

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 30 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.



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Hospital-acquired pneumonia

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Dental abscess



				South West London
ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
NICE NG63: Co	IRATORY TRACT I Insider delayed antib be antibiotics for vira			
	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;
UKHSA Influenza	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	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.
	Optimise analgesia,	give safety netting advice AND:		Self-care advice: Paracetamol/ibuprofen for pain. Drink adequate fluids.
Scarlet fever	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
(Group A 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 corticosteroic		7 days (min) to 14 days (max)	*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	
	Flucloxacillin	250mg QDS BNFc If severe: 500mg QDS	7 days 7 days	and refer to exclude malignant otitis externa.



ILLNESS	DRUG OPTION	DOSE	DURATION	COM	IMENTS
ILLNESS	Offer regular paracetamol Consider eardrops containing anaesthetic and analgesic if an immediate oral antibiotic prescription is not given and there is no eardrum perforation / otorrhoea i.e Phenazone 40mg/g with lidocaine 10mg/g (Otigo®)	or ibuprofen for pain. Apply 4 drops two or three times a day	Up to 7 days Up to 7 days	AOM is a self-limiting information children. It can be cause and it is difficult to disting However, both are usual routinely need antibiotics Advise AOM lasts about week.	ection that mainly affects of by a virus and bacteria guish between these. It is self-limiting and do not is. 3 days but can be up to 1 ference to the number of its improve.
	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	
Acute Otitis	Penicillin allergy or intolerance:			years with bilateral infe benefit from antibiotics	ction are more likely to
Media NICE: Otitis media (acute) NG91	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	5-7 days	Systemically very unwell or high risk of complications: Otorrhoea or under 2 years with infection	Immediate antibiotic No antibiotics or Back-up antibiotics or
NG91 Visual summary	OR	12-17 years: 250-500mg BD		in both ears:	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	
	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 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 oral antibiotic for penicillin allergy or intolerance				
	Consult local microbiologi	st			



ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
Note: Low doses		kely to select out resistance, we recon		amoxicillin. Do not use quinolones (ciprofloxacin
	st line due to poor pneumo	ococcal activity. Reserve all quinolones	s (including levoflo	
	Give self-care advice & safety net – see comments section.			
	Adults aged 18 years	& over:		
	1. Doxycycline	200mg STAT then 100mg OD BNFc	5 days	Self-care advice:
	Adults aged 18 years	& over – alternative first choice anti	biotics:	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 guaifenesin (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			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	OR 12-17 years: 250-500mg BD		bronchodilator, or an oral or inhaled corticosteroid
	Erythromycin	1 month to 1 year: 125mg QDS BNFc OR 250mg BD 2-7 years: 250mg QDS OR 500mg BD	5 days	 unless otherwise indicated. 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)	8-17 years: 250-500mg QDS <i>OR</i> 500 – 1000mg BD 200mg STAT then 100mg OD ^{BNFc}	5 days	
	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
NG114 Visual	Alternative choice (if p	person at higher risk of treatment fa	ilure):	exacerbations, hospitalisations and risk of complications, previous sputum culture and susceptibility results, and risk of resistance with
summary 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	COMMENTS
	Adults aged 18 years & o Send a sputum sample f empirical treatment:	 over or culture and susceptibility testing	ng and start	
	Amoxicillin <i>OR</i> (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	
		over - alternative choice oral antib nt failure) empirical treatment:	iotics (if person	
	2. Co-amoxiclav <i>OR</i>	500/125mg TDS	7-14 days	
	Levofloxacin (consider safety issues)	500mg OD/BD	7 - 14 days	
	Children & young people Send a sputum sample f empirical treatment:	e under 18 years for culture and susceptibility testin	ng and start	Do not await the results of culture. When choosing antibiotics, take account of: severity of symptoms, previous exacerbations,
	1. Amoxicillin <i>OR</i>	1-11 months:125mg TDS BNFc 1-4 years: 250mg TDS 5-17 years: 500mg TDS	7 - 14 days	hospitalisations and risk of complications and treatment failure, previous sputum culture and susceptibility results If unable to take oral antibiotics or severely unwell refer to hospital for IV antibiotics.
Acute exacerbation of Bronchiectasis	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	7 - 14 days	 Course length based on an assessment of the person's severity of bronchiectasis, exacerbation history, severity of exacerbation symptoms, previous culture and susceptibility results, and response to treatment. People who may be at higher risk of treatment failure include people who have had repeated courses of antibiotics, a previous sputum culture
Bronchiectasis (non-cystic fibrosis) (acute	Doxycycline (not in under 12yrs)	200mg STAT then 100mg OD	7 - 14 days	with resistant or atypical bacteria, or a higher risk of developing complications.
exacerbation) NG117 NG117 Visual		 e under 18 years – alternative cho higher risk of treatment failure) en	Antibiotic prophylaxis Only start a trial of antibiotic prophylaxis on specialist advice When considering antibiotic prophylaxis, discuss	
summary	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 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 12-17 years: 250/125mg TDS OR 500/125mg TDS	7 - 14 days	the possible benefits (reduced exacerbations), harms (increased antimicrobial resistance, adverse effects and interactions with other medicines) and the need for regular review with the patient. • Where a person is receiving antibiotic prophylaxis, treatment should be with an antibiotic from a different class. *Local consultant microbiologist recommendation (Dr John Clark, EStH; Dr Marina Basarab, SGH)
	Ciprofloxacin (on microbiologist advice only) (consider safety issues)	1-17 years: 20mg/kg BD (max. 750mg per dose) BNFc	7 - 14 days	
	AND*			
	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 <i>OR</i> 12-17 years: 250-500mg BD	7 - 14 days	
	Doxycycline* (not in under 12yrs)	200mg STAT then 100mg OD	7 - 14 days	



ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
	Low severity in adults	or non-severe in children:		
	1. Amoxicillin	500mg TDS BNFc (higher doses can be used - see BNF/BNFC)	5 days*	
	Low severity in adults choice:	s or non-severe in children – alterna	tive first	
	Doxycycline (not in under 12yrs)	200mg STAT then 100mg OD BNFc	5 days*	Assess severity in adults based on clinical
	OR			judgement guided by mortality risk score (CRB65 or CURB65). See NICE (pneumonia
	Clarithromycin OR	500mg BD ^{BNFc}	5 days*	community acquired) NG138 for full details: ➤ Low severity – CRB65 0 or CURB65 0 or 1 ➤ Moderate severity – CRB65 1 or 2 or CURB65 2
	Erythromycin (preferred if pregnant)	500mg QDS BNFc	5 days*	 High severity – CRB65 3 or 4 or CURB65 3 to 5. 1 point for each parameter: confusion,
	Moderate severity in a	dults:		 (urea >7 mmol/l), respiratory rate ≥30/min,
	1. Amoxicillin	500mg TDS (higher doses can be used - see BNF)	5 days*	 low systolic (<90 mm Hg) or diastolic (≤60 mm Hg) blood pressure, age ≥65. Assess severity in children based on clinical
Community- acquired	AND (if atypical pathogens suspected)			 judgement. Offer an antibiotic. Start treatment as soon as possible after diagnosis, within 4 hours (within 1 hour if sepsis suspected and person meets any high risk criteria – see the NICE guideline on
pneumonia	Clarithromycin	500mg BD	5 days*	sepsis) • When choosing an antibiotic, take account of
NICE (pneumonia	OR			severity, risk of complications, local antimicrobial resistance and surveillance data, recent
community acquired)	Erythromycin (preferred if pregnant)	500mg QDS	5 days*	 antibiotic use and microbiological results Give advice about: possible adverse effects of the antibiotic(s)
NG138	Moderate severity in adults – alternative first choice:			 how long symptoms are likely to last seeking medical help if symptoms worsen
NG138 Visual summary	Doxycycline (not in under 12yrs)	200mg STAT then 100mg OD	5 days*	rapidly or significantly, or do not start to improve within 3 days, or the person becomes systemically very unwell • Refer adults to hospital if: > symptoms or signs suggest a more serious
	OR			illness such as sepsis, or symptoms are not improving as expected
	Clarithromycin	500mg BD	5 days*	with antibiotics Consider referring adults or seeking specialist
	High severity in adults	s or severe in children:		advice if they have bacteria resistant to oral antibiotics or they cannot take oral medicines
	1. Co-amoxiclav	500/125mg TDS ^{BNFc}	5 days*	Consider referring children and young people to hospital or seek specialist paediatric advice on further investigation and management
	AND (if atypical pathogens suspected)			* Stop antibiotics after 5 days unless microbiological results suggest a longer course is needed or the person is not
	Clarithromycin	500mg BD BNFc	5 days*	clinically stable
	OR			
	Erythromycin (preferred if pregnant)	500mg QDS BNFc	5 days*	
	High severity in adults – alternative first choice:			
	Levofloxacin (consider safety issues)	500mg BD	5 days*	



ILLNESS DRUG OPTION DURATION DOSE COMMENTS **HOSPITAL ACQUIRED PNEUMONIA** · Hospital-acquired pneumonia develops 48 hours or more after hospital admission . If symptoms or signs of pneumonia start within 48 hours of hospital admission, see community acquired pneumonia. Non-severe and not higher risk of resistance: 500/125mg TDS BNFc 1. Co-amoxiclav 5 days then review Offer an antibiotic. Start treatment as soon as possible after diagnosis, within 4 hours (within 1 Non-severe and not higher risk of resistance - ADULTS alternative first hour if sepsis suspected and person meets any high-risk criteria – see the NICE guideline on (Choice based on specialist microbiological advice and local resistance sepsis). data) When choosing an antibiotic, take account of: severity of symptoms or signs, number of days in hospital before onset of Options include: symptoms. Doxycycline 200mg STAT then 100mg OD 5 days then risk of developing complications, (not in under 12yrs) review local hospital and ward-based antimicrobial resistance data, OR recent antibiotic use and microbiological results Hospital-Cefalexin 500 mg BD or TDS 5 days then recent contact with a health or social care acquired (caution in penicillin (can increase to 1 to 1.5g TDS or review setting before current admission, pneumonia allergy) QDS) risk of adverse effects with broad spectrum antibiotics. **NICE** OR No validated severity assessment tools are (pneumonia available. Assess severity of symptoms or signs Co-trimoxazole 960mg BD hospital 5 days then based on clinical judgement. review acquired) Higher risk of resistance includes: NG139 OR relevant comorbidity (such as severe lung disease or immunosuppression), Levofloxacin 500mg OD or BD 5 days then recent use of broad spectrum antibiotics, (only if switching review NG139 Visual colonisation with multi-drug resistant from IV levofloxacin summary bacteria, with specialist recent contact with health and social care advice; (consider settings before current admission. safety issues) If symptoms or signs of pneumonia start within days 3 to 5 of hospital admission in people not at higher risk of resistance, consider following Non-severe and not higher risk of resistance - CHILDRENS alternative community acquired pneumonia for choice of first choice: antibiotic. Seek specialist advice from a microbiologist for: 1 month - 11 years: BNFc 5 davs then symptoms that are not improving as Clarithromycin Under 8kg: 7.5mg/kg BD review expected with antibiotics. 8-11kg: 62.5mg BD multi-drug resistant bacteria (Other options may 12-19kg: 125 mg BD 20-29kg: 187.5mg BD Follow the NICE guideline on care of dying be suitable based on adults in the last days of life for adults specialist 30-40 kg: 250mg BD approaching the end of life microbiological OR advice and local 12-17 years: 500mg BD resistance data)



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 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 Pivmecillinam 400mg STAT then 200mg TDS 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



				South West London
ILLNESS	DRUG OPTION	DOSE	DURATION	COMMENTS
	First choice non-pre	gnant women & men if no upper UT	l symptoms:	Self-care advice: • Advise paracetamol for pain and drinking enough
	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 the catheter if it has been in place for more than 7
UTI in patients with catheters NICE NG113: Urinary tract infection (catheter-	If low risk of resistance: Trimethoprim OR	200mg BD	7 days	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
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 OR	500mg BD		Advise paracetamol (+/- low-dose weak opioid)
	Ofloxacin (consider safety issues) OR	200mg BD	14 days then review	 for pain, or ibuprofen if preferred and suitable. 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	Teview	Review antibiotic treatment after 14 days and either stop antibiotics or continue for a further 14 days if needed (based on assessment of history,
NICE NG110:	After discussion with	specialist:		symptoms, clinical examination, urine and blood tests).
Prostatitis (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 Cefalexin	500mg BD/TDS up to 1g-1.5g TDS/QDS for severe infections	7-10 days	previous urine culture and susceptibility results, 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: Pyelonephritis	OR Only if culture results available and			 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. CKS: Although ciprofloxacin, and co-amoxiclav
(acute) visual summary	susceptible: Co-amoxiclav	500/125mg TDS	7-10 days	are associated with an increased risk of Clostridium difficile, MRSA, and other antibiotic-resistant infections, this has to be balanced against the risk of treatment failure and consequent serious complications with the
	Only if culture results available and susceptible: Trimethoprim	200mg BD	14 days	use of narrow spectrum antibiotics. Refer pregnant women to secondary care. NICE CKS: Consider pyelonephritis if 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 and management	OR 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 antibiotic use; send pre-treatment MSU. Imaging: refer if child <6 months, or recurrent or
NICE NG109: Urinary tract		Modified release: ^{BNFc} 12-15 years: 100mg BD	3 days	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 avai	ilable and susceptible:		infection; consider systemic antimicrobials. • For alternative dosing see BNFC.
	Amoxicillin OR	3-11 months: 125mg TDS BNFc 1-4 years: 250mg TDS 5-15 years: 500mg TDS	3 days	<u> </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		Refer or seek specialist advice for:
	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 <u>over</u> 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 For non-pregnant women, trans-men and non-binary
	Cefalexin**	16+ years, 500mg STAT		people with a female urinary system: First advise about behavioural and personal
Recurrent UTI	Antiseptic prophylax			hygiene measures, and self-care (with D-mannose or cranberry products) to reduce the risk of 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 thereafter	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 proph	nylaxis	thoround	 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 in a year	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 50mg NOCTE	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). If no improvement after antiseptic prophylaxis or if it is not appropriate: consider a trial of daily antibiotic
NICE NG112: Urinary tract infection (recurrent) visual summary	Nitrofurantoin* if eGFR <u>over</u> 45ml/min) (avoid at term)	3months-11years, 1mg/kg NOCTE 12+ years, 50-100mg NOCTE		prophylaxis (review within 6 months). ***Methenamine prescribing status: • Red (Prescribed and administered by a specialist) • Pregnancy • Amber 2 (Initiation by a specialist and review after 6 months, then continuation prescribed in primary care)
	2. Amoxicillin** OR	3months-11months, 62.5mg NOCTE 1-4years, 125mg NOCTE BNFc 5-15 years, 250mg NOCTE 16 years+, 250mg NOCTE		o in complicated upper or lower UTI in men, trans women and non binary people with a male genitourinary system in children and young people. Green (Suitable for prescribing in primary care);
	Cefalexin**	3months-15years, 12.5mg/kg NOCTE (max 125mg per dose) ^{BNFc} 16+ years, 125mg NOCTE		o 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 prev ** 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 / SEPTICAEMIA				
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	 To notify a suspected case of meningococcal disease or discuss any queries regarding the management of contacts, please contact UKHSA South London Health Protection Team (SL HPT) ☎ 0344 326 2052 (in & out of hours) or ♣ 0344 326 7255. The South London Health Protection Team (SL HPT) will identify close contacts requiring prophylaxis & any vaccination needs and will advise the GP accordingly. 			



	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 days	Penicillin allergy and previous clarithromycin: use PPI PLUS bismuth salt PLUS metronidazole	
NICE CG184: GORD and	Clarithromycin <i>OR</i>	500mg BD BNFc		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 	
	For alternative regimens/doses see comments & refer to PHE: Helicobacter pylori in dyspepsia: test and treat			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-	



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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> diagnosis and reporting.
	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	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	vithin 12 weeks of symptom resolut	ion (relapse):	activity or adverse effects (such as laxatives), medicines that may cause problems if people are
difficile NG199 NG199 Visual summary	Fidaxomicin (on microbiologist advice only)	200mg BD	10 days	dehydrated (such as NSAIDs). • Do not offer antimotility medicines such as loperamide.
Updated March		nore than 12 weeks after symptom	resolution	Offer an oral antibiotic to treat suspected or confirmed <i>C. difficile</i> infection. For adults, consider seeking prompt specialist
2022	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
	For alternative antibi	otics if first- and second-line antibion 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.
	First choice if systen	nically unwell, immunosuppressed	or with	Self-care advice:
	Significant comorbid 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	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)	 diverticulitis 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 ciprofloxacin with specialist advice



ILLNESS	DRUG	DOSE	DURATION	COMMENTS
GENITAL TRAC	CT INFECTIONS	<u> </u>	<u> </u>	
STI Screening	People with risk factor Risk factors: <25 year	s should be screened for chlamydia, ç rs; no condom use; recent/frequent cl	gonorrhoea, HIV, a nange of partner; s	ind syphilis. Refer individual and partners to GUM. symptomatic 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	l 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:
Vaninal	Clotrimazole <i>OR</i>	100mg pessary	6 nights	Preparations for vaginal candidiasis ailable OTC for adults.
Vaginal candidiasis	Fluconazole (oral)	150mg capsule	STAT	All topical and oral azoles give over 80% cure. Pregnancy: avoid oral azoles, and use clotrimazole 100mg intravaginal treatment for 6
BASHH 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 BASHH Bacterial	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.
<u>BASHH</u> Anogenital	Valaciclovir OR	500mg BD	5 days	First episode: treat within five days if new lesions or systemic symptoms, and refer to GUM.
herpes	Famciclovir	250mg TDS 1g BD (if recurrent)	5 days 1 day	Recurrent: self-care if mild, or immediate short course antiviral treatment, or suppressive therapy if more than six episodes per year.



				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.
<u>Tricnomoniasis</u>	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	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.
	Moxifloxacin ALONE (first line for M. Genitalium associated PID) (consider safety issues)	400mg OD	14 days	



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** Mupirocin 5 days 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.



				South West London
ILLNESS	DRUG	DOSE	DURATION	COMMENTS
	Topical antibiotic (if app	ropriate), for localised infect	ions only:	If not systemically unwell, do not routinely offer either a topical or oral antibiotic.
	Fusidic acid 2%	TDS	5-7 days	Manage underlying eczema and flares with treatments such as emollients and topical corticosteroids, whether antibiotics are given or not.
	First choice oral antibiot	ic:	T	If systemically unwell offer an antibiotic.
Eczema _	Flucloxacillin	500mg QDS BNFc	5-7 days	 Symptoms and signs of secondary bacterial infection can include: weeping, pustules, crusts, no response to treatment, rapidly worsening
(bacterial infection)	Alternative first choice if penicillin allergy or flucloxacillin 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	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.
NG190 Visual	(preferred if pregnant)			If an antibiotic is offered, when choosing between a topical or oral antibiotic, take account of patient
<u>summary</u>		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 co	nfirmed – consult local mici	robiologist	respon has spreading infection that is not 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	ed 12 years and over † (topi	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: o any number of non-inflammatory lesions (comedones) o up to 34 inflammatory lesions (with or
	OR		Assess after 12 weeks	without non-inflammatory lesions) o up to 2 nodules.
	Combination of tretinoin/clindamycin	0.025%/1% OD (thinly in the evening)		Moderate to severe acne, this includes people who have either or both of:
	Alternative treatment if listed options are contraindicated or refused †			without non-inflammatory lesions) o 3 or more nodules. Self-care advice: • Wash with non-alkaline synthetic detergent
Acne Vulgaris	Benzoyl peroxide †	5% OD – BD		cleansing product (e.g. Dove® or Aveeno® moisturising bar) twice daily; do not scrub; avoid make-up. Patient information from the British Association of
NICE Acne vulgaris	Mild to moderate, patient	ts aged 12 years and over †	(topical treatment):	Dermatologist is available here: • Do not use the following to treat acne;
CKS Acne	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
vulgaris	Moderate to severe, patie oral treatment):	ents aged 12 years and over	† (topical PLUS	antibiotic o minocycline as per <u>SWL Position</u>
Updated March Jan 2022 <u>4</u>	Topical treatment			Statement Give clear information tailored to patient needs and concerns. Topics to cover include:
402-2	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	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 orelapses during and after treatment,
	AND Oral treatment			including when to obtain further advice, and treatment options should a relapse occur
	Oral treatment Lymecycline	408mg OD		,
	OR	-		
	Doxycycline	100mg OD		



			South West London
Alternative if above are o	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
Berizoyi peroxide	5% OD – BD		treatment includes an oral antibiotic, consider
AND IF NEEDED			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)
OR			Only continue antibiotic treatment for more than 6 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:			o mild to moderate: offer another option from
Combination of benzoyl peroxide/clindamycin (to be used with caution) Alternative if above is contraindicated, refused †	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 o moderate to severe, and the treatment did not include an oral antibiotic: offer another option which includes an oral antibiotic from
Benzoyl peroxide (alone) AND IF ORAL TREATMENT IS NEEDED	5% OD – BD		the table of treatment choices moderate to severe, and the treatment included an oral antibiotic: consider referral 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
WITH Erythromycin (preferred in pregnancy)	500mg BD	Review at 6-8 weeks. Continue for 3 months max	treatment for acne. If this is not tolerated, or if 1 component of the combination is contraindicated, 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			weeks to decide if they should continue.
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 <i>†</i>



			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 antibiotics for penicillin allergy or if flucloxacillin unsuitable:			Consider marking extent of infection with a single-
	allergy of it flucioxacilling			use surgical marker pen Manage underlying conditions such as diabetes, venous insufficiency, eczema and oedema
	Clarithromycin OR	500mg BD BNFc	5-7 days	
	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
Cellulitis & erysipelas NICE Cellulitis & erysipelas	First choice antibiotic if nose (consider seeking s	infection near the eyes or specialist advice):		from people with cellulitis or erysipelas to guide treatment, but only if the skin is broken and : o there is a penetrating injury or
	Co-amoxiclav	500/125mg TDS ^{BNFc}	7 days	 there has been exposure to water-borne organisms or the infection was acquired outside the UK. Reassess if: symptoms worsen rapidly, or do not start to improve in 2 to 3 days the person is very unwell, has severe pain, or
NG141 Visual summary	Alternative first choice antibiotic if infection near the eyes or nose for penicillin allergy or if co- amoxiclav unsuitable (consider seeking specialist advice):			redness or swelling beyond the initial presentation. • Do not routinely offer antibiotic prophylaxis to prevent recurrent cellulitis or erysipelas.
advice): Clarithromyc	Clarithromycin AND Metronidazole	500mg BD BNFc 400mg TDS BNFc	7 days	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 appropriate *See the General Medical Council's Good practice in prescribing and managing medicines and devices for
				prescribing and managing medicines and devices for 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,
	Alternative first-choice oral antibiotics for adults and young people aged 12 to 17 years for penicillin allergy or if co-amoxiclav is unsuitable:			 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	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 oral antibiotics in pregnancy for penicillin allergy or if co-amoxiclav is unsuitable:			 Offer antibiotic prophylaxis if the cat bite has broken the skin and drawn blood. Consider antibiotic prophylaxis if the cat bite has broken the skin but not drawn blood if the wound could be deep. 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). 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.
NG184 Visual summary CKS Bites	Seek specialist advice			
CNS Biles	Alternate first-choice for children under 12s for penicillin allergy or if co-amoxiclav is unsuitable			
	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.



			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	 > >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 years
	3. Fusidic acid	1% gel BD BNFc	Continue for 48 hours after resolution	<u>, 5410</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 me: topical 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



Patients > 6 months: Mebendazole (<2 years off label) 100mg BNFc STAT dose; repeat after 2 weeks if persistent Threadworm CKS Threadworm Children < 6 months and pregnant or breastfeeding women: Cut fingernalis regularly, avoid biting nails and scratching around the anus Do not shake out items as this may distribute eggs around the room Washing/drying in a hot cycle will kill threadworm eggs Thoroughly dust and vacuum (including vacuuming mattresses) and clean the bat weeksners Comments Co	e same time AND elow) for 2
Patients >6 months: Mebendazole (<2 years off label) Threadworm CKS Threadworm Children < 6 months and pregnant or breastfeeding women: Children seating feeding women: Children seating feeding women: Children seating feeding women: Children seating feeding women: Self-care advice: Mebendazole is available OTC for (not licensed in pregnancy or breat See hygiene measures below. Treat household contacts at the advise hygiene measures (as betweeks. Hygiene measures alone for 6 weeks: Thorough hand hygiene Wear close fitting pants at night and change in the morning Morning bath or shower, including perianal area Wash sleepwear, bed linen, dust and vacuum Cut fingernails regularly, avoid biting nails and scratching around the anus Do not shake out items as this may distribute eggs around the room Washing/drying in a hot cycle will kill threadworm eggs Thoroughly dust and vacuum (including vacuuming mattresses) and clean the bath	e same time AND elow) for 2
Patients >6 months: Mebendazole (<2 years off label) Threadworm CKS Threadworm Children < 6 months and pregnant or breastfeeding women: CHildren < 6 months and pregnant or Do not shake out items as this may distribute eggs around the room Washing/drying in a hot cycle will kill threadworm eggs Thorough label) STAT dose; repeat after 2 weeks if persistent • Mebendazole is available OTC for (not licensed in pregnancy or brea see hygiene measures below. • Treat household contacts at the advise hygiene measures (as be weeks. > Thorough hand hygiene > Wear close fitting pants at night and change in the morning > Morning bath or shower, including perianal area > Cut fingernails regularly, avoid biting nails and scratching around the anus > Do not shake out items as this may distribute eggs around the room > Washing/drying in a hot cycle will kill threadworm eggs Thoroughly dust and vacuum (including vacuuming mattresses) and clean the bat	e same time AND elow) for 2
CKS Threadworm Children < 6 months and pregnant or breastfeeding women: Children < 6 months and pregnant or breastfeeding women: Threadworm Children < 6 months and pregnant or breastfeeding women: Through hand hygiene Wear close fitting pants at night and change in the morning Morning bath or shower, including perianal area Wash sleepwear, bed linen, dust and vacuum Cut fingernails regularly, avoid biting nails and scratching around the anus Do not shake out items as this may distribute eggs around the room Washing/drying in a hot cycle will kill threadworm eggs Thoroughly dust and vacuum (including vacuuming mattresses) and clean the bat	throom by 'damn-
dusting' surfaces ➤ Child <6 months, add perianal wet wiping or washes 3 hourly • For more details, contact the <u>UK Teratology Information Service (UKTIS)</u> on 0344 892	
Permethrin 5% cream BNFc 2 applications, 1 week apart Self-care advice: Permethrin & malathion available First choice permethrin: Treat from ear/chin downwards, and use	t whole body
NHS Scables Permethrin allergy: Malathion 0.5% aqueous liquid BNFc 2 applications, 1 week apart • If using permethrin & patient is usededrly, immunosuppressed, OR malathion: also treat face & scal • Home/sexual contacts: treat w	R if treating with alp.
Lyme disease without focal symptoms but with erythema migrans and/or non-focal symptoms with erythema Lyme disease without focal symptoms but with erythema migrans and/or non-focal symptoms • Treat erythema migrans empiric	cally; serology is
migrans NICE Lyme Disease NG95 Doxycycline Doxycycline Doxycycline Doxycycline Doxycycline Doxycycline 100mg BD BNFc 21 days often negative early in infection. For treatment of other Lyme disc presentations see NICE guidance advice.	sease
PHE Summary of antimicrobial of antimicr	reaction to the
• Be aware that a Jarisch–Herxhe guidance • Be aware that a Jarisch–Herxhe (~15% of patients) does not usu	
CKS Lyme Amoxicillin 1g TDS BNFc 21 days stopping treatment This causes a worsening of in treatment	symptoms early
Updated July 22 Alternative if doxycycline and amoxicillin are not suitable: Updated July 22	
Azithromycin Do not use azithromycin to treat people with cardiac abnormalities associated with Lyme disease because of its Do not use azithromycin to treat people with cardiac abnormalities associated with Lyme disease because of its Do not use azithromycin to treat people with cardiac abnormalities associated with Lyme disease because of its	one treated for eir antibiotics if



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: Antibioti	cs do not cure toothache.	First line treatment is with p	aracetamol and/or i	buprofen; codeine is not effective for toothache.
Mucosal ulceration and inflammation (simple gingivitis) SDCEP Dental problems	Simple saline mouthwash Chlorhexidine (Do not use within 30 mins of toothpaste)	1/2 tsp salt warm water BNFc 0.2% mouthwash 1 minute BD with 10 mL BNFc	Always spit out after use Use until lesions resolve or less pain allows oral hygiene	Self-care advice: Simple saline mouthwash can be prepared at home. Mouthwashes are available OTC. 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 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.
	Hydrogen peroxide (spit out after use)	6% mouthwash 2-3 mins BD-TDS with 15ml in ½ glass warm water ^{BNFc}		
Acute necrotising ulcerative gingivitis	Chlorhexidine (Do not use within 30 mins of toothpaste) OR Hydrogen peroxide (spit out after use)	0.2% mouthwash 1 minute BD with 10 mL BNFc 6% mouthwash 2-3 mins BD-TDS with 15ml in ½ glass warm water 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 systemic signs and symptoms.
	If systemic signs and symptoms: Metronidazole	400mg TDS BNFc	3 days	
Pericoronitis SDCEP Dental problems	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.
	Chlorhexidine (Do not use within 30 mins of toothpaste) OR Hydrogen peroxide (spit out after use)	0.2% mouthwash 1 minute BD with 10 mL BNFc 6% mouthwash 2-3 mins BD-TDS with 15ml in ½ glass warm	Until pain allows for oral hygiene	 Refer to dentist for irrigation and debridement. If persistent swelling or systemic symptoms, use metronidazole or amoxicillin.
		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
Dental abscess SCDEP Dental problems	Amoxicillin <i>OR</i> Penicillin V	500mg-1g TDS ^{BNFc} 500mg-1g QDS ^{BNFc}	Up to 5 days; review at 3 days	 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) 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 to first line drugs. 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.
	Metronidazole	400mg TDS BNFc		
	Penicillin allergy: Clarithromycin	500 mg BD ^{BNFc}		



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