg BD	3 days prophylaxis; 5 days treatment	
Scabies	**First choice permethrin:** Treat **whole** body from ear/chin downwards, and under nails. **If using permethrin** and patient is under 2 years, elderly or immunosuppressed, or **if treating with malathion:** also treat face and scalp. **Home/sexual contacts:** treat within 24 hours.	Permethrin **Permethrin allergy:** Malathion	5% cream 0.5% aqueous liquid	2 applications, 1 week apart	
Mastitis	*S. aureus* is the most common infecting pathogen. Suspect if woman has: a painful, tender or red breast; fever and / or general malaise. Request input from Breast surgery if not resolving. **Breastfeeding:** oral antibiotics are appropriate, where indicated. Women should continue feeding, including from the affected breast.	Flucloxacillin **Penicillin allergy:** Erythromycin ***OR*** Clarithromycin (not if breastfeeding)	1g QDS 500mg QDS 500mg BD	10–14 days	

Dermatophyte infection: skin	**Most cases:** use terbinafine as fungicidal, treatment time shorter than with fungistatic imidazoles. If candida possible, use clotrimazole 1% cream. **If intractable, or scalp:** send skin scrapings, and if infection confirmed: use oral terbinafine or itraconazole (see BNF). **Scalp:** oral therapy, and discuss with specialist.	Topical Terbinafine 1% ***OR***	OD-BD	1- 4weeks, continue for 1-2 weeks after healing	
		Topical Clotrimazole 1%	2-3 times daily	Continue for 1-2 weeks after healing (usually 4-6 weeks).	
		Severe athlete's foot: Topical 1% Terbinafine	OD-BD	7 days	
Dermatophyte infection: nail	**Take nail clippings;** start therapy only if infection is confirmed. Oral terbinafine is more effective than oral azole. Liver reactions 0.1 to 1% with oral antifungals. If candida or non-dermatophyte infection is confirmed, use oral itraconazole. Topical nail lacquer is not as effective. **To prevent recurrence:** apply weekly 1% topical antifungal cream to entire toe area. **Children:** seek specialist advice.	**First line:** Terbinafine	250mg OD	Fingers: 6 weeks Toes: 12 weeks	Stop treatment when continual, new, healthy, proximal nail growth.
		Second line: Itraconazole	200mg BD	1 week a month Fingers: 2 courses Toes: 3 courses	
Varicella zoster/ chickenpox	**Pregnant / immunocompromised / neonate:** seek urgent specialist advice. **Chickenpox:** consider aciclovir if: onset of rash <24 hours, and 1 of the following: >14 years of age; severe pain; dense/oral rash; taking steroids; smoker. Give paracetamol for pain relief.	**First line for chicken pox and shingles:** Aciclovir	800mg 5 times daily	7 days (In immune compromised patients, continue for at least 48	

Herpes zoster/ shingles	**Shingles:** Treat > 50 years old, age less than 50 years with any of the following criteria: Immunocompromised, non-truncal involvement (such as shingles affecting the neck, face, limbs or perineum), involvement of multiple dermatomes, eczema, moderate or severe pain, moderate or severe rash, seek immediate specialist advice regarding antiviral treatment for people with ophthalmic involvement; severely immunocompromised people; immunocompromised people who are systemically unwell, or have a severe or widespread rash or multiple dermatomal involvement; immunocompromised children; or pregnant or breastfeeding women. These are conditions that may indicate HIV infection. Please offer an HIV test in line with national guidance (see BHIVA GUIDELINES)	**Second line (shingles):** Valaciclovir	1g TDS	hrs after crusting of lesions)	
Lyme disease	Diagnosis and management of Lyme disease				
▼ Eye infections					
Conjunctivitis	**First line:** bath/clean eyelids with cotton wool dipped in sterile saline or boiled (cooled) water, to remove crusting. **Treat only if severe**, as most cases are viral or self-limiting. **Bacterial conjunctivitis:** 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. **Third line:** fusidic acid as it has less gram-negative activity.	**Second line:** Chloramphenicol 0.5% eye drop ***OR*** 1% ointment	**Drops:**2 hourly for 2 days, then up to 4 times a day. **Ointment:** up to 4 times daily, or just at night if drops used during day.	Course length up to 1 week, continue for 48 hours after resolution.	
		Third line: Fusidic acid 1% gel	BD		
Corneal Abrasions	Refer to community optometrist for ongoing treatment (see ERF for additional information). Corneal abrasions may be treated with chloramphenicol eye ointment +/- lubricants. Optional lubricating ointment (e.g. Xailin Night) may be added in-between, i.e. alternating with the chloramphenicol.	Chloramphenicol 1% eye ointment **With or without**	6-8 hourly	for 3-7 days	Frequency and duration is guided by severity and response to treatment
		Xailin Night eye ointment preservative free			
Ophthalmic zoster	Treat with oral aciclovir with or without ganciclovir eye gel. Ganciclovir used where on examination there is ocular epithelial	Aciclovir **with /without**	800mg 5 times daily	for 7 days	

	involvement. Oral aciclovir should be prescribed immediately for ophthalmic zoster. During treatment with ganciclovir eye gel, women of childbearing age should use effective contraception, and men with partners of childbearing age should be advised to use barrier contraception during and for at least 90 days after treatment. This is a condition that may indicate HIV infection. Please offer an HIV test in line with national guidance (see BHIVA GUIDELINES)	Ganciclovir 0.15% eye gel	Apply 5 times a day until healed, then 3 times a day for further 7 days	Treatment does not usually exceed 21 days	
Blepharitis	**First line:** lid hygiene for symptom control, including: warm compresses; lid massage and scrubs ;gentle washing; avoiding cosmetics. **Second line:** topical antibiotics if hygiene measures are ineffective after 2 weeks. **Signs of meibomian gland dysfunction**, or acne rosacea: consider oral antibiotics.	**Second line:** topical Chloramphenicol	1% ointment BD	6-week trial	
		Third line: Doxycycline (unlicenced)	100mg OD	2-3 months	

▼ Dental Infections

Link to Scottish Dental Clinical Effectiveness Programme - SDCEP. Patients presenting to non-dental primary care services with dental problems should be directed to their regular dentist, or if this is not possible, to the NHS 111 service who will be able to provided details of how to access emergency dental care.