

Infection – Management and Treatment in Primary Care SWL (Antimicrobial Guidelines)

For use in NHS Sutton, Merton, Wandsworth, Kingston & Richmond boroughs

This guidance is based on the best available evidence but use professional judgement and involve patients

PRINCIPLES OF TREATMENT

- 1. This guidance should not be used in isolation; it should be supported with patient information about safety netting, delayed/back-up antibiotics, self-care, infection severity and usual duration, clinical staff education, and audits. Materials are available on the RCGP TARGET website.
- 2. Prescribe an antibiotic only when there is likely to be a clear clinical benefit, giving alternative, non-antibiotic self-care advice, where appropriate. Limit telephone prescribing to exceptional cases.
- 3. Always check for antibiotic allergies. Confirm true allergy (i.e. rash, swelling of lips, tongue or face, anaphylaxis, etc.) to recommended antibiotic before prescribing an alternative to ensure appropriate antibiotics are not excluded from the options.
- 4. Consider a no, or delayed/back up, antibiotic strategy for acute self-limiting upper respiratory tract infections and mild UTI symptoms.
- 5. In severe infection, or immunocompromised, it is important to initiate antibiotics as soon as possible, particularly if sepsis is suspected. If the patient is not at moderate to high risk for sepsis, give information about symptom monitoring, and how to access medical care if they are concerned.
- 6. Where an empirical therapy has failed or special circumstances exist, microbiological advice can be obtained from St George's Hospital on © 0208 725 5693, Kingston Hospital on © 020 8934 2052 or St Helier Hospital on © 020 8296 2468.
- 7. Use simple generic antibiotics first if possible. Avoid broad spectrum antibiotics (e.g. co-amoxiclav, quinolones and cephalosporins) when narrow spectrum antibiotics remain effective, as they increase the risk of *Clostridium difficile*, MRSA and resistant UTIs.
- 8. Modify suggested adult doses/duration for age, weight and renal function. Consider a larger dose or longer course in severe or recurrent cases. Doses are for guidance only, are oral and for adults unless otherwise stated. Children's doses are provided when appropriate and can be accessed through the BNFc symbol. Refer to the BNF for further dosing and interaction information (e.g. interaction between macrolides and statins, clozapine and ciprofloxacin, etc) if needed. Check for hypersensitivity.
- 9. The use of new and more expensive antibiotics (e.g. quinolones and cephalosporins) is inappropriate when standard and less expensive antibiotics remain effective.
- 10. Lower threshold for antibiotics in immunocompromised or those with multiple morbidities; consider culture/specimens and seek advice.
- 11. Avoid widespread use of topical antibiotics, especially those agents also available systemically; in most cases, topical use should be limited.
- 12. In pregnancy take specimens to inform treatment. Where possible AVOID tetracyclines, aminoglycosides, quinolones, azithromycin (except in chlamydial infection), clarithromycin, and high dose metronidazole (2g STAT), unless benefits outweigh the risks. Penicillins, cephalosporins and erythromycin are safe in pregnancy. Short term use of nitrofurantoin is not expected to cause foetal problems (theoretical risk of neonatal haemolysis). Trimethoprim is also unlikely to cause problems unless poor dietary folate intake, or taking another folate antagonist. Seek further advice from the UK Teratology Information Service on O 0344 892 0909 if needed.
- 13. Avoid all tetracyclines in children under 12 years due to deposition in growing bone and teeth, by binding to calcium, causing staining and occasionally dental hypoplasia.
- 14. Where there are two clinically appropriate options consider adherence and cost effectiveness.
- 15. Disabling, long-lasting or potentially irreversible adverse reactions affecting musculoskeletal and nervous systems have been reported very rarely with fluoroquinolone antibiotics. Fluoroquinolone treatment should be discontinued at the first signs of a serious adverse reaction, including tendon pain or inflammation. For further information click here.



CONTENTS Click on link to go to section within document

UPPER RESPIRATORY TRACT INFECTIONS

Influenza & Influenza prophylaxis

Acute sore throat

Scarlet fever (Group A Streptococcus)

Acute sinusitis

Acute Otitis Externa

Acute Otitis Media

LOWER RESPIRATORY TRACT INFECTIONS

Acute cough and bronchitis

Acute exacerbation of COPD

Acute exacerbation of Bronchiectasis

Community-acquired pneumonia (Children and young people)

Community-acquired pneumonia (Adults)

Hospital-acquired pneumonia

URINARY TRACT INFECTIONS

Uncomplicated lower UTI (i.e. no fever or flank pain) in men & non-pregnant women 16 years & over

UTI in pregnancy

UTI in patients with catheters

Acute prostatitis

Acute pyelonephritis

UTI in Children

Recurrent UTI (2 in 6 months or ≥3 in a year)

MENINGITIS / SEPTICAEMIA

Suspected meningococcal disease

Prevention of secondary case of meningitis

GASTRO-INTESTINAL TRACT INFECTIONS

Oral Candidiasis

Helicobacter pylori Infectious diarrhoea

Clostridiodes difficile

Traveller's diarrhoea

Acute Diverticulitis

GENITAL TRACT INFECTIONS

Chlamydia trachomatis/ urethritis

Epididymitis

Vaginal candidiasis

Bacterial vaginosis

Genital Herpes

Gonorrhoea

Trichomoniasis

Pelvic Inflammatory Disease

SKIN / SOFT TISSUE INFECTIONS

Impetigo

Cold sores

PVL SA

Eczema (bacterial infection)

Acne Vulgaris

Insect bites and stings

Cellulitis & erysipelas

Human and Animal Bites

Dermatophyte infection: skin

Dermatophyte infection: nail

Mastitis

Varicella zoster/ chicken pox

Bacterial Conjunctivitis

Blepharitis

PARASITIC INFECTIONS

Threadworm

Scabies

Lyme disease with erythema migrans (Tick Bites)

DENTAL INFECTIONS

Mucosal ulceration and inflammation (simple gingivitis)

Acute necrotising ulcerative gingivitis

Pericoronitis

Dental abscess



			1	South West London		
ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS		
NICE NG63: Co	IRATORY TRACT I nsider delayed antibi e antibiotics for viral					
	Oseltamivir	Prophylaxis: Aged 13 years & over & adults unless weight <40kg: 75mg OD BNFc	10 days	 Annual vaccination is essential for all those "at risk" of influenza. Antivirals are not recommended for healthy adults. Treat "at risk" patients when influenza is 		
		Treatment: Aged 13 years & over & adults unless weight <40kg: 75mg BD BNFc	5 days	circulating in the community, and ideally within 48 hours of onset (36 hours for zanamivir treatment in children), or in a care home where influenza is likely. • At risk:		
Influenza treatment &	Severe immunosup resistance (plus se	ppression & complicated influenza or o ek advice):	seltamivir	 pregnant (including up to two weeks post- partum); children under six months; 		
prophylaxis NICE TA168 Influenza UKHSA		Prophylaxis: Aged 13 years & over & adults unless weight <40kg: 10mg OD (two inhalations by diskhaler) BNFc	10 days	 adults 65 years or older; chronic respiratory disease (including COPD and asthma); significant cardiovascular disease (not hypertension); severe immunosuppression; 		
<u>Influenza</u>	Zanamivir	Treatment: Aged 13 years & over & adults: 10mg BD (two inhalations by diskhaler) BNFc	5 days	idabetes mellitus; chronic neurological, renal or liver disease; morbid obesity (BMI>40). For pregnant women: Discuss risk benefit with patient before prescribing oseltamivir. Decision to prescribe zanamivir should be discussed with local infection specialist. See the UKHSA Influenza guidance for the treatment of patients under 13 years of age.		
	No antibiotic. Given	ve self-care advice – see comments se	vice – see comments section. • Paracetamol/ib	Self-care advice: Paracetamol/ibuprofen for pain. Medicated lozenges may help pain in adults and		
Acute sore throat	1. Penicillin V	500mg QDS/1g BD ^{BNFc}	5-10 days	 can be bought OTC. Drink adequate fluids. Explain soreness will take about 7 days to resolve and safety net. Self Care Forum Factsheet 		
NICE: Sore	Penicillin allergy:			Avoid antibiotics as 82% of cases resolve in 7 days, and pain is only reduced by 16 hours.		
throat (acute) NG84	Clarithromycin	250-500mg BD ^{BNFc}	5 days	Use FeverPAIN or Centor to assess symptoms. FeverPAIN 0-1 or Centor 0-2: No antibiotic FeverPAIN 2-3: No antibiotic or back up antibiotic		
NG84 Visual summary	OR Erythromycin (preferred if pregnant)	250-500mg QDS/500mg-1g BD ^{BNFc}	5 days	 FeverPAIN 4-5 or Centor 3-4: immediate or back-up antibiotic Systemically very unwell or high risk of complications: immediate antibiotic Complications are rare: antibiotics to prevent quinsy NNT>4000; otitis media NNT200. 10 days penicillin has lower relapse than 5 days in patients under 18 years of age. 		
Scarlet fever (Group A	Optimise analgesia,	give safety netting advice AND:	Self-care advice: Paracetamol/ibuprofen for pain. Drink adequate fluids.			
	Penicillin V	500mg QDS BNFc	10 days	 Prompt treatment with appropriate antibiotics significantly reduces the risk of complications. Vulnerable individuals (immunocompromised, the comorbid, or those with skin disease) are at 		
Streptococcus)	Penicillin allergy:			increased risk of developing complications. • CKS: Offer paracetamol or ibuprofen, encourage		
PHE Scarlet f e v e r	Clarithromycin	250-500mg BD ^{BNFc}	5 days	rest and to drink adequate fluids. CKS: Scarlet fever is a notifiable disease. If there is any suspicion of infection because of clinical features, a notification form should be completed and sent to the local UK Health Security Agency (UKHSA) centre within 3 days.		



			South West London		
ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS	
	No antibiotic. Given	ve self-care advice – see comments se	Self-care advice: Paracetamol/ibuprofen for pain/fever. Little evidence that nasal decongestants or nasal		
	1. Penicillin V	500mg QDS BNFc	5 days	saline help, but people may want to try them. • Symptoms <10 days: do not offer antibiotics as most resolve in 14 days without, and antibiotics	
Acute	Penicillin allergy:		•	only offer marginal benefit after 7 days (NNT15). Symptoms with no improvement >10 days: no	
sinusitis NICE: Sinusitis	Doxycycline (not in under 12yrs) <i>OR</i>	200mg STAT then 100mg OD BNFc	5 days	antibiotic, or delayed antibiotic if several of: > purulent nasal discharge; > severe localised unilateral pain; > fever;	
(acute) NG79	Clarithromycin <i>OR</i>	500mg BD BNFc	5 days	 marked deterioration after initial milder phase. Consider high-dose nasal steroid if >12 years. 	
NG79 Visual summary	Erythromycin (preferred if pregnant)	250-500mg QDS BNFc OR 500-1000mg BD	5 days	 Systemically very unwell, or high risk of complications: immediate antibiotic. Suspected complications: e.g. sepsis, intraorbital or intracranial, refer to secondary care. 	
	Third choice or very unwell or worsening:			<u>CKS</u> : Explain that acute sinusitis is caused by a	
	Co-amoxiclav	500/125mg TDS BNFc	5 days	virus in more than 98% of people, takes on average 2.5 weeks to resolve, and that antibiotics are only likely to help when there are features indicative of bacterial infection.	
	No antibiotic. Give self-care advice – see comments section.				
Acute Otitis	Acetic acid 2% (c 12 years only)*	over 1 spray TDS BNFc	7 days	Self-care advice: • Analgesia for pain relief and apply localised heat (e.g. a warm flannel).	
Externa CKS Otitis	Neomycin sulphat with corticosteroid			*EarCalm® available over the counter Second line: topical acetic acid or topical antibiotic +/- steroid: similar cure at 7 days.	
<u>externa</u>	If cellulitis:		•	If cellulitis or disease extends outside ear canal or systemic signs of infection, start oral flucloxacillin and refer to evalude malignest etitic externs.	
	Flucloxacillin	250mg QDS BNFc If severe: 500mg QDS	7 days 7 days	and refer to exclude malignant otitis externa.	



ILLNESS	DRUG OPTION	DOSE	DURATION	CON	IMENTS
	Offer regular paracetamol or ibuprofen for pain. Consider eardrops containing anaesthetic		Up to 7 days	AOM is a self-limiting infection that mainly affects children. It can be caused by a virus and bacteria and it is difficult to distinguish between these.	
	and analgesic if an immediate oral antibiotic prescription is not given and there is no eardrum perforation / otorrhoea i.e			However, both are usual routinely need antibiotics	lly self-limiting and do not
	Phenazone 40mg/g with lidocaine 10mg/g (Otigo®)	Apply 4 drops two or three times a day	Up to 7 days	Antibiotics make little dif children whose sympton Complications (e.g. mas without antibiotics.	·
	Amoxicillin	1-11 months: 125mg TDS BNFc 1-4 years: 250mg TDS 5-17 years: 500mg TDS	5-7 days	Optimise analgesia and avoid antibiotics Those with otorrhoea, or those aged less than 2	
Acute Otitis	Penicillin allergy or into	lerance:		years with bilateral infe	
Media NICE: Otitis media (acute)	Clarithromycin	1 month - 11 years: BNFc Under 8kg: 7.5mg/kg BD 8-11kg: 62.5mg BD 12-19kg: 125 mg BD	5-7 days	Systemically very unwell or high risk of complications:	Immediate antibiotic
NG91 NG91 Visual summary	OR	20-29kg: 187.5mg BD 30-40 kg: 250mg BD <i>OR</i> 12-17 years: 250-500mg BD		Otorrhoea or under 2 years with infection in both ears:	No antibiotics or Back-up antibiotics or Immediate antibiotic
	Erythromycin (preferred if pregnant)	8-17 years: 250-500mg QDS <i>OR</i> 500 – 1000mg BD	5-7 days	Otherwise:	No antibiotic or Back-up antibiotic
	Worsening symptoms on first choice taken for at least 2 to 3 days:			With immediate antibiotion Seek medical help if syn	
	Co-amoxiclav	1-11 months: 0.25 ml/kg of 125/31 suspension TDS BNFc 1-5 years: 5ml of 125/31 suspension TDS OR 0.25ml/kg of 125/31 suspension TDS 6-11 years: 5ml of 250/62 suspension TDS OR 0.15 ml/kg of 250/62 suspension TDS OR 0.15 ml/kg of 250/62 suspension TDS 12-17 years: 250/125mg TDS OR 500/125mg TDS	5-7 days	Seek medical help if symptoms worsen rapidly or significantly. With back-up antibiotic prescription, advise: Antibiotic not needed immediately. Use prescription if no improvement in 3 days or symptoms worsen. Seek medical help if symptom worsen rapidly or significantly. With no antibiotic given, advise: Antibiotic is not needed. Seek medical help if symptoms worsen rapidly or significantly.	
	Alternative second choice	ce oral antibiotic for penicillin aller	gy or intolerance		
	Consult local microbiolog	ist			



ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
	-		DURATION	COMMENTS
Note: Low doses				amoxicillin. Do not use quinolones (ciprofloxacin xacin) for proven resistant organisms.
	Give self-care advice	e & safety net – see comments sect	tion.	
	Adults aged 18 years	& over:		
	1. Doxycycline	200mg STAT then 100mg OD BNFc	5 days	Colf care advices
	Adults aged 18 years	& over – alternative first choice anti	biotics:	Self-care advice: • Some people may wish to try honey (in over 1s), the herbal medicine pelargonium (in over 12s),
	Amoxicillin <i>OR</i> (preferred if pregnant)	500mg TDS BNFc	5 days	cough medicines containing the expectorant gualfenesin (in over 12s) or cough medicines containing cough suppressants, except codeine,
	Clarithromycin <i>OR</i>	250-500mg BD ^{BNFc}	5 days	(in over 12s). These self-care treatments have limited evidence for the relief of cough symptoms.
	Erythromycin (preferred if pregnant)	250-500mg QDS ^{BNFc} OR 500-1000mg BD	5 days	Acute cough with upper respiratory tract infection: no antibiotic.
Acute cough	Children & young peo	ple under 18 years:		Acute bronchitis: no routine antibiotic. Acute cough and higher risk of complications
and bronchitis	1. Amoxicillin	1-11 months: 125mg TDS BNFc 1-4 years: 250mg TDS 5-17 years: 500mg TDS	5 days	 (at face-to-face examination): immediate or back-up antibiotic. Acute cough and systemically very unwell (at face to face examination): immediate antibiotic.
NICE: Cough (acute) NG120		ple under 18 years - alternative first	choice	Higher risk of complications includes:
	antibiotics:			 people with pre-existing comorbidity; young children born prematurely;
NG120 Visual Summary	Clarithromycin	1 month - 11 years: BNFc Under 8kg: 7.5mg/kg BD 8-11kg: 62.5mg BD 12-19kg: 125 mg BD 20-29kg: 187.5mg BD 30-40 kg: 250mg BD	5 days	 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. Do not offer a mucolytic, an oral or inhaled
	OR	12-17 years: 250-500mg BD		bronchodilator, or an oral or inhaled corticosteroid unless otherwise indicated.
	Erythromycin	1 month to 1 year: 125mg QDS BNFc OR 250mg BD 2-7 years: 250mg QDS	5 days	 Antibiotics have little benefit if no co-morbidity. Consider delayed antibiotic as second line, with safety netting, and advise that symptoms can last up to 3 to 4 weeks.
	OR Doxycycline (not in under 12yrs)	OR 500mg BD 8-17 years: 250-500mg QDS OR 500 – 1000mg BD 200mg STAT then 100mg OD BNFc	5 days	
	(not in under 12yrs)	200mg STAT then 100mg OD 5 5 5		
	1. Amoxicillin <i>OR</i>	500mg TDS (see BNF for severe infection)	5 days	
Acute	Doxycycline <i>OR</i>	200mg STAT then 100mg OD (see BNF for severe infection)	5 days	
exacerbation of COPD	Clarithromycin	500mg BD (see BNF for severe infection)	5 days	 Many exacerbations are not caused by bacterial infections so will not respond to antibiotics. Consider an antibiotic, but only after taking into
NICE: COPD (acute exacerbation) NG114		biotics if no improvement in symptoms days; guided by susceptibilities when a		account severity of symptoms (particularly sputum colour changes and increases in volume or thickness), need for hospitalisation, previous exacerbations, hospitalisations and risk of
NG114 Visual	Alternative choice (if p	person at higher risk of treatment fa	ilure):	complications, previous sputum culture and susceptibility results, and risk of resistance with
NICE COPD	2. Co-amoxiclav OR	500/125mg TDS	5 days	 repeated courses. Some people at risk of exacerbations may have antibiotics to keep at home as part of their
NG115	Co-trimoxazole (consider safety issues) OR	960mg BD	5 days	exacerbation action plan.
	Levofloxacin (consider safety issues)	500mg OD	5 days	



ILLNESS DRUG OPTION DOSE DURATION Adults aged 18 years & over Send a sputum sample for culture and susceptibility testing and start empirical treatment:	COMMENTS
Send a sputum sample for culture and susceptibility testing and start	
1. Amoxicillin OR (preferred if pregnant) 500mg TDS 7-14 days	
Doxycycline <i>OR</i> 200mg STAT then 100mg OD 7-14 days	
Clarithromycin 500mg BD 7-14 days	
Adults aged 18 years & over - alternative choice oral antibiotics (if person at higher risk of treatment failure) empirical treatment:	
2. Co-amoxiclav <i>OR</i> 500/125mg TDS 7-14 days	
Levofloxacin 500mg OD/BD 7 - 14 days (consider safety issues)	
Children & young people under 18 years Send a sputum sample for culture and susceptibility testing and start • When ch	rait the results of culture. noosing antibiotics, take account of: of symptoms, previous exacerbations,
hospitali	sations and risk of complications and
1-4 years: 250mg TDS suscepti 5-17 years: 500mg TDS • If unable	nt failure, previous sputum culture and bility results to take oral antibiotics or severely efer to hospital for IV antibiotics.
Acute exacerbation of Bronchiectasis Clarithromycin OR 1 month - 11 years: BNFc Under 8kg: 7.5mg/kg BD 8-11kg: 62.5mg BD 12-19kg: 125 mg BD 20-29kg: 187.5mg BD 30-40 kg: 250mg BD OR 12-17 years: 250-500mg BD 7 - 14 days person's history, sprevious respons People value in Courses	length based on an assessment of the severity of bronchiectasis, exacerbation severity of exacerbation symptoms, a culture and susceptibility results, and e to treatment. who may be at higher risk of treatment include people who have had repeated of antibiotics, a previous sputum culture
NICE: Bronchiectasis (non-cystic fibrosis) (acute Doxycycline (not in under 12yrs) Doxycycline (not in under 12yrs) 200mg STAT then 100mg OD 7 - 14 days of development of the cystic states of the	stant or atypical bacteria, or a higher risk oping complications.
NG117 Children & young people under 18 years – alternative choice oral antibiotics (if person at higher risk of treatment failure) empirical specialist treatment:	Antibiotic prophylaxis Only start a trial of antibiotic prophylaxis on specialist advice When considering antibiotic prophylaxis, discuss
2. Co-amoxiclav <i>OR</i> 1-11 months: 0.25 ml/kg of 125/31 suspension TDS BNFc 1-5 years: 5ml of 125/31 suspension TDS <i>OR</i> 0.25ml/kg of 125/31 suspension TDS 6-11 years: 5ml of 250/62 suspension TDS <i>OR</i> 0.15 ml/kg of 250/62 suspension TDS <i>OR</i>	sible benefits (reduced exacerbations), ncreased antimicrobial resistance, effects and interactions with other es) and the need for regular review with
Ciprofloxacin (on microbiologist advice only) (consider safety issues) 1-17 years: 20mg/kg BD (max. 750mg per dose) BNFc 7 - 14 days	
AND*	
Clarithromycin* <i>OR</i> 1 month - 11 years: BNFc Under 8kg: 7.5mg/kg BD 8-11kg: 62.5mg BD 12-19kg: 125 mg BD 20-29kg: 187.5mg BD 30-40 kg: 250mg BD <i>OR</i> 12-17 years: 250-500mg BD	
Doxycycline* 200mg STAT then 100mg OD 7 - 14 days [not in under 12yrs] 7 - 14 days	



ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
	Non-severe in childre	n:		Refer to paediatric specialist if under 1 month.
	Amoxicillin (caution in penicillin allergy)	1 to 2 months: 125mg TDS 3 to 11 months: 125mg TDS 1 to 4 years: 250mg TDS 5 to 11 years: 500mg TDS 12 to 17 years: 500mg TDS (higher doses can be used - see BNFc)	5 days 3 days 3 days 3 days 5 days	In children and young people, severity is assessed by clinical judgement. Features of severe CAP may include: • Difficulty breathing • Oxygen saturation less than 90% • Raised heart rate
				Grunting Severe chest indrawing
	Non-severe in childre	en – alternative first choice:		Inability to breastfeed or drink
	2. Clarithromycin	1 to 2 months: •under 8 kg, 7.5 mg/kg BD 3 months to 11 years:	5 days	Lethargy Reduced level of consciousness Note that percutaneous oxygen saturation monitors may be inaccurate in people with pigmented skin.
	OR	 under 8 kg, 7.5mg/kg BD 8 to 11 kg, 62.5mg BD 12 to 19 kg, 125mg BD 20 to 29 kg, 187.5mg BD 30 to 40 kg, 250mg BD 12 to 17 years: 250mg to 500mg BD 	3 days 3 days 3 days 3 days 3 days 5 days	When choosing antibiotics, take account of the severity of symptoms or signs in children and young people the risk of complications, for example, a relevant comorbidity (such as severe lung disease or immunosuppression) local antimicrobial resistance and surveillance
Community- acquired pneumonia Children and young people	Erythromycin (preferred if pregnant) OR	8 to 11 years: 250mg to 500mg QDS 12 to 17 years: 250mg to 500mg QDS BNFc	3 days 5 days	data (such as flu and Mycoplasma pneumoniae infection rates) • recent antibiotic use • previous microbiological results, including colonisation with multi-drug resistant bacteria.
NICE Pneumonia: diagnosis and	Doxycycline (not in under 12yrs)	12 to 17 years: 200mg on first day, then 100 mg OD for 4 days BNFc	5 days	For children and young people with severe community acquired pneumonia: Consider blood cultures if there are additional clinical indications such as suspected sepsis
management NG250	Severe in children:			[NICE sepsis: recognition, diagnosis and early management.]
NG250 Community acquired	Co-amoxiclav (caution in penicillin allergy)	1 to 11 months: •0.5 ml/kg of 125/31 suspension TDS 1 to 5 years: •10 ml of 125/31 suspension TDS	5 days 5 days	Consider sputum cultures, if possible and age appropriate, taking into account their history of antibiotic treatment, their clinical trajectory, the presence of any comorbidities, any recent hospitalisation and the likelihood of getting a
pneumonia in Children and Young people	AND	or •0.5 ml/kg of 125/31 suspension TDS or	5 days	good quality sputum sample. • Do not routinely use urinary antigen tests.
Visual summary	(if atypical pathogens suspected)	•5 ml of 250/62 suspension TDS 6 to 11 years:	5 days	Explain to parents or carers of children with CAP that after starting treatment their child's symptoms
		 10 ml of 250/62 suspension TDS or 0.3 ml/kg of 250/62 suspension TDS 	5 days 5 days	should steadily improve, although the rate of improvement will vary and some symptoms will persist after stopping antibiotics.
	Clarithromycin	12 to 17 years, 500/125mg TDS BNFc 1 to 2 months: •under 8 kg, 7.5 mg/kg BD 3 months to 11 years: • under 8 kg, 7.5mg/kg BD • 8 to 11 kg, 62.5mg BD	5 days 5 days 5 days 5 days	For most children: • fever (without use of antipyretics) and difficulty breathing should have resolved within 3 to 4 days • cough should gradually improve but may persist for up to 4 weeks after discharge and does not usually require further review if the child is otherwise well.
	OR	• 12 to 19 kg, 125mg BD • 20 to 29 kg, 187.5mg BD • 30 to 40 kg, 250mg BD 12 to 17 years: 250mg to 500 mg BD BNFc	5 days 5 days 5 days 5 days 5 days	Advise parents or carers of children with CAP to seek further advice if there is persisting fever combined with: • increased work of breathing or • reduced fluid intake for children or poor feeding for infants or
	Erythromycin (preferred if pregnant)	8 to 11 years: 250mg to 500mg QDS	5 days	unresolving fatigue.
		12 to 17 years: 250mg to 500mg QDS BNFc	5 days	If intravenous antibiotics required, or alternative antibiotics required for severe CAP or penicillin allergy, consult microbiologist.



ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
	Low severity in adults:			If sepsis is suspected, assess and manage the
	Amoxicillin (caution in penicillin allergy)	500mg TDS (higher doses can be used - see BNF)	5 days	person in line with NICE's guideline on sepsis: recognition, diagnosis and early management. Severity is based on clinical judgement guided by
		– alternative first choice:	mortality risk score CRB65. Each CRB65 parameter scores one:	
	Doxycycline (not in pregnancy)	200mg STAT then 100mg OD	5 days	Confusion (Antimicrobial MT<8, or new disorientation in person, place or time) Respiratory rate >30/min; BP low systolic <90mmHg or low diastolic ≤
	OR Clarithromycin	500mg BD	5 days	60mmHg; • Age ≥ 65 Clinical judgement should always be used, as there
	OR Erythromycin	500mg QDS	5 days	may be situations where the mortality risk score does not align with the assessment of disease severity such as comorbidities or pregnancy.
	(preferred if pregnant)		o days	Stratify and inform shared decisions about place of care.
	Moderate severity in a	auits:		Score Severity Potential place of care
	Amoxicillin (caution in penicillin allergy)	500mg TDS (higher doses can be used - see BNF)	5 days	0 Low Primary care-led services and safety netting advice 1 Moderate Primary care-led services and safety netting advice or referral
Community- acquired pneumonia Adults in primary care	AND (if atypical pathogens suspected)			Same day emergency care unit (SDEC)
NICE	Clarithromycin	500mg BD	5 days	Hospital at home service Inpatient care
Pneumonia: diagnosis and management NG250	OR Erythromycin (preferred if pregnant)	500mg QDS	5 days	2 Moderate Refer to hospital 3 High Refer to hospital 4 High Refer to hospital
	., ,	dults – alternative first choice:		When considering a virtual ward, SDEC unit or hospital at home service, make a shared decision
NG250 Community acquired	Doxycycline (not in pregnancy)	200mg STAT then 100mg OD	5 days	with the person (and their family/carers, where appropriate) about the most appropriate place of care, taking into account:
<u>pneumonia –</u> <u>Adults in</u>	OR			 The person's preferences and support network Any advanced care plan or treatment
<u>primary care</u> <u>Visual summary</u>	Clarithromycin High severity in adults	500mg BD	5 days	escalation plan Clinical risks, including any comorbidities or
	Co-amoxiclav (caution in penicillin allergy)	500/125mg TDS	5 days	frailty The safety and suitability of the person's home environment Start antibiotic treatment as soon as possible after establishing a diagnosis. When choosing an
	AND (if atypical pathogens suspected)			antibiotic, take account of: The disease severity The risk of complications, e.g. a relevant comorbidity (such as severe lung disease or
	Clarithromycin	500mg BD	5 days	immunosuppression) Recent antibiotic use
	OR Erythromycin	500mg QDS	5 days	Previous microbiological results, including colonisation with multi-drug resistant bacteria
	(preferred if pregnant)	-	Judys	Give oral antibiotics first line if the person can take
	High severity in adults Levofloxacin	alternative first choice:500mg BD	5 days	oral medicines, and the severity of their condition does not require intravenous antibiotics. Stop antibiotics after 5 days unless microbiological
	(consider safety issues)			results suggest a longer course is needed or the person is not clinically stable.
				Reassess people if symptoms or signs do not improve as expected or worsen rapidly or significantly.



ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
Hospital-acqu		A os 48 hours or more after hospital ad charged from hospital within the last		<u>I</u>
- It molado po		higher risk of resistance:	. r to ro aayor	Refer to paediatric specialist if under 1 month.
	Co-amoxiclav (caution in penicillin allergy)	1 to 11 months: • 0.5ml/kg of 125/31 suspension TDS 1 to 5 years: • 10ml of 125/31 suspension TDS or • 0.5ml/kg of 125/31 suspension TDS or • 5ml of 250/62 suspension TDS 6 to 11 years: • 10ml of 250/62 suspension TDS or • 0.3ml/kg of 250/62 suspension TDS 12 to 17 years: 500/125mg TDS BNFC 18 years+, 500/125mg TDS	5 days then review	Ventilator associated pneumonia is excluded in this guideline. Higher risk of resistance includes symptoms or signs starting more than 5 days after hospital admission, relevant comorbidity such as severe lung disease or immunosuppression, recent use of broad spectrum antibiotics, colonisation with multidrug resistant bacteria and recent contact with health or social care setting before current admission. Start antibiotic treatment as soon as possible after
Hospital- acquired pneumonia	Non-severe and NOT higher risk of resistance – ADULTS alternative first choice:			establishing a diagnosis of HAP. When choosing an antibiotic(s), take account of: • disease severity (based on clinical judgement) • number of days in hospital before onset of
NG250 NG250 Hospital-acquired pneumonia Visual summary	2. Doxycycline (not in under 12yrs or pregnancy) OR Cefalexin (caution in penicillin allergy)	200mg STAT then 100mg OD 500 mg BD or TDS (can increase to 1 to 1.5g TDS or QDS)	5 days then review 5 days then review	symptoms • the risk of developing complications, for example if the person has a relevant comorbidity (such as severe lung disease or immunosuppression) • recent antibiotic use • recent microbiological results, including colonisation with multi-drug resistant bacteria • recent contact with health or social care setting before current admission • the risk of adverse effects with broad spectrum antibiotics, including <i>Clostridium difficile</i> infection.
	Non-severe and not h first choice:	igher risk of resistance – CHILDREN	l alternative	Give oral antibiotics first line if the person can take oral medicines, and the severity of their condition does not require intravenous antibiotics. Stop antibiotics after 5 days unless microbiological
	Clarithromycin	1 month to 11 years: • Under 8 kg, 7.5 mg/kg BD • 8 to 11 kg, 62.5 mg BD • 12 to 19 kg, 125 mg BD • 20 to 29 kg, 187.5 mg BD • 30 to 40 kg, 250 mg BD 12 to 17 years: 500 mg BD	5 days then review	results suggest a longer course is needed or the person is not clinically stable. Reassess people if symptoms or signs do not improve as expected or worsen rapidly or significantly. Consider sending a sample (sputum, nasopharyngeal swab or tracheal aspirate) for processing where appropriate/possible.



ILLNESS DRUG OPTION DOSE **DURATION COMMENTS URINARY TRACT INFECTIONS** Note: As antibiotic resistance and Escherichia coli bacteraemia in the community is increasing, use nitrofurantoin first line, always give safety net and self-care advice, and consider risks for resistance. Give TARGET UTI leaflet, and refer to the PHE UTI guidance for diagnostic information. Self-care advice: 1. Nitrofurantoin 100mg m/r BD (BD dose preferred Advise paracetamol or ibuprofen for pain & due to increased compliance) OR drinking enough fluid to avoid dehydration. 50mg i/r QDS No evidence for cranberry products or urine alkalinising agents to treat lower UTI. When considering antibiotics, take account of OR severity of symptoms, risk of complications, Women: 3 previous urine culture and susceptibility results, days previous antibiotic use which may have led to Men: 7 days If low risk of resistant bacteria and local antimicrobial resistance: resistance data. Trimethoprim 200mg BD **BNF**: Nitrofurantoin may be used with caution if eGFR 30-44ml/min to treat uncomplicated lower UTI caused by suspected or proven multidrug resistant bacteria and only if potential benefit outweighs risk. Low risk of resistance: younger women with If treatment failure always perform culture acute UTI and no risk. Risk factors for increased resistance include: Consider alternative diagnoses and follow recommendations in the acute care-home resident; pyelonephritis or acute prostatitis sections, basing antibiotic choice on recurrent UTI: recent culture and susceptibility results. Uncomplicated hospitalisation for >7 days in the last 6 months; lower UTI (i.e. unresolving urinary symptoms; no fever or flank recent travel to a country with increased If first line unsuitable or eGFR <45ml/min & MSU indicates susceptible: pain) in men & resistance; non-pregnant previous UTI resistant to trimethoprim, women 16 years cephalosporins, or quinolones. & over If risk of resistance: send urine for culture and 400mg STAT then 200mg TDS Pivmecillinam Women: 3 susceptibilities; safety net. days Women: NICE NG109: Men: 7 days Treat women with severe/≥3 symptoms. Urinary tract OR Women <65 years (mild/≤2 symptoms): pain infection (lower) visual summary relief, and consider back up antibiotic (to use if no If high resistance improvement in 48 hours or symptoms worsen at risk & MSU any time) or immediate antibiotic indicates If urine not cloudy, 97% NPV of no UTI. susceptible: If urine cloudy, use dipstick to guide treatment: Fosfomycin 3g STAT Single dose nitrite, leukocyctes, blood all negative 76% NPV; nitrite plus blood or leukocytes 92% PPV of UTI. Men: Immediate antibiotic. Men <65 years: consider prostatitis and send MSU, or if symptoms mild or non-specific, use negative dipstick to exclude UTI. • Nitrofurantoin is not recommended for men with suspected prostate involvement because it is unlikely to reach therapeutic levels in the prostate. All patients >65 years: treat if fever >38°C, or 1.5°C above base twice in 12 hours, and >1 other symptom. **TARGET UTI** SIGN 160: Management of suspected bacterial lower urinary tract infection in adult women Send MSU for culture; start antibiotics in all with significant bacteriuria, Pregnant women: immediate antibiotic. even if asymptomatic: Treatment of asymptomatic bacteriuria in pregnant women: choose from nitrofurantoin If eGFR ≥45ml/min: (avoid at term), amoxicillin or cefalexin based on 100mg m/r BD (BD dose preferred 7 days 1 Nitrofurantoin **UTI** in recent culture and susceptibility results. (avoid at term) due to increased compliance) OR pregnancy Review treatment on results of any available 50mg i/r QDS previous MSU. NICE NG109: SPC: Short-term use of nitrofurantoin in **Urinary tract** pregnancy is unlikely to cause problems to the infection (lower) foetus but avoid at term due to possible risk of visual summary Only if culture results available and susceptible: neonatal haemolysis. SIGN 160: Management of suspected bacterial lower urinary tract infection in adult women 2. Amoxicillin OR 500mg TDS 7 days PHE: Urinary tract infection: diagnostic tools for primary care Cefalexin 500mg BD 7 days



ILLNESS	DRUG OPTION	DOSE	DURATION	South West London COMMENTS
				Self-care advice:
	First choice non-preg	gnant women & men if no upper UT	l symptoms:	Advise paracetamol for pain and drinking enough
UTI in patients with catheters NICE NG113: Urinary tract infection	If eGFR ≥45ml/min: Nitrofurantoin	100mg m/r BD (BD dose preferred due to increased compliance) <i>OR</i> 50mg i/r QDS	7 days	fluids to avoid dehydration. Antibiotic treatment is not routinely needed for asymptomatic bacteriuria in people with a urinary catheter. Consider removing or, if not possible, changing
	If low risk of resistance: Trimethoprim OR	200mg BD	7 days	the catheter if it has been in place for more than 7 days. But do not delay antibiotic treatment 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
(catheter- associated) visual summary	Only if culture results available and susceptible: Amoxicillin	500mg TDS	7 days	resistance data. Refer to NICE NG113 visual summary for suitable antibiotic options & for children's recommended antibiotic options. • Do not routinely offer antibiotic prophylaxis to people with a short-term or long-term catheter or
	Second choice non-p	pregnant women & men if no upper	UTI symptoms:	for catheter change unless there is a history of catheter-change-associated UTI or trauma. Non-pregnant women & men with upper UTI
	Pivmecillinam	400mg STAT then 200mg TDS	7 days	symptoms: Treat as per pyelonephritis. • Pregnant women with upper UTI symptoms: Refer to secondary care.
	Guided susceptibiliti	es when available:		Self-care advice:
	1.Ciprofloxacin <i>OR</i>	500mg BD		 Advise paracetamol (+/- low-dose weak opioid) for pain, or ibuprofen if preferred and suitable.
	Ofloxacin (consider safety issues) OR	200mg BD	14 days then review	Send MSU for culture and start antibiotics. Advise that duration of acute prostatitis may last several weeks.
Acute prostatitis	Trimethoprim (if unable to take quinolone)	200mg BD	i ovion	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
NICE NG110: Prostatitis	After discussion with specialist: symptoms, clinical examination tests).			
(acute) visual summary	2.Levofloxacin (consider safety issues)	500mg OD	14 days then review	 Quinolones achieve high prostate concentrations. NICE CKS: Consider prostatitis if patient has the following: perineal, penile or rectal pain
	OR Co-trimoxazole (consider safety issues)	960mg BD	14 days then review	acute urinary retention obstructive voiding symptoms low back pain pain on ejaculation tender, swollen, warm prostate
	Send MSU and start:			Self-care advice:
	Ciprofloxacin (consider safety issues)	500mg BD	7 days	 Advise paracetamol (+/- low-dose weak opioid) for pain for people over 12. Offer an antibiotic. When prescribing antibiotics, take account of severity of symptoms, risk of complications,
	OR			previous urine culture and susceptibility results,
	Cefalexin	500mg BD/TDS up to 1g-1.5g TDS/QDS for severe infections	7-10 days	previous antibiotic use which may have led to resistant bacteria and local antimicrobial resistance data. If admission not needed, send MSU for culture
Acute pyelonephritis NICE NG111:	OR Only if culture			 and susceptibility testing, and start antibiotics. If no response within 24 hours, seek advice. If ESBL risk, and on advice from a microbiologist, consider IV antibiotic via OPAT.
Pyelonephritis (acute) visual summary	results available and susceptible: Co-amoxiclav	500/125mg TDS	7-10 days	<u>CKS</u> : Although ciprofloxacin, and co-amoxiclav are associated with an increased risk of Clostridium difficile, MRSA, and other antibiotic-resistant infections, this has to be
	OR Only if culture results available and susceptible:			balanced against the risk of treatment failure and consequent serious complications with the use of narrow spectrum antibiotics. Refer pregnant women to secondary care. NICE CKS: Consider pyelonephritis if
	Trimethoprim	200mg BD	14 days	patient has the following: Kidney pain/tenderness in back under ribs New/different myalgia, flu-like illness Shaking chills (rigors) or temperature 37.9°C (or <36°C in people aged over 65 years) Nausea/vomiting



ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
	Lower UTI: Send MS	U then start:		
	If low risk of resistance: Trimethoprim	6 months-11 years: BNFc 4mg/kg (max. 200mg) BD 12-15 years: 200mg BD	3 days	
NICE CG 54: Urinary tract infection in under 16s: diagnosis	<i>OR</i> If eGFR ≥45ml/min: Nitrofurantoin	Immediate release: BNFc 3 months-11 years: 750micrograms/kg QDS 12-15 years: 50mg QDS	3 days	Self-care advice: Advise paracetamol or ibuprofen for pain. Children: immediate antibiotic Child 3 months: refer urgently for assessment. Child 3 months: use positive nitrite to guide
and management NICE NG109: Urinary tract		Modified release: BNFc 12-15 years: 100mg BD	3 days	 antibiotic use; send pre-treatment MSU. Imaging: refer if child <6 months, or recurrent or atypical UTI. Upper UTI: refer to paediatrics to: obtain a urine sample for culture; assess for signs of systemic
infection (lower) visual summary	If culture results avail	lable and susceptible:		infection; consider systemic antimicrobials. • For alternative dosing see BNFC.
<u></u>	Amoxicillin OR	3-11 months: 125mg TDS BNFc 1-4 years: 250mg TDS 5-15 years: 500mg TDS	3 days	or or alternative dosling see <u>DIVI o</u> .
	Cefalexin	3 months -11 years: ^{BNFc} 12.5mg/kg BD 12-15 years: 500mg BD	3 days	
	One-off dose when e	xposed to identifiable trigger	<u> </u>	Refer or seek specialist advice for:
	1. Trimethoprim OR	16+ years, 200mg STAT	Review all within 6 months of initiation and	men trans-women and people with a male urinary system people with recurrent upper UTI people with recurrent lower UTI if the underlying cause of recurrent UTI is unknown
	Nitrofurantoin* if eGFR over 45ml/min) (avoid at term)	16+ years, 100mg STAT	annually thereafter	 pregnant people children under 16 years people with suspected cancer anyone who has had surgery structurally altering the
	2. Amoxicillin** OR	16+ years, 500mg STAT		urethra
	Cefalexin**	16+ years, 500mg STAT		For non-pregnant women, trans-men and non-binary people with a female urinary system:
Doggerout UTI	Antiseptic prophylax	is		First advise about behavioural and personal hygiene measures, and self-care (with D-mannose)
Recurrent UTI (prophylaxis) 16 years+: 2 in 6 months or	Methenamine*** (See comments for prescribing status)	6-12 years, 500mg twice a day ^{BNFc} 12+ years, 1g twice a day	Review all within 6 months of initiation and annually	 or cranberry products) to reduce the risk of UTI. If no improvement after behavioural or personal hygiene measures or if these are not appropriate: for those who are experiencing perimenopause, menopause, or are postmenopausal, consider vaginal oestrogen (off-licence) and review within 12 months.
≥3 in a year	Daily antibiotic prophylaxis			If no improvement after vaginal oestrogen or if it is not appropriate: consider single-dose antibiotic
Under 16 years: ≥2 upper UTI or 1 upper UTI plus ≥1 lower UTI or ≥3 lower UTIs	1. Trimethoprim OR	3-5 months, 2mg/kg NOCTE BNFc (max 100mg per dose) or 12.5mg NOCTE 6 months-5 years, 2mg/kg NOCTE (max. 100mg per dose) or 25mg NOCTE 6 years -11years, 2mg/kg NOCTE (max 100mg per dose) or	months of initiation and	prophylaxis for exposure to a trigger (review within 6 months). If no improvement after trying vaginal oestrogen, and/or prophylaxis for triggers and/or there is no identifiable trigger: consider methenamine hippurate as an alternative to daily prophylaxis, as long as any current UTI is treated (review within 6 months, and then every 12 months, or earlier if agreed with the person).
in a year NICE NG112: Urinary tract infection (recurrent) visual	Nitrofurantoin* if eGFR <u>over</u> 45ml/min)	50mg NOCTE 12+ years, 100mg NOCTE 3months-11years, 1mg/kg NOCTE 12+ years, 50-100mg NOCTE ^{BNFc}		 If no improvement after antiseptic prophylaxis or if it is not appropriate: consider a trial of daily antibiotic prophylaxis (review within 6 months). ***Methenamine prescribing status: Red (Prescribed and administered by a specialist) Pregnancy Amber 2 (Initiation by a specialist and review
summary	(avoid at term) 2. Amoxicillin** OR	3months-11months, 62.5mg NOCTE 1-4years, 125mg NOCTE BNFc 5-15 years, 250mg NOCTE 16 years+, 250mg NOCTE		after 6 months, then continuation prescribed in primary care) o in complicated upper or lower UTI o in men, trans women and non binary people with a male genitourinary system o in children and young people.
	Cefalexin**	3months-15years, 12.5mg/kg NOCTE (max 125mg per dose) BNFc 16+ years, 125mg NOCTE		Green (Suitable for prescribing in primary care); in women, and trans men and non-binary people with a female urinary system, if: they are not pregnant and any current UTI has been adequately treated and
	* Off label use for prevents ** Off label use for pre	enting recurrent upper UTI or complica venting recurrent UTI	ted lower UTI	 they have recurrent UTI that has not been adequately improved by behavioural and personal hygiene measures &/or vaginal oestrogen (if any of these have been appropriate and are applicable).



MENINGITIS / S	EPTICAEMIA			
Suspected meningococcal disease NICE CG 102: Meningitis (bacterial) and meningococcal septicaemia in under 16s: recognition, diagnosis and management	Benzylpenicillin IV or IM	Child <1yr: 300mg BNFc Child 1-9 years: 600mg Adults/child 10+ years: 1.2g	STAT dose; give IM if vein cannot be accessed	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. CKS: Bacterial meningitis and meningococcal disease are notifiable diseases in England and Wales.
Prevention of secondary case meningitis	contact UKHSA Sou	uth London Health Protection Team (S Health Protection Team (SL HPT) will	SL HPT) T 0344 3.	s regarding the management of contacts, please 26 2052 (in & out of hours) or 👨 0344 326 7255. acts requiring prophylaxis & any vaccination needs



	South West London				
ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS	
GASTRO-INTES	STINAL TRACT INFE	CTIONS			
Oral Candidiasis	Miconazole oral gel	4 - 23 months: 1.25ml of 20mg/g BNFc QDS (hold in mouth after food) ≥2 years: 2.5ml of 20mg/g QDS (hold in mouth after food)	7 days; continue for 7 days after resolved	Self-care advice: Miconazole oral gel is available OTC (not licensed for use in children under 4 months of age or during first 5–6 months of life of an infant born pre-term, patients with liver dysfunction and patients taking warfarin or simvastatin). See SmPC. Topical azoles are more effective than topical	
CKS Candida	If not tolerated: Nystatin suspension	1ml; 100,000 units/mL ^{BNFc} QDS (half in each side)	7 days; continue for 2 days after resolved	Nopical azoles are more ellective than topical nystatin. Oral candidiasis is rare in immunocompetent adults; consider undiagnosed risk factors, including HIV. If extensive/severe candidiasis, use 50mg fluconazole	
	Fluconazole capsules	50mg/100mg OD BNFc	7-14 days	If HIV or immunocompromised, use 100mg fluconazole.	
	Always use PPI. First line & first relapse & no penicillin allergy: PPI plus TWO antibiotics:			Always test for <i>H. pylori</i> before giving antibiotics. Treat all positives, if known DU, GU, or low grade MALToma. NNT in non-ulcer dyspepsia: 14. Do not offer eradication for GORD.	
	Omeprazole <i>OR</i> Lansoprazole <i>AND</i>	20mg BD BNFc 30mg BD BNFc		Do not use clarithromycin, metronidazole or quinolone if used in the past year for any infection.	
Helicobacter pylori	Amoxicillin AND	1g BD ^{BNFc}	7-14 days; MALToma 14	Penicillin allergy and previous clarithromycin: use PPI PLUS bismuth salt PLUS metronidazole	
NICE CG184: GORD and	Clarithromycin <i>OR</i>	500mg BD BNFc	days	PLUS tetracycline hydrochloride. Relapse and no penicillin allergy use PPI PLUS amoxicillin PLUS clarithromycin or metronidazole	
dyspepsia in adults:	Metronidazole	400mg BD ^{BNFc}		(whichever was not used first line). Relapse and previous metronidazole and	
investigation and	Penicillin allergy:			clarithromycin: use PPI PLUS amoxicillin PLUS	
management PHE:	PPI AND			either tetracycline <i>OR</i> levofloxacin (if tetracycline not tolerated). • Relapse and penicillin allergy (no exposure to	
Helicobacter pylori in	Clarithromycin AND	500mg BD ^{BNFc}	7 days;	quinolone): use PPI PLUS metronidazole PLUS levofloxacin.	
dyspepsia: test and treat	Metronidazole	400mg BD ^{BNFc}	MALToma 14 days	 Relapse and penicillin allergy (with exposure to quinolone): use PPI PLUS bismuth salt PLUS metronidazole PLUS tetracycline. Retest for H. pylori: post DU/GU, or relapse after second line therapy, using UBT or SAT, consider 	
		ens/doses see comments & refer to dyspepsia: test and treat	PHE:	referral for endoscopy and culture. Third line: seek gastroenterology advice. See BNF and PHE H.Pylori quick reference guide for alternative combinations.	
Infectious diarrhoea PHE Diarrhoea	Antibiotics are usu If systemically unwe 500mg BD for 5-7 d If giardia is confirment	ays if treated early (within 3 days). ed or suspected: tinidazole 2g STAT is	ally unwell. undercooked mea	at and abdominal pain), consider clarithromycin 250-	



	1			South West London
ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
	First-line for first epi	sode of mild, moderate or severe:	•	For suspected or confirmed <i>C. difficile</i> infection, see <u>Public Health England's guidance on</u>
	Vancomycin	125mg QDS	10 days	 diagnosis and reporting. Assess: whether it is a first or further episode, severity of infection, individual risk factors for
	Second-line for first ineffective:	episode of mild, moderate or severe	e if vancomycin	complications or recurrence (such as age, frailty or comorbidities).
Clostridiodes difficile	Fidaxomicin (on microbiologist advice only)	200mg BD	10 days	Existing antibiotics: 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
NICE Clostridiodes	For further episode v	within 12 weeks of symptom resolut	ion (relapse):	activity or adverse effects (such as laxatives),
difficile NG199 NG199 Visual	Fidaxomicin (on microbiologist advice only)	200mg BD	10 days	medicines that may cause problems if people are dehydrated (such as NSAIDs). Do not offer antimotility medicines such as loperamide.
summary Updated March	For further episode r	nore than 12 weeks after symptom	resolution	Offer an oral antibiotic to treat suspected or confirmed <i>C. difficile</i> infection.
2022	(recurrence):			For adults, consider seeking prompt specialist
	Vancomycin OR	125mg QDS	10 days	advice from a microbiologist or infectious diseases specialist before starting treatment. For children and young people, treatment should be started by, or after advice from, a
	Fidaxomicin(on microbiologist advice only)	200mg BD	10 days	microbiologist, paediatric infectious diseases specialist or paediatric gastroenterologist. • If antibiotics have been started for suspected C. difficile infection, and subsequent stool
		otics if first- and second-line antibi threatening infection seek specialis		sample tests do not confirm infection, consider stopping these antibiotics. For detailed information click on the visual summary.
Traveller's	Stand-by: Azithromycin (unlicensed)	500mg OD	1-3 days	Prophylaxis rarely, if ever, indicated. Prophylactic medication solely in anticipation of the onset of an ailment outside the UK
diarrhoea	Prophylaxis/treatme nt: Bismuth subsalicylate (Pepto-Bismol®)	2 tablets QDS	2 days	 should be given on a private prescription. Consider stand-by antimicrobial only for patients at high risk of severe illness, or visiting high risk areas. Refer to https://nathnac.net/, CKS or BNF.
		nically unwell, immunosuppressed ities:	or with	Self-care advice:
	Co-amoxiclav	500/125mg TDS	5 days (a longer course may be needed based on clinical assessment)	If patient is systemically well, consider not prescribing antibiotics, offer diet and lifestyle advice (see NICE guidance for recommendations), and advise the person to represent if symptoms persist or worsen. Offer antibiotics if systemically unwell or immunosuppressed or with significant
Acute	Alternative first choice	ce if penicillin allergy or co-amoxicl	av unsuitable:	comorbidities but does not meet the criteria for referral for suspected complicated acute diverticulitis
CKS Diverticular disease NICE diverticular disease NICE Diverticulitis NG147: antimicrobial prescribing visual summary	Cefalexin (caution with penicillin allergy) and Metronidazole OR Trimethoprim and Metronidazole OR Ciprofloxacin* (consider safety issues) and metronidazole	500mg BD-TDS (up to 1-1.5g TDS-QDS in severe infection) and 400mg TDS 200mg BD and 400mg TDS 500mg BD and 400mg TDS	5 days (a longer course may be needed based on clinical assessment)	 Advise on the use of analgesia, such as paracetamol as needed. Advise the patient to avoid NSAIDs and opioid analgesia (such as codeine) if possible, due to the potential increased risk of diverticular perforation (see CKS for further information) Recommend clear liquids only, with a gradual reintroduction of solid food if symptoms improve over the following 2–3 days (CKS) Consider checking bloods for raised white cell count and CRP, which may suggest infection (CKS) If the person is managed in primary care, arrange a review within 48 hours, or sooner if symptoms worsen. Arrange urgent hospital admission if symptoms persist or deteriorate despite management in primary care. Consider arranging referral to a specialist in colorectal surgery if a person is managed in primary care and has frequent or severe recurrent episodes of acute diverticulitis. *Only prescribe ciprofloxacin if switching from IV
Notes Bases	for mulden as subs De		DNE/DNEG (DNE	ciprofloxacin with specialist advice



			1	
ILLNESS	DRUG	DOSE	DURATION	COMMENTS
GENITAL TRAC	T INFECTIONS			
STI Screening				nd syphilis. Refer individual and partners to GUM. ymptomatic or infected partner; area of high HIV.
	1. Doxycycline	100mg BD	7 days	 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. As single dose azithromycin has led to increased resistance in GU infections, doxycycline should be used first line for chlamydia and urethritis. Advise patient to abstain from sexual intercourse until doxycycline is completed or for 7 days after
-	Second line/pregnan	t/breastfeeding/allergy/intolerance:		treatment with azithromycin (14 days after azithromycin started and until symptoms resolved
Chlamydia trachomatis/ urethritis	2. Azithromycin	1g STAT then 500mg OD	2 days (total 3 days)	 if urethritis). If chlamydia, test for reinfection at 3 to 6 months following treatment if <25 years or consider if >25 years and high risk of reinfection. Second line, pregnant, breastfeeding, allergy, or intolerance: azithromycin is most effective. As lower cure rate in pregnancy, test for cure at least 3 weeks after end of treatment. Consider referring all patients with symptomatic urethritis to GUM as testing should include Mycoplasma genitalium and Gonorrhoea. If M. genitalium 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.
	Doxycycline <i>OR</i>	100mg BD	10-14 days	
Epididymitis	Ofloxacin (consider safety issues) OR Ciprofloxacin (consider safety issues)	200mg BD 500mg BD	14 days 10 days	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.
	Clotrimazole <i>OR</i>	500mg pessary	STAT	Self-care advice:
				Preparations for vaginal candidiasis ailable OTC for adults.
Vaginal candidiasis	Clotrimazole <i>OR</i>	100mg pessary	6 nights	 All topical and oral azoles give over 80% cure.
BASHH -	Fluconazole (oral)	150mg capsule	STAT	Pregnancy: avoid oral azoles, and use clotrimazole 100mg intravaginal treatment for 6
Vulvovaginal candidiasis	Recurrent: Fluconazole (induction/maintena nce)	150mg every 72 hours <i>THEN</i> 150mg once a week	3 doses 6 months	nights. • Recurrent (>4 episodes per year): 150mg oral fluconazole every 72 hours for three doses induction, followed by one dose once a week for six months maintenance.
Bacterial	Oral Metronidazole OR	400mg BD OR 2g	7 days STAT	Self-care advice: Preparations for bacterial vaginosis are available OTC that patients may find helpful.
vaginosis <u>BASHH</u> <u>Bacterial</u>	Metronidazole 0.75% vaginal gel <i>OR</i>	5g applicator at night	5 nights	Oral metronidazole is as effective as topical treatment, and is cheaper. Seven days results in fewer relapses than 2g stat at four weeks.
<u>vaginosis</u>	Clindamycin 2% cream	5g applicator at night	7 nights	Pregnant/breastfeeding: avoid 2g dose. Treating partners does not reduce relapse.
Genital Herpes	Oral Aciclovir <i>OR</i>	400mg TDS 800mg TDS (if recurrent)	5 days 2 days	Self-care advice: • Advise saline bathing, analgesia, or topical lidocaine for pain, and discuss transmission.
BASHH Anagonital	Valaciclovir OR	500mg BD	5 days	First episode: treat within five days if new lesions
Anogenital herpes	Famciclovir	250mg TDS 1g BD (if recurrent)	5 days 1 day	 or systemic symptoms, and refer to GUM. Recurrent: self-care if mild, or immediate short course antiviral treatment, or suppressive therapy if more than six episodes per year.



II.				South West London
ILLNESS	DRUG	DOSE	DURATION	COMMENTS
Gonorrhoea	Ceftriaxone OR Ciprofloxacin (only if known to be sensitive & consider safety issues)	1000mg IM 500mg	STAT	 Antibiotic resistance is now very high. Use IM ceftriaxone if susceptibility not known prior to treatment. Use Ciprofloxacin only if susceptibility is known prior to treatment and the isolate is sensitive to ciprofloxacin at all sites of infection. Refer to GUM. Test of cure is essential.
Trichomoniasis	Metronidazole	400mg BD OR 2g (more adverse effects)	5-7 days STAT	Oral treatment needed as extravaginal infection common. Treat partners, and refer to GUM for other STIs. Pregnant/breastfeeding: avoid 2g single dose
B A S H H Trichomoniasis	Pregnancy, to treat symptoms:			metronidazole; clotrimazole for symptom relief (not cure) if metronidazole declined.
THEHOMOMASIS	Clotrimazole	100mg pessary at night	6 nights	(
Pelvic Inflammatory Disease BASHH PID	1. Ceftriaxone AND Metronidazole AND Doxycycline 2. Metronidazole AND Ofloxacin (consider safety issues) OR Moxifloxacin ALONE (first line for M. Genitalium associated PID) (consider safety issues)	1000mg IM STAT 400mg BD 100mg BD 400mg BD 400mg BD	Single dose 14 days 14 days 14 days 14 days	 Refer women and sexual contacts to GUM. Raised CRP supports diagnosis, absent pus cells in HVS smear good negative predictive value. Exclude: ectopic pregnancy, appendicitis, endometriosis, UTI, irritable bowel, complicated ovarian cyst, functional pain. Moxifloxacin has greater activity against likely pathogens, but always test for gonorrhoea, chlamydia and Mycoplasma genitalium. If M. genitalium tests positive use moxifloxacin.



ILLNESS DRUG DOSE DURATION COMMENTS SKIN / SOFT TISSUE INFECTIONS Refer to RCGP Skin Infections online training. For MRSA, discuss therapy with microbiology. Topical antiseptic: • Localised non-bullous impetigo: consider initial treatment with hydrogen peroxide 1% cream (other topical antiseptics are available for superficial skin 1% cream BD-TDS BNFc Hydrogen peroxide 5 days infections, but no evidence for these was found) Widespread non-bullous impetigo: offer a short First-choice topical antibiotic if hydrogen peroxide unsuitable (for course of a topical or oral antibiotic, taking account example, if impetigo is around eyes) or ineffective: of prescribing considerations Bullous impetigo, or systemically unwell, or at 2% cream TDS BNFc Fusidic acid 5 days high risk of complications: offer a short course of an oral antibiotic Alternative topical antibiotic if fusidic acid resistance suspected or When prescribing, take into account: confirmed: that topical and oral antibiotics are both effective at treating impetigo 2% ointment TDS BNFc **Impetigo** 5 days Mupirocin the person's preferences, including practicalities of administration and possible NICE NG153 First-choice oral antibiotic: adverse effects Impetigo: that antimicrobial resistance can develop antimicrobial rapidly with extended or repeated use of 500ma QDS BNFc Flucloxacillin 5 days prescribing topical antibiotics local antimicrobial resistance data Alternative oral antibiotics if penicillin allergy or flucloxacillin NG153 visual • A 5-day course is appropriate for most people with unsuitable: summary impetigo, but can be increased to 7 days based on clinical judgment, depending on the severity and number of lesions. Clarithromycin OR 250mg BD (up to 500mg 5 days Do not offer combination treatment with a BD for severe infections) topical and oral antibiotic to treat impetigo (not more effective, risk adverse effects and resistance) Erythromycin (preferred 250-500mg QDS BNFc 5 days Consider referral to specialist or hospital if: Symptoms or signs suggest serious illness if pregnant) e.g. cellulitis Immunocompromised patient with widespread impetigo Bullous impetigo in babies Impetigo recurring frequently Systemically unwell High risk of complications If frequent, severe, and predictable triggers, consider oral prophylaxis: Self-care advice: For infrequent cold sores, antiviral creams are **Cold sores** available OTC (licensed for adults and children). **CKS Cold** Most resolve after 5 days without treatment. Aciclovir 400mg BD BNFc sores 5-7 days Topical antivirals applied prodromally can reduce duration by 12-18 hours. Panton-Valentine leukocidin (PVL) is a toxin produced by 20.8-46% of S. aureus from boils/abscesses. PVL strains are rare in healthy people, but severe. **PVL SA** Suppression therapy should only be started after primary infection has resolved, as ineffective if lesions are still leaking. Risk factors for PVL: recurrent skin infections; invasive infections; MSM; if there is more than one case in a home or close PHE PVL SA community (school children; millitary personell; nursing home residents; household contacts). Contact microbiologist for treatment advice if required. For contact details see 'Principles of Treatment' section at start of guidance.



II I NECC	DRUC	DOSE	DUDATION	South West London
ILLNESS	DRUG	DOSE	DURATION	COMMENTS
	Topical antibiotic (if app	ropriate), for localised infect	tions only:	If not systemically unwell, do not routinely offer either a topical or oral antibiotic.
Eczema (hactorial	Fusidic acid 2%	TDS	5-7 days	Manage underlying eczema and flares with treatments such as emollients and topical corticostoroids, whether artibiotics are given or not
	First choice oral antibiot	ic:		 corticosteroids, whether antibiotics are given or not. If systemically unwell offer an antibiotic. Symptoms and signs of secondary bacterial
	Flucloxacillin	500mg QDS BNFc	5-7 days	infection can include: weeping, pustules, crusts, no response to treatment, rapidly worsening
(bacterial infection)	Alternative first choice i	f penicillin allergy or fluclox	acillin not suitable:	eczema, fever and malaise. Not all flares are caused by a bacterial infection,
NICE Secondary bacterial	Clarithromycin	250mg BD (up to 500mg BD for severe infections) BNFc	5-7 days	so will not respond to antibiotics. Eczema is often colonised with bacteria but may not be clinically infected. Do not routinely take a skin swab at initial presentation. Consider sending a skin swab if the
infection of eczema and other common skin conditions	OR Erythromycin (preferred if pregnant)	250mg–500mg QDS ^{BNFc}	5-7 days	 infection is worsening or not improving as expected. If the infection recurs frequently, send a skin swab and consider taking a nasal swab and starting treatment for decolonisation. If an antibiotic is offered, when choosing between a topical or oral antibiotic, take account of patient
summary		r signs of cellulitis, see the rec cellulitis and erysipelas section		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. Consider referral or seeking specialist advice if the person has spreading infection that is not
	If MRSA suspected or confirmed – consult local microbiologist			responding to oral antibiotics, is systemically unwell, is at high risk of complications, has infections that recur frequently. Refer to hospital if there are symptoms or signs suggesting a more serious illness or condition such as necrotising fasciitis or sepsis.
	Any severity, patients ag	ged 12 years and over † (top)	ical treatment):	Mild to moderate acne, this includes people who
	Combination of adapalene/benzoyl peroxide	0.1%/2.5% or 0.3%/2.5% OD (thinly in the evening)		have 1 or more of:
	Combination of tretinoin/clindamycin Alternative treatment if	0.025%/1% OD (thinly in the evening)	Assess after 12 weeks	 up to 2 nodules. Moderate to severe acne, this includes people who have either or both of: 35 or more inflammatory lesions (with or without non-inflammatory lesions) 3 or more nodules.
Acne Vulgaris	listed options are contraindicated or refused † Benzoyl peroxide †	5% OD – BD		Self-care advice: Wash with non-alkaline synthetic detergent cleansing product (e.g. Dove® or Aveeno® moisturising bar) twice daily; do not scrub; avoid make-up. Patient information from the British Association of Dermatologist is available here:
NICE Acne	Mild to moderate, patien	ts aged 12 years and over †	(topical treatment):	Do not use the following to treat acne;
<u>vulgaris</u>	Combination of benzoyl peroxide/clindamycin	3%/1% or 5%/1% OD (thinly in the evening)	Assess after 12 weeks	monotherapy with a topical antibiotic monotherapy with an oral antibiotic combination of a topical and oral
CKS Acne vulgaris	Moderate to severe, patie oral treatment):	l ents aged 12 years and over	† (topical PLUS	antibiotic o minocycline as per <u>SWL Position</u>
Updated Jan 2024	Topical treatment			Statement Give clear information tailored to patient needs and concerns. Topics to cover include:
	Combination of adapalene/benzoyl peroxide	0.1%/2.5% or 0.3%/2.5% OD (thinly in the evening)		 possible reasons for their acne treatment options, including OTC treatments if appropriate benefits and drawbacks of treatment
	OR		A	o potential impact of acne importance of adhering to treatment, as
	Azelaic acid *	15% gel BD or 20% cream BD	Assess after 12 weeks	positive effects can take 6-8 weeks to become noticeable
	AND	ZU% CIEdIII DU		 relapses during and after treatment, including when to obtain further advice, and
	Oral treatment			treatment options should a relapse occur
	Lymecycline	408mg OD		
	OR			
	Doxycycline	100mg OD		



			South West London
Alternative if above are	contraindicated/refused: (ora	l treatment)	Refer to a consultant dermatologist if any of the
Erythromycin OR Clarithromycin OR	500mg BD 250mg BD	Assess after 12 weeks	following apply: there is diagnostic uncertainty they have acne conglobata they have nodulo-cystic acne they have acne fulminans (urgent referral to hospital dermatology team to be assess within 24 hours) Consider referring to a consultant dermatologist if they have:
Trimethoprim (following consultant advice, off-label**)	300mg BD		 mild to moderate acne that has not responded to two courses of treatment moderate to severe acne which has not responded to previous treatment that contains an oral antibiotic
Children under 12 years			o acne with scarring
Combination of adapalene/benzoyl peroxide (not in under 9's) Alternative treatment if above is contraindicated or refused #	0.1%/2.5% OD (thinly in the evening) BNFc	Review at 6-8 weeks. Continue for 3 months max	 acne with persistent pigmentary changes acne contributing to persistent psychological distress or a mental health disorder To reduce risk of skin irritation with topical treatments, start with alternate-day or short contact application (e.g. wash off after an hour). If a person receiving treatment for acne wishes to use hormonal contraception, consider using the combined oral contraceptive pill in preference to the
Benzoyl peroxide	5% OD – BD BNFc		progestogen-only pill Review treatment at 12 weeks and in those whose
AND IF NEEDED			treatment includes an oral antibiotic, consider continuing treatment for up to 12 more weeks if their acne has not completely cleared (either oral
Erythromycin	500mg BD BNFc		and topical treatment, or topical only) Only continue antibiotic treatment for more than 6
OR			months in exceptional circumstances. Review every
Clarithromycin	250mg BD (weight ≥ 30kg)		 12 weeks and stop as soon as possible. If acne fails to respond adequately to a 12 week course of a first-line treatment option and at review the severity is:
Pregnant women:			 mild to moderate: offer another option from
Combination of benzoyl peroxide/clindamycin (to be used with caution) Alternative if above is	3%/1% or 5%/1% OD (thinly in the evening)		the table of treatment choices. If mild to moderate acne fails to respond adequately to 2 different 12 week courses of treatment options, consider referral to a consultant dermatologist-led team
contraindicated, refused † Benzoyl peroxide (alone)	5% OD – BD		 moderate to severe, and the treatment did not include an oral antibiotic: offer another option which includes an oral antibiotic from the table of treatment choices moderate to severe, and the treatment included an oral antibiotic: consider referral
AND IF ORAL TREATMENT IS NEEDED			to a consultant dermatologist-led team. Consider maintenance treatment in people with a history of frequent relapse after treatment. Consider a fixed combination of topical adapalene
Benzoyl peroxide	5% OD – BD		and topical benzoyl peroxide as maintenance treatment for acne. If this is not tolerated, or if 1
WITH		Daview et C 0	component of the combination is contraindicated,
Erythromycin (preferred in pregnancy)	500mg BD	Review at 6-8 weeks. Continue for 3 months max	consider topical monotherapy with adapalene, azelaic acid, or benzoyl peroxide Review maintenance treatments for acne after 12 weeks to decide if they should continue.
OR			,
Clarithromycin	250mg BD		* Useful in reducing risk of hyperpigmentation in individuals with darker skin ** See the General Medical Council's Good practice in prescribing and managing medicines and devices for further information PLEASE NOTE: Changes have been made post-IMOC to provide clarity, and have been annotated with †



			1	South West London
ILLNESS	DRUG	DOSE	DURATION	COMMENTS
	First-choice oral antibiot	ic:		Only offer an antibiotic when there are signs or symptoms of infection (for example, redness or
	Flucloxacillin	500mg-1g QDS (1g dose is off-label use* and is recommended for obese/severely obese patients)	7 days	symptoms of infection (in Skillings, redicted or swelling spreading beyond the ulcer, localised warmth, increased pain or fever). Manage any underlying conditions to promote ulcer healing Do not take a sample for microbiological testing at initial presentation, even if the ulcer might be infected as most leg ulcers are colonised by bacteria.
	Alternative first-choice o flucloxacillin unsuitable:	ral antibiotics for penicillin	allergy or if	Give advice to seek medical help if symptoms or signs of infection: Worsen rapidly or significantly at any time, or
Leg ulcer infection NICE Leg Ulcer Infection	Doxycycline OR	200mg on first day, then 100mg OD (can be increased to 200mg OD)	7 days	 Do not start to improve within 2 to 3 days of starting treatment Person becomes systemically unwell or has severe pain out of proportion to the infection If the infection is worsening, or not improving as expected, consider microbiological testing. When microbiological results are available:
NG152 Visual summary	Clarithromycin OR	500mg BD	7 days	Review the antibiotic and change according to results if infection is not improving, using a narrow spectrum antibiotic if possible.
	Erythromycin (preferred if pregnant)	500mg QDS	7 days	Consider referring or seeking specialist advice if the person: Has a higher risk of complications because of comorbidities such as diabetes or
	Second-choice oral antik available):	piotics (guided by microbiole	ogical results when	immunosuppression Has lymphangitis Has spreading infection not responding to oral antibiotics
	Co-amoxiclav OR	500/125mg TDS	7 days	 Cannot take oral antibiotics Has a severe infection warranting the use of IV antibiotics Refer to existing pathways for administration of iv antibiotics if appropriate
	Co-trimoxazole (in penicillin allergy, off- label use*)	960mg BD	7 days	*See the General Medical Council's Good practice in prescribing and managing medicines and devices for further information
		vice – see comments section.		Self-care advice: Oral antihistamines and topical treatments are available from the pharmacy
		igns of infection, see the recor is and erysipelas section of the		Avoid scratching to reduce risk of infection Redness and itching are common and may last up to 10 days
				Treat only if sign of infection, as most cases are self-limiting, most insect bites or stings will not need antibiotics.
Insect bites and stings NICE Insect bites and stings NG182 Visual summary NICE CKS: Insect bites and stings Updated March 2022				likely to be an inflammatory or allergic reaction rather than an infection Consider referral or seeking specialist advice for people if: they are systemically unwell they are severely immunocompromised, and have symptoms or signs of an infection they have had a previous systemic allergic reaction to the same type of bite or sting the bite or sting is in the mouth or throat, or around the eyes it has been caused by an unusual or exotic insect they have fever or persisting lesions associated with a bite or sting that occurred while travelling outside the UK Reassess if: symptoms or signs of an infection develop the person's condition worsens rapidly or significantly or they become systemically unwell the person has severe pain out of proportion to the wound, which may indicate the presence of toxin-producing bacteria
				Take account of other possible diagnoses, such as <u>Lyme disease</u> indicated by erythema migrans



				South West London
ILLNESS	DRUG	DOSE	DURATION	COMMENTS
	Flucloxacillin	500mg-1g QDS ^{BNFc} (1g dose is off-label*)	5-7 days	A longer course (up to 14 days in total) may be needed based on clinical assessment. However, the skin does take time to return to normal, and full resolution at 5 to 7 days is not expected.
	Alternative first-choice a			Consider marking extent of infection with a single-
	allergy or if flucloxacilling		-	use surgical marker penManage underlying conditions such as diabetes,
	Clarithromycin OR	500mg BD BNFc	5-7 days	venous insufficiency, eczema and oedema
	Erythromycin (preferred in pregnancy) OR	500mg QDS BNFc	5-7 days	Infection around the eyes or the nose (the triangle from the bridge of the nose to the corners of the mouth, or immediately around the eyes including
	Doxycycline (not in under 12yrs)	200mg on first day, then 100mg OD	5-7 days	periorbital cellulitis) is of more concern because of a risk of a serious intracranial infection complication. Consider taking a swab for microbiological testing
	First choice antibiotic if nose (consider seeking s	infection near the eyes or specialist advice):	o there is a penetrating injury or there has been exposure to water-lorganisms or the infection was acquired outside Reassess if: symptoms worsen rapidly, or do not improve in 2 to 3 days the person is very unwell, has sever redness or swelling beyond the init presentation. Do not routinely offer antibiotic prophylor prevent recurrent cellulitis or erysipelas Refer to hospital if there are symptoms more serious illness or condition such a cellulitis, osteomyelitis, septic arthritis, fasciitis or sepsis Consider referring or seeking specialist person: is severely unwell or has lymphang has infection near the eyes or nose may have uncommon pathogens has spreading infection not respondantibiotics cannot take oral antibiotics (to explantibiotics at home or in the communicappropriate	treatment, but only if the skin is broken and:
Cellulitis & erysipelas NICE Cellulitis & erysipelas	Co-amoxiclav	500/125mg TDS ^{BNFc}		 the infection was acquired outside the UK. Reassess if: symptoms worsen rapidly, or do not start to
NG141 Visual summary	the eyes or nose for pen	ntibiotic if infection near icillin allergy or if co- onsider seeking specialist		redness or swelling beyond the initial presentation. Do not routinely offer antibiotic prophylaxis to prevent recurrent cellulitis or erysipelas. Refer to hospital if there are symptoms or signs of a more serious illness or condition such as orbital cellulitis, osteomyelitis, septic arthritis, necrotising fasciitis or sepsis Consider referring or seeking specialist advice if the person: is severely unwell or has lymphangitis has infection near the eyes or nose may have uncommon pathogens has spreading infection not responding to oral antibiotics cannot take oral antibiotics (to explore giving IV antibiotics at home or in the community if
Clarithromycin AND Metronidazole	,	500mg BD BNFc 400mg TDS BNFc		
				further information.



				South West London
ILLNESS	DRUG	DOSE	DURATION	COMMENTS
	Prophylaxis and treatme	nt ALL:	3 days for prophylaxis 5 days for	Seek specialist advice from a microbiologist for bites from a wild or exotic animal (including birds and non-traditional pets) or domestic animal bites (including farm animal bites) you are unfamiliar with Manage the wound with irrigation and debridement
	Co-amoxiclav	375-625mg TDS ^{BNFc}	treatment (course length can be increased to 7 days (with review) based on clinical assessment of the wound)	as necessary Offer an antibiotic treatment course for human or animal bites if there are symptoms or signs of infection, such as: Increased pain Inflammation, Fever,
		oral antibiotics for adults and penicillin allergy or if co-amo		 Discharge or An unpleasant smell Take a swab for microbiological testing if there is
	Doxycycline (not in under 12yrs)	200mg STAT then 100- 200mg OD BNFc	3 days for prophylaxis	 discharge (purulent or non-purulent) from the wound Do not offer antibiotic prophylaxis if a human or animal bite has not broken the skin. Human bite:
Human and Animal Bites	AND Metronidazole	400mg TDS BNFc	5 days for treatment (course length can be increased to 7 days (with review) based on clinical assessment of the wound)	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 (see below). Cat bite: Offer antibiotic prophylaxis if the cat bite has
NICE Human and Animal Bites	Alternative first-choice of allergy or if co-amoxicla	ral antibiotics in pregnancy v is unsuitable:	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.	
NG184 Visual summary CKS Bites	Seek specialist advice			Dog or other traditional pet bite (excluding cat): 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).
OKO BIKCS	Alternate first-choice for co-amoxiclav is unsuital	children under 12s for penio	cillin allergy or if	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.
	Co-trimoxazole* (off- label) (<u>consider safety</u> <u>issues</u>)	6 weeks to 5 months: 120mg or 24mg/kg BD BNFc 6 months to 5 years: 240 mg or 24 mg/kg BD 6 years to 11 years: 480 mg or 24 mg/kg BD	3 days for prophylaxis 5 days for treatment (course length can be increased to 7 days (with review) based on clinical assessment of the wound)	 High-risk areas include the hands, feet, face, genitals, skin overlying cartilaginous structures or an area of poor circulation People at high risk include those at risk of a serious wound infection because of a co-morbidity (such as diabetes, immunosuppression, asplenia or decompensated liver disease) Assess the risk of tetanus, rabies or a bloodborne viral infection and take appropriate action. Consider referral or seeking specialist advice if, for example, the person: Is systemically unwell Has an infection after prophylactic antibiotic Cannot take or has an infection that is not responding to oral antibiotics *See the General Medical Council's Good practice in prescribing and managing medicines and devices for further information.
	Terbinafine <i>OR</i>	1% cream OD-BD BNFc	1-4 weeks	Self-care advice: Topical antifungals available OTC.
Dermatophyte infection: skin	Clotrimazole <i>OR</i> Miconazole	1% cream BD-TDS BNFc 2% cream BD BNFc	4 weeks (min) 2-6 weeks Continue for 1 week after healing	 Terbinafine licensed in >16 years Miconazole/Clotrimazole licensed in children and adults Most cases: use terbinafine as fungicidal, treatment time shorter and more effective than with
PHE Fungal	Athlete's foot only:			fungistatic imidazoles or undecenoates.
skin and nail infections	Undecenoate (topical) (e.g. Mycota®)	BD ^{BNFc}	Continue for 1 week after healing	 If candida possible: use imidazole. If intractable, or scalp: send skin scrapings and if infection confirmed: use oral terbinafine or itraconazole. Scalp: oral therapy, and discuss with specialist.
		<u> </u>		



				South West London
ILLNESS	DRUG	DOSE	DURATION	COMMENTS
	Take nail clippings; star	rt therapy only if infection is	confirmed.	Prescribing of topical nail lacquer is not routinely
Dermatophyte infection: nail	Terbinafine	250mg OD ^{BNFc}	Fingers: 6 weeks Toes: 12 weeks	 recommended in SWL. See position statement. 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.
CKS Fungal nail infection	Itraconazole	200mg BD BNFc	1 week a month: Fingers: 2 courses Toes: 3 courses	 To prevent recurrence: apply weekly 1% topical antifungal cream to entire toe area. Children: seek specialist advice. Stop treatment when continual, new, healthy, proximal nail growth.
	Flucloxacillin	500mg QDS BNFc	10-14 days	
Mastitis	Penicillin allergy:			S. aureus is the most common infecting pathogen. Suspect if woman has: a painful breast; fever and/or
CKS Mastitis and breast abscess	Erythromycin (preferred if pregnant) OR	250-500mg QDS BNFc	10-14 days	Suspect in wornar has, a painful bleast, level and/or general malaise; a tender, red breast. Breastfeeding: oral antibiotics are appropriate, where indicated. Women should continue feeding, including from the affected breast.
	Clarithromycin	500mg BD BNFc	10-14 days	
	For chicken pox or shingles Aciclovir	800mg five times a day	7 days	Self-care advice: Advise paracetamol for pain relief. CKS: Advise the following simple measures to help alleviate symptoms: Encourage adequate fluid intake to avoid dehydration.
	For shingles if poor compliance:			 Dress appropriately to avoid overheating or shivering. Wear smooth, cotton fabrics. Keep nails short to minimize damage from scratching.
Varicella zoster/ chicken pox	Valaciclovir <i>OR</i>	1g TDS ^{BNFc}	7 days	 Pregnant/immunocompromised/neonate: seek urgent specialist advice. Chickenpox: consider aciclovir if: onset of rash <24 hours, and one of the following:
Herpes zoster/ shingles UKHSA Varicella	Famciclovir (not for children)	250-500mg TDS OR 750mg BD	7 days	nours, and one of the following: > >14 years of age; > severe pain; > dense/oral rash; > taking steroids; > smoker. • Shingles: treat if >50 years (PHN rare if <50 years) and within 72 hours of rash, or if one of the following: > active ophthalmic; > Ramsey Hunt; > eczema; > non-truncal involvement; > moderate or severe pain; > moderate or severe rash. • Shingles treatment if not within 72 hours: consider starting antiviral drug up to one week after rash onset, if high risk of severe shingles or continued vesicle formation; older age; immunocompromised; or severe pain.
		Bathe/clean eyelids with cotto (cooled) water, to remove crus		
Bacterial Conjunctivitis NICE Summary of antimicrobial prescribing guidance	2. Chloramphenicol	0.5% eye drops BNFc 2 hourly for 2 days then reduce frequency to TDS- QDS OR 1% eye ointment TDS – QDS OR NOCTE if using antibiotic eye drops during the day	Continue for 48 hours after resolution	Self-care advice: Chloramphenicol available OTC for those >2 years. 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. Chloramphenicol eye drops containing borax or boric acid buffers: use in children younger than 2
	3. Fusidic acid	1% gel BD ^{BNFc}	Continue for 48 hours after resolution	<u>years</u>



ILLNESS	DRUG	DOSE	DURATION	COMMENTS
	Give self-care advice -	- see comments section.		Self-care advice: • Lid hygiene for symptom control, including: warm
Blepharitis NICE	1. Chloramphenicol	1% eye ointment BD BNFc	6 week trial	compresses; lid massage, wipes and scrubs; gentle washing; avoiding cosmetics. Lid hygiene products are available OTC. Second line: topical antibiotics if hygiene measures
Summary of antimicrobial prescribing guidance	2. Oxytetracycline <i>OR</i>	500mg BD BNFc then 250mg BD	4 weeks (initial) 8 weeks (maintenance)	Second line. (optical antibiotics if hygierie measures are ineffective after 2 weeks. Signs of Meibomian gland dysfunction, or acne rosacea: consider oral antibiotics.
<u></u>	Doxycycline (off label use*)	100mg OD BNFc then 50mg OD	4 weeks (initial) 8 weeks (maintenance)	*See the General Medical Council's <u>Good practice in prescribing and managing medicines and devices</u> for further information



				South West London
ILLNESS	DRUG	DOSE	DURATION	COMMENTS
PARASITIC INF	ECTIONS			
	Patients >6 months: Mebendazole (<2 years off label)	100mg ^{BNFc}	STAT dose; repeat after 2 weeks if persistent	Self-care advice: Mebendazole is available OTC for those >2 years (not licensed in pregnancy or breast-feeding) See hygiene measures below. Treat household contacts at the same time AND advise hygiene measures (as below) for 2 weeks.
Threadworm CKS Threadworm	Children < 6 months and pregnant or breastfeeding women:	 Do not shake out item Washing/drying in a home Thoroughly dust and wasting' surfaces Child <6 months, add 	ne its at night and change er, including perianal a linen, dust and vacuu dy, avoid biting nails a s as this may distribut ot cycle will kill thread racuum (including vacu perianal wet wiping of	area Im Indicate the second sec
Scabies	Permethrin	5% cream ^{BNFc}	2 applications, 1 week apart	Self-care advice: Permethrin & malathion available OTC. First choice permethrin: Treat whole body from ear/chin downwards, and under nails.
NHS Scabies	Permethrin allergy: Malathion	0.5% aqueous liquid ^{BNFc}	2 applications, 1 week apart	 If using permethrin & patient is under 2 years, elderly, immunosuppressed, <i>OR</i> if treating with malathion: also treat face & scalp. Home/sexual contacts: treat within 24 hours.
Lyme disease with erythema			rthema migrans	Treat <u>erythema migrans</u> empirically; serology is
MICE Lyme Disease NG95 PHE Summary of antimicrobial	Doxycycline (For 9 years and above, unlicensed in under 12 years)	100mg BD BNFc Or 200mg OD	21 days	often negative early in infection. For treatment of other Lyme disease presentations see NICE guidance/seek specialist advice. If symptoms worsen during treatment for Lyme disease, assess for an allergic reaction to the antibiotic.
prescribing guidance	Alternative if doxycycli	ine is not suitable (e.g. pregi	nancy):	Be aware that a Jarisch–Herxheimer reaction (~15% of patients) does not usually warrant
CKS Lyme disease	Amoxicillin	1g TDS BNFc	21 days	stopping treatment This causes a worsening of symptoms early in treatment
Updated July 22	Alternative if doxycycli	ine and amoxicillin are not s	uitable:	o It can happen when large numbers of
	Azithromycin Azithromycin Azithromycin 500mg OD BNFc 17 days bacteria in the tit does not ha Lyme disease They should k	Lyme disease They should keep taking their antibiotics if their symptoms worsen and seek medical		



DRUG DURATION ILLNESS DOSE COMMENTS

DENTAL INFECTIONS

For suspected dental infections outside a dental setting. Derived from the Scottish Dental Clinical Effectiveness Programme 2011 SDCEP

This guidance is not designed to be a definitive guide to oral conditions, as GPs should not be involved in dental treatment. This guidance may be followed if treatment is deemed necessary and the clinician feels competent to do so however patients presenting to non-dental primary care services with dental problems, in the first instance, should be directed to their regular dentist, or if this is not possible, to the NHS 111 service, who will be able to provide details of how to access emergency dental care.

Note: Antibiotics do not cure toothache. First line treatment is with paracetamol and/or ibuprofen; codeine is not effective for toothache.					
Mucosal	Simple saline mouthwash	½ tsp salt warm water BNFc	Always spit out	Self-care advice: Simple saline mouthwash can be prepared at home. Mouthwashes are available OTC.	
ulceration and inflammation (simple gingivitis)	Chlorhexidine (Do not use within 30 mins of toothpaste)	0.2% mouthwash 1 minute BD with 10 mL BNFc	Use until lesions	 Temporary pain and swelling relief can be attained with saline mouthwash. Use antiseptic mouthwash if more severe, and if pain limits oral hygiene to treat or prevent 	
SDCEP Dental problems	Hydrogen peroxide (spit out after use)	6% mouthwash 2-3 mins BD-TDS with 15ml in ½ glass warm water ^{BNFc}	pain allows oral hygiene	secondary infection. The primary cause for mucosal ulceration or inflammation (aphthous ulcers; oral lichen planus; herpes simplex infection; oral cancer) needs to be evaluated and treated.	
Acute	Chlorhexidine (Do not use within 30 mins of toothpaste) OR	0.2% mouthwash 1 minute BD with 10 mL BNFc	Until pain allows for oral hygiene	Self-care advice: Mouthwashes are available OTC. Refer to dentist for scaling and hygiene advice. Antiseptic mouthwash if pain limits oral hygiene. Commence metronidazole in the presence of	
necrotising ulcerative gingivitis	Hydrogen peroxide (spit out after use)	6% mouthwash 2-3 mins BD-TDS with 15ml in ½ glass warm water BNFc	Tor oral Hygierie	systemic signs and symptoms.	
	If systemic signs and symptoms: Metronidazole	400mg TDS BNFc	3 days	Calf arm orbital	
	Metronidazole <i>OR</i>	400mg TDS ☺	3 days	Self-care advice: Use antiseptic mouthwash if pain and trismus	
	Amoxicillin	500mg TDS ☺	3 days	limit oral hygiene. • Mouthwashes are available OTC.	
Pericoronitis S D C E P D e n t a l	Chlorhexidine (Do not use within 30 mins of toothpaste) OR	0.2% mouthwash 1 minute BD with 10 mL BNFc	Until pain allows for oral hygiene	 Refer to dentist for irrigation and debridement. If persistent swelling or systemic symptoms, use metronidazole or amoxicillin. 	
<u>problems</u>	Hydrogen peroxide (spit out after use)	6% mouthwash 2-3 mins BD-TDS with 15ml in ½ glass warm water ^{BNFc}			
	Regular analgesia should be the first option until a dentist can be seen for urgent drainage, as repeated courses of antibiotics for abscesses are not appropriate.			Self-care advice: • Analgesia available OTC. • Repeated antibiotics alone, without drainage, are	
	Amoxicillin <i>OR</i>	500mg-1g TDS BNFc		 ineffective in preventing the spread of infection. Antibiotics are only recommended if there are signs of severe infection, systemic symptoms, or a high risk of complications. Patients with severe odontogenic infections (cellulitis, plus signs of sepsis; difficulty in swallowing; impending airway obstruction) 	
	Penicillin V	500mg-1g QDS BNFc	_		
Dental abscess SCDEP Dental problems	Metronidazole	400mg TDS BNFc	Up to 5 days; review at 3 days	should be referred urgently for hospital admission to protect airway, for surgical drainage and for IV antibiotics. The empirical use of cephalosporins, coamoxiclay, clarithromycin, and clindamycin do not offer any advantage for most dental patients, and should only be used if there is no response	
	Penicillin allergy: Clarithromycin	500 mg BD ^{BNFc}		 If pus is present, refer for drainage, tooth extraction, or root canal. Send pus for investigation. If spreading infection (lymph node involvement or systemic signs, i.e. fever or malaise) ADD metronidazole. Use clarithromycin in true penicillin allergy and, if severe, refer to hospital. 	



SOURCE DOCUMENTS

This guidance is based on:

- Managing common infections: guidance for consultation and local adaptation. BNF (latest review June 2021) https://www.bnf.org/wp-content/uploads/2021/07/summary-antimicrobial-prescribing-guidance july-21-for-BNF.pdf
- Online BNF. Last updated 3rd February 2022. https://bnf.nice.org.uk/
 Online BNF for Children Last updated 3rd February 2022. https://bnfc.nice.org.uk/
 NICE Clinical Knowledge Summaries (CKS) https://cks.nice.org.uk/
- In the development of these guidelines advice was sought from Microbiologists at Epsom and St Helier University Hospitals, Kingston Hospital and St George's Hospital