BNSSG Antimicrobial Prescribing Guideline – Summary

These summary guidelines are to be used alongside the full BNSSG antimicrobial prescribing guidelines and do not cover every infection in the full guidelines. The links take you to the appropriate section of the full guideline

Infection	Comment	Antibiotic	Penicillin Allergy	Course Length
Meningitis – see full guideline				
Upper respiratory tract infections				
Sore throat/ Pharyngitis/ Tonsillitis	Avoid antibiotics Delayed antibiotics	Penicillin V	Clarithromycin Or Erythromycin if pregnant	5-10 days Pen V 5 days Clarith and Eryth
Acute otitis media	Target antibiotics	Amoxicillin	Clarithromycin	5 days
Acute sinusitis	Avoid antibiotics Delayed antibiotics	Penicillin V	Doxycycline or Clarithromycin	5 days
Lower respiratory tract infections				
Acute cough,	Avoid antibiotics Delayed antibiotics	Adults: Doxycycline Children: Amoxicillin		5 days
Acute exacerbation COPD		Amoxicillin	Doxycycline or Clarithromycin	5 days
Acute exacerbation of bronchiectasis		Amoxicillin	Doxycycline	7-14 days
Community acquired pneumonia		Amoxicillin	Adult: Doxycycline Child: Clarithromycin	5 days
Urinary tract infections				
UTI adults (not pregnant)	First line	Nitrofurantoin or Trimethoprim if low risk of resistance and <75 years		Women 3 days Men 7 days
	eGFR <45ml/min low risk of resistance	Trimethoprim		
	eGFR <45ml/min Increased risk of resistance	Pivmecillinam (a penicillin)	Not type 1 allergy – Cefalexin Type 1 allergy - Fosfomycin	Piv – 3 days M&W Cef - Women 3d Men 7 d Fos – stat (2nd dose men)
Acute Prostatitis		Ciprofloxacin or Ofloxacin (if STI)		14 days then review
Acute Pyelonephritis (not pregnant)		Cefalexin or Co-amoxiclav	Ciprofloxacin	7-10 days Cef and Co-amox 7 days Cipro
UTI in children > 3 months	Lower UTI	First UTI – Trimethoprim Second UTI within a year - Cefalexin		3 days
	Upper UTI	Cefalexin		7-10 days
Gastro-intestinal Tract Infections – see full guideline				
Genital Tract Infections – see full guideline				
Skin Infections				
Cellulitis		Flucloxacillin	Clindamycin (risk assess for C dif)	5 days

Aims-

- ❑ To provide a simple, effective, economical and empirical approach to the treatment of common infections.
- ❑ To target the use of antibiotics and antifungals in primary care
- ❑ To minimise the emergence of bacterial resistance in the community.

Principles of Treatment

1. This guidance is based on the best available evidence but professional judgement should be used and patients should be involved in the decision.
2. It is important to initiate antibiotics as soon as possible in severe infection.
3. A dose and duration of treatment for adults is usually suggested, but may need modification for age, weight and renal function. Children's doses are provided when appropriate. Refer to BNF for further dosing and interaction information (e.g. interaction between macrolides and statins) and check for known hypersensitivity in patient records and with patients or carers.
4. Type 1 penicillin allergy is an obvious allergic reaction with swelling of the lips and tongue, itchy, lumpy rash, difficulty breathing. If there is a type 1 anaphylactic reaction to penicillins do not give penicillins or cephalosporins or beta-lactams of any kind.
5. Lower threshold for antibiotic use in immunocompromised or those with multiple morbidities; consider culture and seek advice
6. Prescribe an antibiotic only when there is likely to be a clear clinical benefit.
7. Consider a 'no antibiotic' strategy or delayed antibiotic strategy for acute self-limiting URTI and mild UTI symptoms.
8. Limit prescribing over the telephone to exceptional cases.
9. Use simple generic antibiotics if possible. **Avoid broad spectrum antibiotics (e.g. co-amoxiclav, quinolones and cephalosporins) when narrow spectrum antibiotics remain effective, as they increase risk of *Clostridium difficile*, MRSA and resistant UTIs.**
10. Avoid widespread use of topical antibiotics (especially those agents also available as systemic preparations, e.g. fusidic acid).
11. In pregnancy, take specimens to inform treatment, use this guidance alternative or seek expert advice. Penicillins and cephalosporins are not associated with increased risks. If possible, avoid tetracyclines, quinolones, aminoglycosides, azithromycin, clarithromycin, high dose metronidazole (2g stat) unless the benefits outweigh the risks. 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. Erythromycin is generally thought to be ok in pregnancy but in the first trimester only use if benefits outweigh the possible risks. UK Teratology Information Centre ☎ 0344 892 0909
12. Microbiological advice can be obtained from secondary care trusts ☎ NBT and UHB and virology 0117 4146222 (option 1 GP bacteriology, option 4 virology) ☎ Weston Hospital 01934 647053

We would like to thank the following for their contribution; Dr Martin Williams, Dr Philip Williams, Dr Rajeka Lazarus - Consultant Microbiologists UHBW, Dr Alisdair Mcgowan - Consultant Microbiologist NBT, Dr Mbiye Mpenge - Consultant Microbiologist UHBW, Dr Paddy Horner- Unity Sexual Health, Dr Stefania Vergnano Paediatric Infectious Disease Consultant UHBW and PHE for providing the guidance template.

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Upper Respiratory Tract Infections				
Influenza treatment PHE Influenza For prophylaxis see: NICE Influenza and PHE Influenza	**Annual vaccination is essential for all those at risk of influenza**. For otherwise healthy adults antivirals not recommended. **Treat 'at risk' patients with uncomplicated influenza** with oseltamivir 75mg BD for 5 days when influenza is circulating in the community and ideally within 48 hours of onset (36 hours for zanamivir treatment in children) (do not wait for lab report) or in a care home where influenza is likely. **At risk:** pregnant (including up to two weeks post-partum), children under six months, adults 65 years or over, chronic respiratory disease (including COPD and asthma) significant cardiovascular disease (not hypertension), severe immunosuppression, diabetes mellitus, chronic neurological, renal or liver disease, morbid obesity (BMI≥40). See PHE Influenza guidance for treatment of patients in severe immunosuppression and dose adjustments (and seek advice). See PHE Influenza guidance for treatment of patients under 13 years (and seek advice).			
Sinusitis (acute) (Purulent nasal discharge, facial pain, unwell) NICE Sinusitis	**Symptoms <10 days** do not offer antibiotics as most resolve in 14 days without and antibiotics only offer marginal benefit after 7 days **Symptoms >10 days with no improvement:** no antibiotic or back-up antibiotic if several of purulent nasal discharge, severe localised unilateral pain (particularly over teeth and jaw), fever, marked deterioration after initial milder phase. **Systemically very unwell or more serious signs and symptoms or has high risk of complications:** immediate antibiotic **Suspected complications** e.g. sepsis, intraorbital, periorbital or intracranial, refer to secondary care **Self-care**: paracetamol/ ibuprofen for pain/fever. Consider high-dose nasal steroid if >12 years Nasal decongestants or saline may help some	No antibiotics: self-care First line for delayed prescription: Phenoxymethylpenicillin Penicillin allergy or intolerance: Doxycycline Clarithromycin Very unwell or worsening: Co-amoxiclav Mometasone	 500mg QDS 200mg stat then 100mg od 500mg BD 625mg TDS 200micrograms BD	 5 days 5 days 5 days 5 days 14 days

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Acute sore throat/ Pharyngitis/ Tonsillitis (Purulent tonsils, fever, tender lymph nodes, no cough.) FeverPAIN **NICE sore throat**	FeverPAIN 0-1: no antibiotic FeverPAIN 2-3: no or back-up antibiotic FeverPAIN 4-5: immediate or back-up antibiotic Systemically very unwell or high risk of complications: immediate antibiotic Back-up prescription: use if no improvement in 3-5 days or symptoms worsen. Safety net: seek medical help if symptoms worsen rapidly or significantly or the person becomes very unwell. Or no improvement after 1 week if no antibiotic given If *Group A Streptococcus* is grown from throat swab then ensure 10 days of phenoxymehtylpenicillin is received.	Self-care: paracetamol or ibuprofen, adequate fluids, some evidence of medicated lozenges in adults Phenoxymethylpenicillin *Penicillin allergy:* Clarithromycin Pregnant and penicillin allergy Erythromycin	 500 mg QDS or 1g BD (if mild) 500mg QDS when severe 250mg BD If severe: 500mg BD 500mg QDS	 5-10 days 5 days 5 days
		FeverPAIN Score: Fever in last 24h, **P**urulence, **A**ttend rapidly 3d or less, severely **I**nflamed tonsils, **N**o cough or coryza).		
	Feverpain is an appropriate tool for children from 3 years of age Where appropriate for older children doses should be rounded up to the nearest capsule size.	Self-care: paracetamol or ibuprofen, adequate fluids Phenoxymethylpenicillin 1 month-12 years: 12.5mg/kg (max 500mg/dose) QDS ≥12 years: 500mg QDS If poor compliance is anticipated in children Amoxicillin ≥1 month: 30mg/kg (max 500mg/dose) TDS Penicillin allergic Clarithromycin Child 1 month–11 years: Body-weight under 8 kg: 7.5 mg/kg BD Body-weight 8-11 kg: 62.5 mg BD Body-weight 12–19 kg: 125 mg BD Body-weight 20–29 kg: 187.5 mg BD Body-weight 30–40 kg: 250 mg BD Child ≥12 years: 250 -500mg BD		5-10 days 5 days 5 days
Acute Otitis Externa Remedy otitis externa page CKS otitis externa	Ear swabs for microbiology are rarely helpful in primary care and not indicated for non-complicated otitis externa. First line: analgesia for pain relief and advise to keep the ear clean and dry. Oral/systemic antibiotics should only be considered (in addition to topical therapy) for cases of infection outside of the ear canal (cellulitis). All cases of suspected malignant/necrotising externa should be referred to secondary care for urgent assessment Other antibiotic/steroid ear drops are available on formulary and can be used if Betnesol-N or Otomize are not available or contra-indicated (e.g. patent grommet or tympanic membrane perforation.)	*Mild cases:* Topical Acetic acid 2% spray *Moderate/severe cases:* Betnesol-N Otomize *If a fungal infection (suspected or confirmed on swab):* Clotrimazole 1% solution *If cellulitis* Flucloxacillin	 One spray TDS Three drops TDS One spray TDS Three drops TDS 250mg QDS If severe: 500mg QDS Children see the cellulitis section	7 days Until 2 weeks after infection has improved 5-7 days

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Acute Otitis Media (AOM)-Child (Ear pain, bulging red ear drum, unwell) NICE Otitis media (acute)	**Optimise analgesia and target antibiotics** Otorrhoea (discharge after ear drum perforation) in any child or young person or under 2 years with infection in both ears: no, back-up or immediate antibiotic Otherwise: no or back-up antibiotic Systemically very unwell or high risk of complications: immediate antibiotic Back up prescription: use if no improvement in 3 days or symptoms worsen Safety netting: seek medical help if symptoms worsen rapidly or significantly or becomes very unwell. Or if no antibiotic, do not start to improve after 3 days. If antibiotic not given, no eardrum perforation/ otorrhoea and oral analgesia is insufficient Lidocaine/ phenazone ear drops (Otigo®) 4 drops 2-3 times daily can be prescribed for relief of pain and local symptomatic treatment. Advise to discontinue if ear discharge develops.	Amoxicillin >7 days: 30mg/kg (max 500mg/dose) TDS Where appropriate for older children doses should be rounded up to the nearest capsule size.		5 days
		Penicillin allergy: Clarithromycin Child 1 month–11 years: Body-weight under 8 kg: 7.5 mg/kg BD Body-weight 8-11 kg: 62.5 mg BD Body-weight 12–19 kg: 125 mg BD Body-weight 20–29 kg: 187.5 mg BD Body-weight 30–40 kg: 250 mg BD Child ≥12 years: 250 -500mg BD		
Scarlet fever PHE Scarlet fever	Notifiable disease **Prompt treatment** with appropriate antibiotics significantly reduces the risk of complications. Observe immunocompromised individuals (diabetes, women in the puerperal period, chickenpox) as they are at increased risk of developing invasive infection	Phenoxymethylpenicillin *Penicillin allergy:* Clarithromycin	500mg QDS 250-500mg BD	10 days 5 days
	Where appropriate for older children doses should be rounded up to the nearest capsule size.	Phenoxymethylpenicillin 1 month-12 years: 12.5mg/kg (max 500mg/dose) QDS >12 years: 500mg QDS *If poor compliance is anticipated in children* Amoxicillin >1 month: 30mg/kg (max 500mg/dose) TDS *Penicillin allergic* Clarithromycin Child 1 month–11 years: Body-weight under 8 kg: 7.5 mg/kg BD Body-weight 8-11 kg: 62.5 mg BD Body-weight 12–19 kg: 125 mg BD Body-weight 20–29 kg: 187.5 mg BD Body-weight 30–40 kg: 250 mg BD Child ≥12 years: 250 -500mg BD		10 days 10 days 5 days

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Lower Respiratory Tract Infections				
Note: Low doses of penicillins are more likely to select out resistance. Do **not** use quinolone (ciprofloxacin, ofloxacin) first line due to poor pneumococcal activity. Reserve all quinolones (including levofloxacin) for proven resistant organisms.				
Acute Cough NICE Cough	**Acute cough with upper respiratory tract infection** no antibiotic **Acute bronchitis** no antibiotic **Acute cough and higher risk of complications (at face-to-face examination):** immediate or back up antibiotic **Acute cough and systemically very unwell (at face-to-face examination):** immediate antibiotic Higher risk of complications includes: • people with pre-existing comorbidity (significant heart, lung, renal, liver, or neuromuscular disease, immunosuppression or cystic fibrosis) • young children born prematurely • people over 65 with 2 or more of, or over 80 with 1 or more of: hospitalisation in previous year, type 1 or 2 diabetes, history of congestive heart failure, current use of oral corticosteroids. For prescribing antibiotics in adults with acute bronchitis who have had a CRP test. If CRP <20mg/L no antibiotics, 20-100mg/L back-up antibiotics, >100mg/L immediate antibiotics **Pertussis:** suspect in patients with a cough lasting 14 days or more without apparent cause plus one of the following: paroxysms of coughing; inspiratory 'whoop', post-tussive vomiting. See UKHSA Testing for pertussis in primary care. If suspected and within 14 days of onset (or 21 days if there is a close contact who falls into priority 1 for public health action or is pregnant see Guidance on the management of cases of pertussis) treat with Clarithromycin or Erythromycin if pregnant for 7 days. Notifiable disease In infants and toddlers with a dry cough consider bronchiolitis (no antibiotics needed) In infants and toddlers with a barking cough consider croup (no antibiotics needed)	*Adults first choice* Doxycycline *Adults alternative:* Amoxicillin Clarithromycin Or if pregnant Erythromycin	 200mg on day 1 then 100mg od 500 mg TDS 250-500mg BD 250-500mg QDS	 5 days 5 days 5 days 5 days
	Amoxicillin >1 month: 30mg/kg (max 500mg/dose) TDS Where appropriate for older children doses should be rounded up to the nearest capsule size. *Children alternative:* Clarithromycin Child 1 month–11 years: Body-weight under 8 kg: 7.5 mg/kg BD Body-weight 8-11 kg: 62.5 mg BD Body-weight 12–19 kg: 125 mg BD Body-weight 20–29 kg: 187.5 mg BD Body-weight 30–40 kg: 250 mg BD Child ≥12 years: 250 -500mg BD			5 days 5 days
Acute Exacerbation of COPD (Purulent sputum, cough worse, chest signs and worsening dyspnoea) NICE COPD BNSSG COPD	Many exacerbations are not caused by bacterial infections so will not respond to antibiotics. Consider an antibiotic, but only after taking into account severity of symptoms (particularly sputum colour changes and increases in volume or thickness), need for hospitalisation, previous exacerbations, hospitalisations and risk of complications, previous sputum culture and susceptibility results, and risk of resistance with repeated courses. *People higher risk of treatment failure: repeated courses of antibiotics, previous or current sputum culture with resistant bacteria or people at higher risk of developing complications.* If recurrent exacerbations send sputum sample.	*First-line:* Amoxicillin *or* Doxycycline or Clarithromycin *Second line:* Use alternative first choice *If at risk of treatment failure:* Co-amoxiclav If penicillin allergic: Co-trimoxazole Unless recent sample to base empiric therapy on. Ensure sample is sent and review treatment with results.	 500 mg TDS 200 mg stat then 100 mg OD 500 mg BD 625 mg TDS 960 mg BD	 5 days 5 days 5 days 5 days 5 days
Acute Exacerbation of Bronchiectasis NICEBronchiectasis BNSSG bronchiectasis	Send sputum sample for culture and sensitivity, specify bronchiectasis patient on sputum form. Start antibiotics while awaiting result. Treat following the patient's specific treatment plan (if in place), based on recent culture results or as per the first-line treatment stated on the guideline if neither available. See the BNSSG bronchiectasis guidelines if new growth of or colonisation with *P.aeruginosa.*	*First-line (see comments):* Amoxicillin *Penicillin allergy or on regular macrolide:* Doxycycline	 1 gram TDS 100 mg BD	 7-14 days Review at 7 days If no resolution seek specialist advice

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Community acquired pneumonia NICE Pneumonia (Community Acquired) Covid-19 rapid guideline: managing Covid-19 BNSSG primary care assessment and management guidance for COVID and non-COVID patients – available on teamnet	Where able use the **CRB65 score** to help guide and review in adults. Each scores 1: **C**onfusion (AMT<8), **R**espiratory rate >30/min, **B**P systolic <90 or diastolic ≤60; Age >**65** Score 0: suitable for home treatment Score 1-2: consider hospital assessment or admission particularly those with a score of 2 Score 3-4: urgent hospital admission Diagnosing pneumonia during COVID-19 Where physical examination and other ways of making an objective diagnosis are not possible the clinical diagnosis of CAP can be informed by other clinical signs or symptoms such as: - Temperature above 38°C - Respiratory rate above 20 breaths per minute - Heart rate above 100 beats per minute - New confusion Assessing shortness of breath is important The following signs and symptoms help to identify those with more severe illness and aid decision about hospital admission: Shortness of breath at rest or difficulty breathing / Collapse or fainting Coughing up blood / New confusion Blue lips or face / Becoming difficult to rouse Feeling cold or clammy with pale or mottled skin / Little or no urine output See the BNSSG primary care assessment and management guidance for COVID and non COVID patients for more information.			
	Antibiotics should not be offered if COVID-19 is likely to be the cause and symptoms are mild. Offer antibiotics if the likely cause is bacterial; if it is unclear if viral or bacterial and symptoms are more concerning; if there is a high risk of complications e.g. old or frail; pre-existing comorbidity such as immunosuppression, significant heart or lung disease or history of severe illness following previous lung infection. More likely a viral infection if: History of COVID-19 symptoms for about a week Severe muscle pain Loss of smell Breathlessness but no pleuritic pain History of exposure to COVID-19 More likely a bacterial infection if: Rapidly unwell after only few days of symptoms Does not have a history of typical COVID-19 symptoms Pleuritic pain Purulent sputum Avoid clarithromycin if known cardiac issues as it can prolong QT interval or if the patient is on interacting medication Give safety-net advice and likely duration of symptoms e.g. cough 6 weeks	If CRB65=0 Amoxicillin If penicillin allergy: Doxycycline If pregnant and allergic to penicillin Erythromycin If allergic to penicillin and needing liquid or breastfeeding Clarithromycin If CRB65=1-2 and at home (clinically assess need for dual therapy for atypicals if CRB65=2 ensure dual) Amoxicillin AND Clarithromycin Or Erythromycin (if pregnant) Or if penicillin allergic Doxycycline OR Clarithromycin alone (if pregnant discuss with microbiology)	500mg TDS 200mg day 1 then 100mg daily for 4 days 500mg QDS 500mg BD 500mg TDS 500mg BD 500mg QDS 200mg day 1 then 100mg OD 500mg BD	5 days 5 days 5 days 5 days 5 days 5 days 5 days 5 days 5 days
	A wheeze in children is likely to be viral Where appropriate for older children doses should be rounded up to the nearest capsule size.	Amoxicillin >1 month: 30mg/kg (max 500mg/dose) TDS *Penicillin allergic:* Clarithromycin Child 1 month–11 years: Body-weight under 8 kg: 7.5 mg/kg BD Body-weight 8-11 kg: 62.5 mg BD Body-weight 12–19 kg: 125 mg BD Body-weight 20–29 kg: 187.5 mg BD Body-weight 30–40 kg: 250 mg BD Child ≥12 years: 250 -500mg BD		5 days 5 days

ILLNESS	COMMENTS	MEDICINE	DOSE	DURATION OF TREATMENT
Pneumonia in Sirona Rehabilitation Units	Take into consideration previous pneumonia antibiotic treatment both in their rehabilitation and acute hospital stays	Doxycycline Alternative Co-trimoxazole	200mg on first day then 100mg once daily 960mg BD	5 days
Aspiration Pneumonia in Sirona Rehabilitation Units	Aspiration of gastric contents leads to chemical pneumonitis for which antibiotic treatment is not required. Signs of infection emerge ≥48 hours following aspiration and include purulent sputum. Specific anti-anaerobic cover is not required.	Amoxicillin If penicillin allergic Clarithromycin If antibiotic use within the previous 2 weeks: Co-trimoxazole	1gram TDS 500mg BD 960mg BD	5 days

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Meningitis				
Prevention of secondary case of meningitis: Only prescribe following advice from the Public Health England South West (Rivergate) 03003038162 (option 1)				
Suspected meningococcal disease PHE Meningococcal disease NICE meningitis	**Transfer all patients to hospital immediately.** **IF** time before admission, and non-blanching rash, give IV or IM benzylpenicillin or ceftriaxone, unless definite history of anaphylaxis, rash is not a contraindication **IV administration preferred over IM** IM ceftriaxone should be divided between two injection sites	Benzylpenicillin *or* Ceftriaxone	1200 mg IV/IM 2 gram IV infusion over at least 30 minutes but if vein cannot be found give IM.	STAT dose
		Benzylpenicillin *or* Ceftriaxone	≥10 years: 1200 mg IV/IM 1 - 9 years: 600 mg IV/IM 1 month - 1 years: 300 mg IV/IM Child ≥ 12 years: 2 gram IV infusion over at least 30 minutes but if vein cannot be found give IM. Child 1 month-11 years & 50kg or more: 2 gram IV infusion over at least 30 minutes but if vein cannot be found give IM. Child 1 month-11 years & less than 50kg: 80mg/kg IV infusion over at least 30 minutes but if a vein cannot be found give IM	STAT dose
Urinary tract Infections As *E. coli* bacteraemia in the community is increasing ALWAYS safety net and consider risks for resistance				
Do not treat asymptomatic bacteriuria (except sometimes in pregnancy, see below) there is no evidence of benefit. **Trimethoprim:** May cause rise in serum creatinine due to inhibition of tubular secretion and may cause hyperkalaemia.				
Acute Prostatitis NICE prostatitis	Send MSU and start antibiotics Quinolones achieve higher prostate levels. Review antibiotic treatment after 14 days and either stop antibiotics or continue for a further 14 days if needed (based on assessment of history, symptoms, clinical examination, urine and blood tests) Consider STI screen (gonorrhoea / Chlamydia) and consider referral to GUM. MHRA Fluroquinolone warning Fluroquinolone patient information leaflet	Ciprofloxacin *or* Ofloxacin (*Ofloxacin if STI suspected*) *Alternative if unable to take a fluoroquinolone:* Trimethoprim	500 mg BD 200 mg BD 200 mg BD	14 days then review 14 days then review 14 days then review
UTI in Catheterised patients NICE UTI catheter associated BNSSG UTI care home form	Do NOT treat or send routine catheter specimens unless **systemically unwell** or **evidence of pyelonephritis**. State symptoms on sample request e.g. fever, loin pain, new confusion and that catheter present. Consider referral to secondary care if symptoms are severe e.g. nausea, vomiting, reduced urine output. Take sample if new onset of delirium or one or more symptoms of UTI Do not dipstick urine catheter samples. Consider removing or if not possible changing the catheter if it has been in place for more than 7 days. But do not delay antibiotic treatment.	*If clinical evidence of pyelonephritis treat as acute pyelonephritis below* *Lower UTI First-line – if cannot wait for sensitivity:* Nitrofurantoin Or Trimethoprim *Or Second line choice* Pivmecilliam (is a penicillin)	 100mg MR BD 200mg BD 400mg stat then 200mg TDS	 7 days 7 days 7 days
Catheter changes	Do not use prophylactic antibiotics for catheter changes unless history of catheter-change-associated UTI or trauma	Gentamicin or based on previous sensitivities	80mg IM	Single dose

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
UTI in adults (lower) Symptoms: Dysuria, Frequency, Suprapubic tenderness, urgency, polyuria, haematuria PHE URINE **NICE UTI** BNSSG Lower UTI guidelines BNSSG Care Home UTI Form	**See lower UTI guideline for diagnosis details** **Always safety net.** **Give Target UTI leaflet** Older Adults **In treatment failure:** always perform culture, second-line treatment choice depends on sensitivity of organism isolated. When sending samples state antibiotics started empirically, so sensitivity of isolated organisms to agent prescribed can be checked. Pivmecillinam dose should be increased to 400mg tds if an Extended spectrum beta-lactamase (ESBL) producer is identified on culture and sensitivities Prescribing for trans people should be based on anatomy and will need to take account of any gender reassignment surgery and whether there has been structural alteration of the person's urethra	**1st line** Nitrofurantoin **Or if low risk of resistance and < 75 years** Trimethoprim **If eGFR <45ml/min and Low risk of resistance:** Trimethoprim **If eGFR <45ml/min and high risk of resistance or second line:** Not penicillin allergic Pivmecillinam Penicillin allergic (not type 1) Cefalexin Penicillin allergic (type 1) Fosfomycin If eGFR 30-44ml/min Nitrofurantoin can be used with caution	100mg MR BD 200mg BD 200mg BD 400mg stat then 200mg TDS 500mg BD 3 grams stat, men 2nd dose of 3 grams, 3 days later (2nd dose unlicensed) 100mg MR BD	Nitrofurantoin, Trimethoprim and Cefalexin Women 3 days Men 7 days Pivmecillinam Men and Women 3 days Fosfomycin women single dose, men two doses
	Risk factors for increased resistance include: care home resident, recurrent UTI (2 in 6 months ≥3 in 12 months), hospitalisation >7d in the last 6 months, unresolving urinary symptoms, recent travel to a country with increased antimicrobial resistance (outside Northern Europe and Australasia) especially health related, previous known UTI resistant to trimethoprim, cephalosporins or quinolones. **If increased resistance risk**, send culture for susceptibility testing & give safety net advice. Previous cultures should also guide empirical treatment.			
UTI in Pregnancy **NICE UTI** HPA UKTIS	If patient symptomatic send MSU and treat If not symptomatic send MSU and wait for results If MSU comes back positive, patient is asymptomatic, it is the first episode and an uncomplicated singleton pregnancy send a carefully taken repeat MSU and don't treat. If the subsequent sample is culture positive or the patient is symptomatic then treat. Short-term use of nitrofurantoin in pregnancy unlikely to cause problems to the foetus but avoid at term due to risk of neonatal haemolysis. Trimethoprim: AVOID if low folate status or folate antagonist prescribed (eg antiepileptic or proguanil) & ensure folate supplement used for 1st trimester plus consider increase to 5mg daily dose.	*First-trimester* Nitrofurantoin Cefalexin *Second-trimester* Nitrofurantoin Trimethoprim Cefalexin *Third-trimester* *Trimethoprim* *Cefalexin*	Nitrofurantoin – 100 mg MR BD Cefalexin - 500 mg BD Trimethoprim – 200 mg BD	Follow up at 48hrs to assess response to treatment. All for 7 days
Acute Pyelonephritis in adults (proven UTI and loin pain +/- fever) **NICE pyelonephritis** BNSSG pyelonephritis pathway	If admission not needed, always send MSU for culture & sensitivities (state pyelonephritis) and start antibiotics. If ESBL risk d/w microbiology Do not prescribe Nitrofurantoin, Pivmecillinam or Fosfomycin if clinical evidence of pyelonephritis MHRA Fluroquinolone warning Fluroquinolone patient information leaflet	Cefalexin *or* Co-amoxiclav *If type 1 penicillin allergy* Ciprofloxacin	500 mg TDS 625 mg TDS 500 mg BD	7–10 days 7-10 days 7 days
Acute pyelonephritis in pregnancy **NICE pyelonephritis** UKTIS	For pregnant women who do ***not*** require admission. If admission not needed, send MSU (state pyelonephritis) for culture & sensitivities and start antibiotics MHRA Fluroquinolone warning Fluroquinolone patient information leaflet **If no response within 24 hours, admit.**	Cefalexin *Second-line:* Ciprofloxacin *(for use when alternatives unsuitable - see BNF and UKTIS for risks)*	500 mg TDS 500 mg BD	10 days 7 days

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Recurrent UTI non-pregnant women ≥ 3 UTIs/year or ≥ 2/ 6 months NICE recurrent UTI BNSSG Recurrent UTI gudieline	First line: Advise simple measures including hydration Second line: Standby or post-trigger antibiotics Third line: Methenamine or Antibiotic prophylaxis Choice of antibiotics should be based on recent sensitivities.	Nitrofurantoin *or* Trimethoprim Methenamine (Hiprex)	100mg 200mg single dose or 100 mg daily dose 1gram BD	Post-trigger: Stat (off-label) Prophylaxis: Every night Review at 3-6 months

UTI in Children

NICE UTI children

PHE URINE

NICE UTI

Bristol children's hospital – Urinary tract infection in children – management and referral

Includes information on diagnosis, urine collection, scanning and referral

UTI symptoms:

Age group	Most common symptoms	→	Least common symptoms
Younger than 3 months	Fever, vomiting, lethargy, irritability	Poor feeding, failure to thrive	Abdominal pain, jaundice, haematuria, offensive urine
Over 3 months preverbal (infants and toddlers)	fever	Abdominal pain, loin tenderness, vomiting, poor feeding	Lethargy, irritability, haematuria, offensive urine, failure to thrive
Verbal (children)	Frequency, dysuria	Dysfunctional voiding, changes to continence, abdominal pain, loin tenderness	Fever, malaise, vomiting, haematuria, offensive urine, cloudy urine

Child <3 months: send urine for cultures and sensitivities (if appropriate) and refer urgently for assessment

Child >3 months assess with urine dipstick:

Dipstick 3months – 3 years	Nitrite +ve	Nitrite -ve
Leukocyte esterase +ve	UTI highly likely, send for MC&S, start treatment	UTI likely, send for MC&S, start treatment
Leukocyte esterase -ve	UTI likely if freshly voided sample, send for MC&S, start treatment	No UTI, do not send for MC&S

Dipstick over 3 years	Nitrite +ve	Nitrite -ve
Leukocyte esterase +ve	UTI highly likely start treatment, send for MC&S if risk of serious illness or previous UTIs.	May be due to infection elsewhere, send for MC&S, do not start treatment unless strong clinical suspicion of UTI
Leukocyte esterase -ve	If freshly voided sample start treatment. Send for MC&S, subsequent management will depend on result	No UTI, do not send for MC&S

Also send urine samples for culture when suspicion of upper UTI, high to intermediate risk of serious infection, recurrent UTIs, infection has not responded to treatment within 24-48 hours if no sample has already been sent, when clinical signs and dipstick tests do not correlate.

Lower UTI / cystitis Bacteriuria / +ve stick test but fever <38°C and no systemic symptoms (e.g. vomiting, loin pain / tenderness)	First UTI: Trimethoprim 3 months – 11 years: 4mg/kg (max 200mg/dose) BD ≥12 years: 200mg BD Second UTI within a year: Cefalexin 3months – 11 years: 25mg/kg (max 1gram/dose) BD ≥12 years: 1gram BD	3 days
Upper UTI / pyelonephritis Bacteriuria / +ve stick test and fever ≥38°C Bacteriuria / +ve stick test plus loin pain/ tenderness, irrespective of fever Consider referral to a paediatric specialist (under 6 months refer); ensure urine sample for culture has been taken.	Cefalexin 6months – 11 years: 25mg/kg (max 1gram/dose) BD ≥12 years: 1gram BD	7 – 10 days

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Gastro-Intestinal Tract Infections				
Oral Candidiasis CKS **Self-care**	**For localised or mild oral candidal infection:** After 7 days if some response to initial treatment agent offer further 7 days. After 7 days if initial treatment has had little or no effect, despite adequate adherence, offer Miconazole oral gel for 7 days. Avoid Miconazole if patient is on warfarin. Oral candidiasis is rare in immunocompetent adults consider undiagnosed risk factors including HIV.	Nystatin suspension (100, 000 units/mL) Second Line Miconazole oral gel (20mg/ml)	1ml QDS after meals, retain near oral lesion before swallowing. ≥2 years: 2.5ml QDS after meals, retain near oral lesion before swallowing.	Continue treatment for 48 hours after symptoms resolve Continue treatment for 7 days after symptoms resolve
	For extensive or severe candidiasis, HIV or if the patient is immunocompromised : If infection not resolved after 7 days, offer further 7 days Consider sending swab for culture, ID and sensitivity testing Children have a higher fluconazole clearance than adults	Fluconazole	50 mg OD extensive or severe 100mg OD HIV or immunocompromised	7 days
		Fluconazole 1 month – 11 years: 6mg/kg on day one then 3mg/kg (max 100mg/dose) OD ≥12 years: 3mg/kg (max 100mg/dose) OD		7 days
Eradication of Helicobacter pylori NICE PHE	Always test for *H pylori* before giving antibiotics Treat all positives if known DU, GU or low grade MALToma, NNT in non-ulcer dyspepsia is 14 Consider test and treat in persistent uninvestigated dyspepsia. Do not offer eradication for GORD. DU/GU relapse: retest for *H. pylori* using breath or stool test OR consider endoscopy for culture & susceptibility. NUD: Do not retest, offer PPI or H_2RA **Do not use clarithromycin, metronidazole or quinolone if used in the past year for any infection. See BNF /NICE for alternative treatment options** Retest for H pylori: post DU/GU or relapse after second line therapy, using UBT or SAT consider referral for endoscopy and culture	Omeprazole 20 mg BD ***or*** Lansoprazole 30 mg BD **PLUS** Clarithromycin 500mg BD with Amoxicillin 1gram BD **OR** Clarithromycin 500mg BD with Metronidazole 400mg BD		7 days
Infectious diarrhoea PHE Diarrhoea	Refer previously healthy children with acute painful or bloody diarrhoea to exclude *E. coli* 0157 infection. **Antibiotic therapy not usually indicated unless systemically unwell.** If systemically unwell and campylobacter suspected (e.g. undercooked meat and abdominal pain), consider Clarithromycin 250-500mg BD for 5-7 days if treated early (within 3 days) and send sample. Notify suspected cases of food poisoning to UKHSA (Rivergate) 03003038162 (option 1)			
Clostridioides difficile BNSSG C dif **NICE C dif**	Stop unnecessary antibiotics, PPIs and antiperistaltic agents. If severe symptoms or signs (see below) should discuss treatment with microbiology, review progress closely and/or consider hospital referral. Signs of severe CDI: T >38.5°C, WCC >15x10^9/L, acutely rising creatinine or signs/symptoms of severe colitis **Antimotility agents should not be prescribed** Further episode within 12 weeks of symptom resolution – discuss treatment with microbiologist Further episode after 12 weeks of symptom resolution - treat with Vancomycin if less severe, first recurrence episode or has been a long time between episodes otherwise discuss with microbiologist.	Vancomycin	125mg QDS	10 days Contact microbiology if no improvement in symptoms after 7 days treatment
Traveller's diarrhoea **-standby treatment** CKS NaTHNaC	**Only consider standby antibiotics for remote areas or people at high-risk of severe illness if they contract travellers' diarrhoea** If standby treatment appropriate give: Azithromycin 500mg OD 1-3 days (private Rx). If quinolone resistance high (e.g. South Asia): consider antimotility agent bismuth subsalicylate (Pepto Bismol) 2 tablets QDS as prophylaxis or for 2 days treatment (self-care). Further information - The National Travel Health Network and Centre (NaTHNaC) www.nathnac.org/			

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Threadworm CKS **Self-care**	Treat **all** household contacts at the same time PLUS advise hygiene measures for 2 weeks (hand hygiene, pants at night, morning shower) PLUS wash sleepwear, bed linen, dust, and vacuum on day one	*6 months or older:* Mebendazole (off label if <2yrs) *<6 months or pregnancy:* 6 weeks of hygiene measures, including perianal wet wiping or washes 3 hourly during the day	100 mg	Stat dose. If reinfection occurs second dose may be needed after two weeks
Diverticulitis CKS NICE Diverticular Disease	In patients with suspected mild, uncomplicated diverticulitis consider a no antibiotic prescribing strategy if the patient is systemically well and has no co-morbidities. Advise simple analgesia, for example paracetamol and advise the person to re-present if symptoms persist or worsen. Offer antibiotics if the person is systemically unwell or has significant co-morbidity but does not meet the criteria for referral. Arrange a review within 48 hours or sooner if symptoms worsen. Consider same day hospital assessment (HOT clinic) if complications are suspected e.g. abscess or perforation	Co-amoxiclav *Penicillin allergic:* Co-trimoxazole PLUS Metronidazole See BNF for Co-trimoxazole dosing advice, avoid in blood disorders and discontinue immediately if blood disorders or rash develop	625mg TDS 960mg BD 400mg TDS	5 days Ensure review at 48 hours
Genital Tract Infections Contact UK Teratology Information Service www.uktis.org for information on foetal risks if patient is pregnant.				
STI screening	People with risk factors should be screened for chlamydia, gonorrhoea, HIV, syphilis. Refer individuals and partners to Unity Sexual Health service. Risk factors: < 25y, no condom use, recent (<12mth) new partner or 2 or more partners, symptomatic partner, sexual contact of person with chlamydia, gonorrhoea, trichomonas, pelvic inflammatory disease and non-gonococcal urethritis. Men who have sex with men are also at increased risk of HIV and syphilis. Persons or sexual contacts of persons from areas of high HIV.			
Chlamydia trachomatis BASHH CKS Endorse prescription 'FS' to enable free NHS prescription	Opportunistically screen 16-24yr olds if sexually active. Risk factors: recent change of sexual partner and lack of consistent condom use. Treat partners &/or refer to Unity Sexual Health service if required. Risk of testing positive 10-15% in next 3-6 months. Repeat Chlamydia test advised at 3 months. Due to lower cure rate in pregnancy, test for cure at least 3 weeks after treatment. Test for cure for rectal infections If requires Azithromycin and weighs less than 45kg discuss with Unity Sexual Health	Doxycycline *If allergic or intolerant or pregnant and breastfeeding* Azithromycin	100mg BD 1gram single dose then 500mg daily	7 days Stat 2 days
Urethritis BASSH Endorse prescription 'FS' to enable free NHS prescription	Doxycycline is now first line. Purulent discharge: gonorrhoea is more likely therefore need to consider adding Ceftriaxone 1gram IM and refer to Unity Sexual Health. Treat partners and/or refer to Unity Sexual Health service if required	Doxycycline (1st line) Azithromycin (2nd line)	100mg BD 1gram then 500mg OD	7 days Stat 2 days
Genital Herpes BASHH Endorse prescription 'FS' to enable free NHS prescription	Advise: saline bathing, Vaseline, analgesia or topical lidocaine for pain and discuss transmission. Confirm diagnosis using swab (viral transport media – PCR) First episode: treatment indicated within 5 days of the start of the episode, or while new lesions are still forming, or if systemic symptoms persist. Recurrent: first line – supportive therapy only (saline bathing, Vaseline, analgesia and/or lidocaine ointment); give standby prescription for oral Rx, to be started at prodrome (if recognisable) For suppression therapy (>=6 recurrences/year) seek advice from Unity Sexual Health or consider suppressive therapy which should be discontinued after a maximum of a year to reassess recurrence frequency. If recurs aciclovir suppression should be re-instituted following discussion with patient and can be continued >1yr. Some patients prefer episodic treatment for recurrences. Ensure diagnosis is confirmed before commencing a patient on suppressive therapy.	Aciclovir oral *or* Aciclovir oral Aciclovir oral Or Aciclovir oral Aciclovir oral	200 mg five times each day 400 mg TDS 800mg TDS 400mg TDS 400mg BD	5 days 5 days 2 days 5 days Up to 1 year

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Epididymo-orchitis BASHH Endorse prescription 'FS' to enable free NHS prescription	STIs infection probable: recent change sexual partner, urethral discharge, STI contact Gonorrhoea more likely if: purulent urethral discharge, man who has sex with men, black ethnicity or contact gonorrhoea. Remember to assess and treat partner(s) epidemiologically Traditional risk linked to age, with >35yrs indicating enteric micro-organism more likely. But >10-13% men aged 35-65 have at least one new sexual partner in the last year (NATSAL 2013) Remember to exclude Torsion if acute onset and unilateral as testicular salvage is required within 6 hours and success diminishes with time. Send urine for cultures and sensitivities: Enteric origin suspected – boric acid container STI suspected – universal container for STI screen (urethral swab also required) MHRA Fluroquinolone warning Fluroquinolone patient information leaflet	**Most likely due to any STI:** Ceftriaxone PLUS Doxycycline Second line if ceftriaxone/doxycycline contraindicated : Ofloxacin **Most likely due to chlamydia or other non-gonococcal organisms (if no risk factors for gonorrhoea)** Doxycycline Or Ofloxacin **Most likely due to an STI and an enteric organism** Ceftriaxone PLUS Ofloxacin **Most likely due to an enteric organism** Ofloxacin Or Levofloxacin If quinolones are contra-indicated, treat with: Co-amoxiclav	 1gram IM 100mg BD 200mg BD 100mg BD 200mg BD 1gram IM 200mg BD 200mg BD 500mg po OD 625mg po TDS	 STAT ~~10~~ 14 days 14 days 10-14 days 14 days STAT 14 days 14 days 10 days 10 days Review with cultures at 48-72 hours
Vaginal candidiasis BASHH CKS **Self-care**	All topical and oral azoles give over 70% cure **Pregnancy:** avoid oral azoles, use intravaginal treatment for 7 days **Recurrent** not pregnant (>4 episodes per year): 150mg oral fluconazole every 72 hours for three doses induction, followed by one dose once a week for six month maintenance	Fluconazole or Clotrimazole *Pregnant:* Clotrimazole	150mg orally 500 mg PV pessary 500 mg PV pessary at night	Stat Stat (nocte) Up to 7 nights
Bacterial Vaginosis BASHH CKS	Oral metronidazole is as effective as topical treatment and is cheaper. Less relapse with 5-7 days than 2g stat at 4 wks **Pregnant/breastfeeding:** avoid 2g stat Insufficient evidence to treat asymptomatic pregnant women – symptomatic women should be treated. Treating partners does not reduce relapse	oral Metronidazole *or* oral Metronidazole *or* Metronidazole 0.75% intravaginal gel *or* Clindamycin 2% intravaginal cream *or* Clindamycin	400 mg BD 2 grams 5 grams applicatorful at night 5 grams applicatorful at night 300mg BD	5-7 days stat 5 nights 7 nights 7 days
Anogenital Warts BASHH Endorse prescription 'FS' to enable free NHS prescription	The evidence base to advise on 1st and 2nd line treatment is not strong. If warts are fleshy and non-keratinised (apply cream/solution directly to warts. Cream may be easier to apply and comes with a mirror). If warts keratinised (advise patients to use Aldara® sparingly especially if sub-preputial warts as a strong response (it is an immune modulator) may result in significant pain and ulceration. Patients should read instructions carefully). All treatments have significant failure and relapse rates. Refer to Unity Sexual Health service for specialist treatment if no response after 4 weeks treatment.	Podophyllotoxin Imiquimod 5% (Aldara®) At risk of pregnancy or pregnant Refer to Unity Sexual Health	Twice a day for 3 days then 4 days off X3 a week	4 weeks 4 weeks

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Trichomoniasis BASHH CKS Endorse prescription 'FS' to enable free NHS prescription	Treat partners refer to Unity Sexual Health service. 2g single dose metronidazole is not as effective as 5-7 days (avoid in pregnancy). Unity has observed increasing failure rates with metronidazole 500mg bd as recommended by BASSH Clotrimazole for symptom relief (not cure) if metronidazole declined.	Oral Metronidazole For symptoms Clotrimazole	400 mg TDS 100mg pessary at night	7 days 6 nights
Pelvic Inflammatory Disease BASHH, CKS Endorse prescription 'FS' to enable free NHS prescription	Refer woman and contacts to Unity Sexual Health service. Always test for chlamydia and gonorrhoea using a NAAT AND culture for gonorrhoea. Ceftriaxone, doxycycline and metronidazole now recommended first line by BASH in view of quinolone side effects and broad spectrum antimicrobial efficacy including against *Mycoplasma genitalium*. A quinolone regimen is however permissible providing risks are discussed with patient if im ceftriaxone is not available and patient does not want to attend Unity Sexual Health. However >40% of gonorrhoea isolates now resistant to quinolones in BNSSG. If gonorrhoea likely (partner has it, severe symptoms, sex abroad) use ceftriaxone containing regimen should be used. Metronidazole is included to improve coverage for anaerobic bacteria. Anaerobes are of relatively greater importance in patients with severe PID and if >25 yrs when chlamydia is detected less often - <25yrs 35% PID caused by chlamydia and >25yrs only 11%. Moxifloxacin has good anaerobic cover on its own and can be considered instead of ofloxacin and metronidazole in patients in whom compliance is a concern. Ceftriaxone also provides antimicrobial cover against other bacteria associated with PID in addition to gonorrhoea. MHRA Fluroquinolone warning Fluroquinolone patient information leaflet	Ceftriaxone PLUS Metronidazole PLUS Doxycycline Alternative Metronidazole PLUS Ofloxacin *If high risk of gonorrhoea* Add Ceftriaxone Alternative if risk of poor compliance Moxifloxacin If high risk of gonorrhoea Add Ceftriaxone Or Ceftriaxone PLUS Azithromycin PLUS Metronidazole At risk of pregnancy and pregnancy test negative. Benefits of PID treatment with regimens detailed above outweigh risks. Pregnant Refer to gynae – parental therapy advised Breastfeeding Discuss with unity sexual health or gynae.	1gram IM 400mg BD 100mg BD 400mg BD 400mg BD 1gram IM 400mg OD 1gram IM 1gram IM 1gram then 500mg OD 400mg BD	Stat 14 days 14 days 14 days 14 days Stat 14 days stat stat day 1 4 days (days 2-5) 5 days
Gonorrhoea ***Neisseria gonorrhoeae*** BASHH Endorse prescription 'FS' to enable free NHS prescription	For the treatment of uncomplicated anogenital infection in adults. Treated cases need a test of cure at 2 weeks. All treatment failures must be discussed with Unity Sexual Health and reported to Public Health England. If unable to treat in primary care refer to Unity Sexual Health service for treatment. Refer to Unity Sexual Health for contact tracing. Intra-muscular: Reconstitute 1 g vial of Ceftriaxone with 3.5 ml of 1% Lidocaine solution NB: azithromycin antimicrobial resistance has increased in the UK, 40% reduced susceptibility in Bristol 2018. NB Both alternative regimens are often inadequate to treat pharyngeal gonorrhoea	Ceftriaxone Pharyngeal infection Ceftriaxone Alternative Gentamicin **PLUS** Azithromycin ***Only*** *if intramuscular injection is contraindicated or refused by the patient:* Cefixime PLUS Azithromycin	1 gram deep IM injection 1 gram deep IM injection 240mg IM injection 2 gram orally 400 mg orally 2 gram orally	Stat Stat Stat Stat Stat Stat

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Skin Infections				
Impetigo NICE Impetigo	Localised non bullous use hydrogen peroxide or if not appropriate Fucidin Widespread non bullous use oral or topical antibiotic Bullous impetigo or systemically unwell or high risk of complications use oral antibiotic	*Topical treatment:* Hydrogen peroxide 1% cream (Crystacide) Fucidin cream 2% oral Flucloxacillin *If penicillin allergic:* oral Clarithromycin *MRSA only:* Doxycycline	 Apply 2-3 times a day Apply 3 times a day 500 mg QDS 500 mg BD 100 mg BD	5 days
		Topical treatment: Hydrogen peroxide 1% cream (Crystacide) apply 2- 3 times a day Fucidin cream 2% apply 3 times a day Flucloxacillin 1month – 1 year: 125mg QDS 2 – 9 years: 250mg QDS ≥10 years: 500mg QDS Consider using capsules were appropriate in older children as they are more likely to be tolerated than liquid *If child less than 5 years old and flucloxacillin is unlikely to be tolerated:* Co-amoxiclav 1month – 5 years: 0.5ml/kg TDS using 125/31 suspension *Penicillin allergy:* Clarithromycin Child 1 month–11 years: Body-weight under 8 kg: 7.5 mg/kg BD Body-weight 8-11 kg: 62.5 mg BD Body-weight 12–19 kg: 125 mg BD Body-weight 20–29 kg: 187.5 mg BD Body-weight 30–40 kg: 250 mg BD Child ≥12 years: 250 -500mg BD		5 days
Eczema NICE secondary bacterial infection of eczema NICE Eczema	If **no** visible signs of infection use of antibiotics (alone or with steroids) encourages resistance and does not improve healing. In eczema with visible signs of infection: weeping, pustules, yellow crusting, skin more swollen/sore, no response to treatment, rapidly worsening eczema (particularly if topical steroids are already being used) and systemic features associated with this fever and malaise. If patient not systemically unwell do not routinely offer either a topical or oral antibiotic. If offered topical may be more appropriate if infection is localised and not severe (avoid repeat courses); an oral antibiotic more appropriate if the infection is widespread or severe. If systemically unwell offer an oral antibiotic. Treat as impetigo above without the use of Hydrogen peroxide.			

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Cellulitis and Erysipelas **NICE cellulitis** CKS BNSSG cellulitis in adults pathway	If river or sea water exposure, discuss with microbiologist. In uncomplicated cellulitis, 5 days of antibiotic treatment is as effective as a 10-day course (IDSA) but skin may look abnormal for weeks, in uncomplicated cellulitis if slow to resolve screen for MRSA. Stop clindamycin if diarrhoea occurs. Cellulitis around eye: if preseptal (skin of eyelid – eye/orbit should not be involved) - the patient should be treated and referred and reviewed by ophthalmology. Orbital cellulitis (the infection is primarily in the orbit and frequently causes eyelid swelling, red eye, restricted eye movements, reduced vision and pushed out eye) is an emergency and requires immediate ophthalmology review *The use of Clindamycin must be risk assessed taking into account risk factors for *Clostridium difficile* infection (CDI): Past history of CDI or C diff colonisation Healthcare contact in the last 60 days Antibiotic use in the last 90 days Use of a PPI Alternatives are Clarithromycin 500mg bd for 5 days or if taking a statin Doxycycline 200mg day 1 then 100mg od for 5 days total See the BNSSG cellulitis in adults pathway for information on diagnosis, treatment, patient advice and re-presentations MHRA Fluroquinolone warning Fluroquinolone patient information leaflet	Flucloxacillin *If penicillin allergic*:* *Clindamycin *If infection near eyes or nose:* Co-amoxiclav *If penicillin allergic* Cefalexin *Or if type 1 allergy* Levofloxacin	500 mg QDS (If BMI≥30: 1gram QDS) 300 mg QDS 625 mg TDS 500 mg TDS 500 mg OD	5 days Discuss with microbiology if considering a repeat course of antibiotics
		Flucloxacillin 1month – 1 year: 125mg QDS 2 – 9 years: 250mg QDS ≥10 years: 500mg QDS Consider using capsules were appropriate in older children as they are more likely to be tolerated than liquid *If child less than 5 years old and flucloxacillin is unlikely to be tolerated:* Co-amoxiclav 1month – 5 years: 0.5ml/kg TDS using 125/31 suspension *Penicillin allergy:* Clarithromycin Child 1 month–11 years: Body-weight under 8 kg: 7.5 mg/kg BD Body-weight 8-11 kg: 62.5 mg BD Body-weight 12–19 kg: 125 mg BD Body-weight 20–29 kg: 187.5 mg BD Body-weight 30–40 kg: 250 mg BD Child ≥12 years: 250 -500mg BD If infection near eyes or nose: Co-amoxiclav 1month – 5 years: 0.5ml/kg TDS using 125/31 suspension 6 – 11 years: 0.3ml/kg TDS using 250/62 suspension (max 10ml/ dose) ≥12 years: 625mgTDS using tablets or 10ml TDS 250/62 suspension *Penicillin allergic:* Discuss with microbiology		5 days Discuss with microbiology if considering a repeat course of antibiotics

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Diabetic foot infection BNSSG diabetic foot infection guidelines NICE diabetic foot infection	**Mild diabetic foot infection**: local infection involving only the skin/ sub-cutaneous tissues, if erythema <2cm, no systemic inflammatory response, no antibiotic treatment in last 3 months (if previous antibiotics, grown resistant organisms or polymicrobial flora discuss with microbiology) **Moderate diabetic foot infection**: local infection with erythema more than 2cm around ulcer or involving structure deeper than skin/ sub-cutaneous tissues, no systemic inflammatory response signs. If antibiotics in the last 3 months, grown resistant organisms or polymicrobial flora discuss with microbiology. Consider hospitalisation if moderate diabetic foot infection is associated with key relevant co-morbidities. **Samples:** if no recent swab or deep tissue sample has been collected then this should be done as close to starting antibiotic therapy as possible. Review treatment when results available. *The use of Clindamycin must be risk assessed taking into account risk factors for *Clostridium difficile* infection (CDI): Past history of CDI or C diff colonisation Healthcare contact in the last 60 days Antibiotic use in the last 90 days Use of a PPI MHRA Fluroquinolone warning Fluroquinolone patient information leaflet	Mild diabetic foot infection: Flucloxacillin *Penicillin allergy:* Clindamycin* Or if pregnant Erythromycin *MRSA present*: Doxycycline Or Co-trimoxazole *Moderate diabetic foot infection:* Co-amoxiclav *Penicillin allergy or MRSA present:* Co-trimoxazole PLUS Metronidazole *Pseudomonas aeruginosa grown from cultures:* Ciprofloxacin PLUS Clindamycin*	 500mg – 1gram QDS (1gram if BMI≥30) 300mg QDS 500mg QDS 100mg BD 960mg BD 625mg TDS 960mg BD 400mg TDS 750mg BD 300mg QDS	7-14 days Reassess after 2-7 days . Course length based on clinical assessment Minimum 7 days up to 6 weeks for osteomyelitis
Leg ulcer NICE Leg Ulcer Infection	**Ulcers are always colonised with bacteria**. Antibiotics do not improve healing unless active infection **Signs of active infection include – redness or swelling spreading beyond ulcer, localised warmth, increased pain, fever.** Don't send a swab on first presentation. If not responding to first line treatment a swab of ulcer is recommended. Please state the treatment the patient has already received on clinical details.	*If active infection:* Flucloxacillin *or* Clarithromycin	 500 mg QDS 500 mg BD	 5 days Discuss with microbiology if considering a repeat course of antibiotics
Abscess	Drain, do not require antibiotics			

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
MRSA Skin Colonisation	Due to the potential risk of MRSA transmission & increased risks for certain patients, two attempts at decolonisation should be made for care home residents, persons with regular hospital admission and prior to elective surgery. Two days after stopping, 3 X MRSA screens should be taken at 48 hour intervals. If any of these are positive a second 5 day course is required followed by 3 rescreens as above. If unsuccessful seek microbiology advice if decolonisation essential Chlorhexidine gluconate 4% liquid (Hibiscrub®) contains soya oil. Do not use in patients with a peanut or soya allergy	Mupirocin 2% nasal ointment AND *For Adults:* Chlorhexidine gluconate 4% liquid *For children or exfoliative skin condition:* Octenidine 0.3% Lotion (Octenisan®)	Apply to inner surface of each nostril TDS skin wash daily and scalp wash twice in 5 days skin wash daily and scalp wash twice in 5 days	Five consecutive days
MRSA Infection Meticillin-resistant *Staphylococcus aureus*	Use antibiotic sensitivities to guide treatment. If severe infection or no response to monotherapy after 24-48 hours, seek advice from microbiologist regarding combination therapy. **Patients being treated for MRSA infection should also receive topical eradication therapy (see colonisation)**	If active infection, MRSA *confirmed*, infection not severe and admission not required		
		Confirmed active infection: Doxycycline OR according to sensitivities *Children:* Seek microbiology advice	100 mg BD	5 days
Scabies CKS	Treat all home & skin to skin contacts (including sexual partners in the last 8 weeks) at the same time. Wash bed sheets, towels and clothing at the same time. Best applied at night and advise patients to reapply treatment to hands when/if washed during the treatment period.	Permethrin 5% cream If continued infection: Repeat permethrin as above If continued infection after the four applications of permethrin and treatment of contacts and laundry and >15kg Ivermectin	Apply to whole body and wash off after 12-24 hours 200micrograms/kg (round to nearest 3mg tablets)	Two applications spaced one week apart Single dose can be repeated after 7 days if scabies severe
Headlice CKS **Self-care**	Head lice can be mechanically removed by combing wet hair meticulously with a plastic detection comb (probably for at least 30 minutes) over the whole scalp at 4 day intervals for a minimum of 2 weeks, and continued until no lice are found on consecutive sessions; hair conditioner or vegetable oil can be used to facilitate the process	Dimeticone 4% lotion (All affected individuals in a household should be treated at the same time)	Rub into dry hair and scalp, allow to dry naturally, shampoo after 8 hours (or overnight)	Two applications spaced one week apart
Mastitis CKS	S. aureus is the most common infecting pathogen Suspect if women has: a painful breast, fever and/or general malaise, a tender red breast. Breastfeeding: oral antibiotics are appropriate where indicated. Women should continue feeding, including from the affected breast.	Flucloxacillin *If woman or child is penicillin allergic:* Clarithromycin	500 mg QDS 500 mg BD	7 days and review 7 days and review
Candida infection of the nipple in breastfeeding CKS	Treat women and infant at the same time to prevent re-infection. Fluconazole is an off-label indication in breast feeding Miconazole gel in infants – divide the dose into smaller portions and apply the gel to the affected area(s) with a clean finger after feeding. Do not apply to the back of the throat.	*Women:* Miconazole 2% cream to the nipples after every breastfeeding *Second line:* Fluconazole	 150-300mg single dose Then 50-100mg bd	2 weeks Single dose 10-14 days
		Infant: >4 months or 5-6 months if born pre-term: Miconazole oral gel 1.25ml QDS If this is unsuitable Nystatin 1ml QDS		7 days after lesions have healed 7 days, continued for 2 days after lesions have resolved

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Wound infections following surgery or trauma	It is a clinical decision if a wound is infected **Signs of active infection include – redness or swelling spreading beyond the wound, localised warmth, increased pain, fever.** Don't send a swab on first presentation. If not responding to first line treatment a swab of wound is recommended. Please state the treatment the patient has already received on clinical details. See BNF for Co-trimoxazole dosing advice, avoid in blood disorders and discontinue immediately if blood disorders or rash develop If trauma, ensure wound is cleaned and debrided and consider tetanus If an open fracture give a dose of Co-amoxiclav (if not penicillin allergic) and transfer to secondary care If a patient is known MRSA positive discuss with microbiology	*Following 'clean surgery'* Flucloxacillin *Penicillin allergic:* Clarithromycin *Following 'contaminated surgery likely to contain bowel flora' or following trauma* Co-amoxiclav *Penicillin allergic:* Co-trimoxazole PLUS Metronidazole	500mg QDS 500mg BD 625mg TDS 960mg BD 400mg TDS	5 days
		Following 'clean surgery' Flucloxacillin 1month – 1 year: 125mg QDS 2 – 9 years: 250mg QDS ≥10 years: 500mg QDS Consider using capsules were appropriate in older children as they are more likely to be tolerated than liquid *If child less than 5 years old and flucloxacillin is unlikely to be tolerated:* Co-amoxiclav 1month – 5 years: 0.5ml/kg TDS using 125/31 suspension *Penicillin allergy:* Clarithromycin Child 1 month–11 years: Body-weight under 8 kg: 7.5 mg/kg BD Body-weight 8-11 kg: 62.5 mg BD Body-weight 12–19 kg: 125 mg BD Body-weight 20–29 kg: 187.5 mg BD Body-weight 30–40 kg: 250 mg BD Child ≥12 years: 250 -500mg BD *Following 'contaminated surgery likely to contain bowel flora' or following trauma* Co-amoxiclav 1month – 5 years: 0.5ml/kg TDS using 125/31 suspension 6 – 11 years: 0.3ml/kg TDS using 250/62 suspension (max 10ml/ dose) ≥12 years: 625mg TDS using tablets or 10ml TDS 250/62 suspension *Penicillin allergy:* Cefalexin 1 month – 11 years: 25mg/kg (max 1gram/dose) BD ≥12 years: 1gram BD Plus Metronidazole 2 months – 11 years: 7.5mg/kg (max 400mg/dose) TDS ≥12 years: 400mg TDS		5 days

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Acne NICE acne vulgaris CKS Self-care	**Mild-Moderate:** 1 or more of: • any number of non-inflammatory lesions (comedones) • up to 34 inflammatory lesions (with or without non-inflammatory lesions) • up to 2 nodules **Moderate-Severe:** either or both of: • 35 or more inflammatory lesions (with or without non-inflammatory lesions) • 3 or more nodules 1st line treatment: Offer a 12-week course of 1 of the options. Completing the course is important because positive/ noticeable effects can take 6 to 8 weeks. **Review at 12 weeks:** **If acne has failed to respond:** • **Mild-moderate** – offer another treatment option. • **Moderate-severe** – if not previously taking an oral antibiotic, offer an option that includes lymecycline or doxycycline **plus** a topical treatment. • **Moderate-severe-** been taking an oral antibiotic – refer to dermatology **If improving but not cleared completely:** Continue treatment for 12 more weeks. **If completely cleared:** Stop any oral antibiotic, continue topical treatment. Consider continuing a non-antibiotic containing topical treatment such as Adapalene/Benzoyl peroxide or Trifarotene as a maintenance treatment especially in people with a history of frequent relapse after treatment. **Review at 24 weeks:** **Mild to moderate acne –** failure to respond adequately to 2 different 12-week courses of treatment options, consider dermatology referral. **Relapse** If relapses after responding adequately to an appropriate first-line therapy consider either another 12 weeks of the same treatment or an alternative 12 week treatment.	**Any Severity** Adapalene (0.1% or 0.3%) / benzoyl peroxide (2.5%) OR **Any Severity** Trifarotene 50microgram/gram OR **Any Severity** Tretinoin (0.025%) / Clindamycin (1%) **Mild to moderate** Benzoyl peroxide (3% or 5%) / Clindamycin (1%) OR **Moderate to severe** Adapalene (0.1% or 0.3%) /Benzoyl peroxide (2.5%) **AND** Lymecycline or Doxycycline OR **Moderate to severe** Azelaic acid (15% or 20%) **AND** Lymecycline or Doxycycline OR **Moderate to severe** Trifarotene 50microgram/gram **AND** Lymecycline or Doxycycline	In the evening In the evening In the evening In the evening In the evening 408mg OD 100mg OD In the evening 408mg OD 100mg OD In the evening 408mg OD 100mg OD	Review at 12 weeks
	• Oral antibiotics should always be used in combination with a non-antibiotic containing topical preparation, never as monotherapy. • Topical and oral antibiotics should not be used for more than 6 months except in exceptional circumstances. • To reduce excessive dryness/irritation with topical retinoids, contact time should be increased gradually. Use of an oil free, non-pore blocking moisturiser earlier in the evening can also help reduce dryness and irritation. • Benzoyl peroxide monotherapy is an alternative if other treatments are contraindicated or avoiding use of retinoid and antibiotic. • Benzoyl peroxide products may bleach or discolour material including hair and dyed fabrics.			

<table>
<tr><th>ILLNESS</th><th>COMMENTS</th><th>MEDICINE</th><th>ADULT DOSE</th><th>DURATION OF TREATMENT</th></tr>
<tr><td>Bites –
Human or Animal
CKS
nathnac

NICE human and animal bites</td><td colspan="4">Prophylaxis for an uninfected bite
<table>
<tr><th>Type of bite</th><th>Bite has not broken the skin</th><th>Bite has broken the skin but not drawn blood</th><th>Bite has broken the skin and drawn blood</th></tr>
<tr><td>Human bite</td><td>Do not offer antibiotics</td><td>Consider antibiotics if it is in a high risk area or person at high risk</td><td>Offer antibiotics</td></tr>
<tr><td>Cat bite</td><td>Do not offer antibiotics</td><td>Consider antibiotics if the wound could be deep</td><td>Offer antibiotics</td></tr>
<tr><td>Dog or other traditional pet bite</td><td>Do not offer antibiotics</td><td>Do not offer antibiotics</td><td>Offer antibiotics if it has caused considerable, deep tissue damage or is visibly contaminated (for example with dirt or a tooth).
Consider antibiotics if it is a high risk area or a person at high risk</td></tr>
</table>
High risk areas: 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 e.g. diabetes, immunosuppression, asplenia, decompensated liver disease</td></tr>
<tr><td></td><td>Assess risk of tetanus, rabies or a blood born infection e.g. HIV, hepatitis B&C.
Manage the wound with irrigation and debridement as necessary.
Seek advice from microbiology or bites from a wild or exotic animal (including birds and non-traditional pets and consider obtaining advice for domestic animal bites (including farm animal bites) you are unfamiliar with
Penicillin allergy: review all at 24 and 48 hours as not all pathogens are covered
If pregnant and penicillin allergic, discuss with microbiology IV antibiotics may be required.</td><td>Prophylaxis or treatment:
Co-amoxiclav

Penicillin allergic:
Doxycycline
PLUS Metronidazole</td><td>
625 mg TDS

200mg OD
400mg TDS</td><td>Prophylaxis 3 days
Treatment 5 days</td></tr>
<tr><td></td><td></td><td>Prophylaxis or treatment:
Co-amoxiclav
1month – 5 years: 0.25ml/kg TDS using 125/31 suspension
6 – 11 years: 0.15ml/kg TDS using 250/62 suspension (max 10ml/ dose)
≥12 years: 625mg TDS using tablets or 10ml TDS 250/62 suspension

Penicillin allergic:
Children ≥12 years:
Metronidazole
≥12 years: 400mg TDS
PLUS
Doxycycline
≥12 years: 200mg OD
Children under 12 years:
Co-trimoxazole
>6 weeks: 24mg/kg (max 480mg/dose) BD
PLUS
Metronidazole
>2months: 7.5mg/kg (max 400mg/dose) TDS</td><td></td><td>Prophylaxis 3 days
Treatment 5 days</td></tr>
<tr><td>Insect Bites
NICE insect bites and stings</td><td colspan="4">For people who have symptoms or signs of an infected insect bite or sting treat as cellulitis and erysipelas.</td></tr>
</table>

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Tick bites (Lyme disease) NICE NG95 UKHSA Lyme disease: management and prevention	**Prophylaxis:** not routinely recommended in Europe. Give safety net advice about erythema migrans and other possible symptoms that may occur within 1 month of tick removal. **Treatment:** Treat erythema migrans empirically; serology is often negative early in infection. For other suspected Lyme disease such as neuroborrelosis (CN palsy, radiculopathy) seek advice Discuss the diagnosis and management of Lyme disease in children and young people under 18 years with a specialist (Paediatric Infectious Diseases), unless they have a single erythema migrans lesion and no other symptoms	*Treatment:* *Doxycycline* *First alternative:* Amoxicillin	100mg BD 1gram TDS	21 days 21 days
		< 9 years: Amoxicillin 30mg/kg (max 1gram/dose) TDS First alternative: Azithromycin ≥1 month: 10mg/kg (max 500mg/dose) daily 9 – 12 years: Doxycycline (soluble tablet) 2.5mg/kg (max 100mg/dose) BD day 1 then daily for 20 days First alternative Amoxicillin 30mg/kg TDS (max 1gram/dose) >12 years: Doxycycline 100mg BD First alternative Amoxicillin 1 gram TDS		21 days 17 days 21 days 21 days 21 days 21 days
Dermatophyte infection – skin CKS body & groin CKS foot CKS scalp PHE fungal skin and nail infections diagnosis	**Most cases:** Terbinafine is fungicidal, so treatment time shorter and more effective than with fungistatic imidazoles. **If candida possible**: use imidazole e.g.clotrimazole. **If intractable or scalp**: send skin scrapings. **If infection confirmed:** use *oral* terbinafine or itraconazole see BNF for dosing. **Scalp:** oral therapy and discuss with specialist Terbinafine is not licenced for use in under 12s but is considered an appropriate treatment.	Terbinafine 1% cream *or* Clotrimazole 1% cream	BD BD	1-4 weeks For 1-2 weeks after healing (i.e. 4-6 weeks)
Dermatophyte infection – nail CKS PHE fungal skin and nail infections diagnosis	Take nail clippings: start therapy only if infection confirmed by laboratory. Terbinafine is more effective than azoles. Liver reactions rare (0.1-1%) with oral antifungals. If candida or non-dermatophyte infection confirmed, consider oral itraconazole see BNF for dosing. Topical nail lacquer is not as effective To prevent recurrence: apply weekly 1% topical antifungal cream to entire toe area. For children, seek specialist advice	*First-line:* Terbinafine *Second-line:* Itraconazole pulsed therapy	250 mg OD - fingers - toes 200 mg BD as 7 day course - fingers - toes	6 weeks 12 weeks 7 days every month 2 courses 3 courses Stop treatment when continual, new, healthy, proximal nail growth
Cold sores **Self-care**	Most resolve after 5 days without treatment. Topical antivirals applied in prodromal period reduce duration by 12-18 hours In frequent, severe and predicable triggers: consider oral prophylaxis: Aciclovir 400mg BD for 5-7 days			

ILLNESS	COMMENTS	MEDICINE	ADULT DOSE	DURATION OF TREATMENT
Varicella zoster /chicken pox UKHSA Varicella CKS **Herpes zoster/ shingles** PCDS Herpes zoster CKS	**Pregnant/immunocompromised/neonate/pneumonitis/encephalitis: seek urgent specialist advice for IV aciclovir** **Chicken pox:** aciclovir recommended if: onset of rash <48 hours and one of the following: >14 years old, severe pain, dense/oral rash, taking steroids, smoker **Shingles:** treat if >50 years & 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. Treatment not within 72 hours: consider starting antiviral drug up to one week after rash onset if high risk of severe shingles or complications (continued vesicle formation, older age, immunocompromised, severe pain) **Ophthalmic zoster: Refer to ophthalmology for review.**	*If indicated:* Aciclovir	800 mg five times a day	7 days (Uncomplicated) In cases of treatment failure seek Virologist advice to guide further treatment Zoster: until 2 days after crusting of lesions in immuno-compromised patients
		Aciclovir 1-23 months: 200mg QDS 5 days 2-5 years: 400mg QDS 5 days 6-11 years: 800mg QDS 5 days 12- 17 years: 800mg five times daily 7 days A fever persisting for more than 3 days post eruption or a new fever post initial subsidence needs to be taken seriously and requires oral antibiotics Flucloxacillin 1month – 1 year: 125mg QDS 2 – 9 years: 250mg QDS ≥10 years: 500mg QDS Consider using capsules were appropriate in older children as they are more likely to be tolerated than liquid Or if penicillin allergic (not type 1) or Flucloxacillin unpalatable Cefalexin 1 month – 11 years: 25mg/kg (max 1gram/dose) BD ≥12 year: 1 gram BD		5-7 days (uncomplicated) In cases of treatment failure seek Virologist advice to guide further treatment Zoster: until 2 days after crusting of lesions in immuno-compromised patients Antibiotic course (where necessary) 5 days
Eye Infections				
Conjunctivitis remedy pathway (bnssgccg.nhs.uk) CKS **Self-care**	**First line**: bath/clean eyelids with cotton wool dipped in sterile saline or boiled (cooled) water to remove crusting Only treat if severe, as most viral or self-limiting. Bacterial conjunctivitis is usually unilateral and self-limiting; it is characterised by red eye with mucopurulent, not watery, discharge. 65% and 74% resolve on placebo by day 5 and 7 There is a theoretical risk of grey baby syndrome if chloramphenicol is used during the third trimester of pregnancy an alternative is Fusidic acid 1% MR gel BD but this has less Gram-negative activity. Avoid Levofloxacin in pregnancy and breast feeding.	*Second line if treatment required:* Chloramphenicol 0.5% drops **OR** Chloramphenicol 1% ointment *Third line (in adults):* Levofloxacin 0.5% eye drops	4 times daily 3-4 times daily or just at night if using eye drops. QDS	All for 48 hours after resolution usually 5-7 days
Blepharitis remedy pathway (bnssgccg.nhs.uk) CKS	**First line:** lid hygiene for symptom control, including warm compresses, lid massage and scrubs, gentle washing, avoiding cosmetics **Second line**: topical antibiotics if hygiene measures are ineffective after 2 weeks. **Signs of Meibomian gland dysfunction or acne rosacea:** consider oral antibiotics	Second line: Chloramphenicol 1% ointment Third line oral Doxycycline	BD to eyelids 100mg OD 4 weeks then 50mg OD maintenance for 8 weeks	2 weeks – this can be extended to 6 weeks if beneficial 12 weeks total
Dental Infections				
GPs should not be involved in dental treatment. Patients presenting to non-dental primary care services with dental problems should be directed to their regular dentist or if this is not possible to NHS 111 who will be able to provide details of how to access emergency dental care. Antibiotics do not cure toothache. First line treatment is with paracetamol and/or ibuprofen. Codeine is not effective for toothache. Current recommended dental prescribing information can be found online at: https://www.rcseng.ac.uk/-/media/files/rcs/fds/publications/fds-amp-2020.pdf				

Changes to Antimicrobial Prescribing Guidelines August 2024

Section	Guideline	Change
Lower Respiratory Infections	Cough	Timeframe for giving antibiotics in pertussis altered in line with national guidelines

Changes to Antimicrobial Prescribing Guidelines April 2024

Section	Guideline	Change
Upper Respiratory Infections	Acute otitis media	Addition of Otigo as second line option if no antibiotics given and oral pain relief is insufficient. Note ear drum must not be perforated.
Lower Respiratory Infections	Cough	Information on Pertussis added
	Exacerbation of COPD	Penicillin allergic increased risk of treatment failure – levofloxacin switched to Co-trimoxazole
Genital-urinary	Epididymo-orchitis	Information on samples required added
Genital Tract	Vaginal candidiasis	Removed miconazole as an option in pregnancy, it is no longer available
Skin and soft tissue	Acne	Trifarotene added to treatment options. Additional information added to comments section.
	Diabetic foot infections	Re-written in line with a new BNSSG diabetic foot infection guideline. Treatment split into mild and moderate infection.

Changes to Antimicrobial Prescribing Guidelines February 2024

Section	Guideline	Change
All	Quinolone antibiotic prescribing	MHRA alert and patient information leaflet linked
Skin and soft tissue	Ulcers and Wound Infections	Update on when to take wound swabs
	Scabies	Included Ivermectin