

Upper Respiratory Tract Infections:

- Acute Sore Throat:** [NICE NG84 2-page visual summary](#)
 Avoid antibiotics where possible; advise paracetamol, self-care, and safety net; provide [RTI](#) leaflet.
FeverPAIN 0-1 or Centor 0-2: self-care, use no antibiotic strategy.
FeverPAIN 2-3: no or 'back-up/delayed' antibiotic
FeverPAIN 4-5 or Centor 3-4: immediate antibiotic, or 'back-up/delayed' prescription.
 Systemically very unwell or high risk of complications: immediate antibiotic.
 - Phenoxymethylpenicillin
 - Clarithromycin (if penicillin allergy) or
 - Erythromycin (preferred if pregnant & penicillin allergy)
- Influenza:** treat 'at risk' patients in line with [PHE Influenza](#) guidance
- Scarlet Fever:** [PHE](#)
 - Phenoxymethylpenicillin
 - Clarithromycin (if penicillin allergy) or
 - [Erythromycin \(preferred if pregnant & penicillin allergy\)](#)
- Acute Otitis Media:** [NICE NG91 2-page visual summary](#)
First line: avoid antibiotics where possible; advise self-care and safety net; provide [RTI](#) leaflet
Second line:
 - First option: amoxicillin; if penicillin allergy or intolerance: clarithromycin, or erythromycin (preferred if pregnant)
 - Second option: co-amoxiclav (if worsening symptoms on first antibiotic choice taken at least for 2-3 days)
 Consider Otovent® kit for OME
- Acute Otitis Externa:** [CKS](#)
First line: analgesia for pain relief, and apply localised heat (e.g. a warm flannel); provide RTI leaflet
Second line:
 - First option: topical acetic acid 2% (EarCalm®) (+ available OTC)

- Second options: topical Betneson-N® drops or Otomize® spray
- If cellulitis: flucloxacillin

Sinusitis (acute): [NICE NG79 2-page visual summary](#)
First line: avoid antibiotics where possible; advise self-care and safety net; provide [RTI](#) leaflet
Second line:

- First option: phenoxymethylpenicillin; if penicillin allergy: doxycycline, clarithromycin, or erythromycin (preferred if pregnant)
- Second option - If high-risk of complications, or persistent or worsening symptoms: co-amoxiclav

Lower Respiratory Tract Infections:

- Acute Cough:** [NICE NG120 2-page visual summary](#)
First line: avoid antibiotics where possible; advise self-care and safety net; provide [RTI](#) leaflet
Second line: 5-day delayed antibiotic, safety net and advise that symptoms can last 3 weeks; provide [RTI](#) leaflet; third line: immediate antibiotic:
 - Amoxicillin
 - If penicillin allergy: doxycycline
- Acute Exacerbation of COPD:** [NICE NG114 2-page visual summary](#). Choose antibiotics accordingly when current susceptibility available.
 - When current First option: doxycycline or amoxicillin
 - If penicillin allergy: clarithromycin
 - Second option (no improvement in symptoms after 2-3 days): use alternative first choice
 - Third option/if risk of resistance: co-trimoxazole
- Acute Exacerbation of Bronchiectasis (non-cystic fibrosis):** [NICE NG117 3-page visual summary](#). Choose antibiotics accordingly when current susceptibility available.
 - First option: amoxicillin (preferred if pregnant) or doxycycline
 - If penicillin allergy: clarithromycin

- Managing suspected or confirmed pneumonia during COVID-19 pandemic:** [NICE NG165](#) Use antibiotics only when appropriate as per full guidance
 - First option: doxycycline (not if pregnant / breastfeeding)
 - Alternative: amoxicillin
- Community Acquired Pneumonia:** [NICE NG123 3-page summary](#)
 - [CRB65](#) Score 0 - First option: doxycycline; second option: amoxicillin, or clarithromycin (if penicillin allergy), or erythromycin (preferred if pregnant)
 - [CRB65](#) Score 1,2 & at home – First option: amoxicillin AND (if atypical pathogens suspected) clarithromycin or erythromycin (preferred if pregnant); Second option: doxycycline or clarithromycin
 - [CRB65](#) Score 3-4: IM benzylpenicillin & urgent hospital admission

Meningitis:

- Suspected Meningococcal Disease:** [PHE Meningococcal disease](#)
 - IV or IM benzylpenicillin
 - IV or IM cefotaxime

Sepsis:

- Suspected 'Red Flag Sepsis':** [NICE NG51](#); [UK Sepsis Trust](#)
Transfer all suspected 'red flag sepsis' patients to acute hospital immediately
If time to treatment in hospital is likely to be more than 1 hour it is recommended that the first dose of antibiotic is administered by a primary care clinician (if possible after obtaining blood cultures).
 - IV or IM cefotaxime (alternatively, ceftriaxone)

Urinary Tract Infections:

- Lower UTI in non-pregnant women and men (aged ≥ 16 yrs):** [NICE NG109 3-page visual summary](#), [PHE UTI diagnosis](#)
 Avoid antibiotics where possible; advise self-care and safety net; provide [UTI](#) leaflet.

- Uncomplicated UTI & <70 years-old: First option (if GFR≥45): nitrofurantoin, if low risk of resistance: trimethoprim; Second option: pivmecillinam
- Risk of resistance, frail and/or associated co-morbidity: First option (if GFR≥45): nitrofurantoin; second option: pivmecillinam. Avoid trimethoprim
- If increased risk of resistance (refer to resistance factors in main guidance): fosfomycin (Monuril®)

Perform culture in all treatment failures.

- **Recurrent UTI in non-pregnant women:** (2 in 6mths and/or ≥3 in 12mths): [NICE NG112](#), [PHE UTI diagnosis](#)

Avoid antibiotics where possible. Provide [UTI](#) leaflet

First line: advise simple measures, self-care and safety netting (may wish to try +OTC D-mannose or cranberry supplements).

Second line: stand-by or post-coital antibiotics; Third line if recent culture sensitive:

- Nitrofurantoin or trimethoprim

Or consider:

- Methenamine hippurate

- **UTI in pregnancy:** [NICE NG109](#), [PHE UTI diagnosis](#)

- First line (if GFR≥45): nitrofurantoin (avoid at term)
- Second line: amoxicillin (if susceptible) or cefalexin

- **Lower UTI in children and young people:** [NICE NG109 3-page visual summary](#), [PHE UTI diagnosis](#)

- First line: trimethoprim (if low risk of resistance) or nitrofurantoin (if GFR≥45)
- Second line: pivmecillinam (if ≥40kg), amoxicillin (if susceptible), or cefalexin

- **Upper UTI in children and young people:** [NICE NG111 3-page visual summary](#), [PHE UTI diagnosis](#)

Refer to paediatricians to: obtain a urine sample for culture, assess for signs of systemic infection.

- First line: cefalexin or co-amoxiclav (if susceptible)
- Second line: consult with microbiology

- **Acute pyelonephritis in non-pregnant women and men (aged ≥ 16 yrs):** [NICE NG111 3-page visual summary](#), [PHE UTI diagnosis](#)

- Cefalexin, or co-amoxiclav (if susceptible); or trimethoprim (if susceptible), or ciprofloxacin (consider safety issues)
- If ESBL risk: contact microbiologist

- **Acute prostatitis:** [NICE NG110 2-page visual summary](#), [PHE UTI diagnosis](#)

First line:

- First option (if susceptible): ciprofloxacin or ofloxacin
- Second option (if susceptible): trimethoprim

Second line: (after discussion with specialist)

- Levofloxacin or co-trimoxazole

Gastro-intestinal Tract Infections:

- **Oral candidiasis:** [CKS](#)

- Miconazole oral gel
- Nystatin oral gel (if miconazole not tolerated)
- Fluconazole capsules if extensive/severe

- **Infectious diarrhoea:**

Avoid antibiotics unless systemically unwell or pregnant

- Clarithromycin if campylobacter suspected,
- Otherwise, contact microbiologist for advice via Musgrove Park Hospital switchboard: ☎ 01823 333444

- **Giardiasis:** [BNE](#), [BNFc](#)

- First line: tinidazole
- Second line: metronidazole

- **Acute diverticulitis:** [NICE NG147 2-page visual summary](#)

There is no robust evidence to support the use of antibiotics for treating diverticulitis in primary care. *It may be* appropriate to treat mild to moderate episodes if 2 or more SIRS criteria: Temp > 38.3°C or < 36.0°C, Pulse > 90/min, RR > 20/min, New confusion/drowsy, Glucose > 7.7mmol/L (non-diabetic patient), WBC > 12 or < 4x10⁹/L

- Doxycycline plus metronidazole

- **Eradication of *H. pylori*:** [NICE CG184](#), [NICE PPI doses](#), [PHE *H. pylori*](#), [CKS](#)

Do not use clarithromycin, metronidazole or quinolone if used in the past year for any infection

- First and second line: PPI with amoxicillin + either clarithromycin or metronidazole
- Penicillin allergy & previous MZ + clari: PPI WITH bismuth subsalicylate (Pepto-Bismol tab®) 'off-label' + metronidazole + tetracycline
- Relapse & previous MZ + clari: PPI with amoxicillin + tetracycline or levofloxacin

- ***Clostridioides difficile*:** [DoH](#), [PHE](#)
Stop unnecessary antibiotics, PPIs and antiperistaltic agents.

- First episode & not severe CDI: vancomycin
 - Second episode/severe/type 027: vancomycin
 - Recurrent: fidaxomicin (**AMBER** drug)
- Vancomycin should be available in Community pharmacies providing the [Specialist medicines service](#) from Apr 21. If delay in starting vancomycin then metronidazole can be prescribed and switched to vancomycin when available.

- **Travellers' diarrhoea:** [CKS](#)

Only for patients at high risk of severe illness or visiting high risk areas

- Stand-by: azithromycin
- Prophylaxis/treatment: bismuth subsalicylate (Pepto-Bismol®) (+available OTC)

- **Threadworms:** [CKS](#)

Treat all household contacts at same time and advise hygiene measures for 2 weeks

- ≥6 months: mebendazole ('off label' < 2 years)
- <6 months or pregnant (at least in first trimester): six weeks hygiene measures

Genital Tract Infections:

- **STI Screening:** [BASHH](#)
- **Chlamydia trachomatis:** [BASHH](#)
- First line:**
 - First option: doxycycline (contraindicated in pregnancy)
 - Second option/pregnant or breastfeeding: azithromycin ('off label' use in pregnancy)
- Second line:**
 - First option: erythromycin
 - Second option (if pregnant or breastfeeding): amoxicillin
- **Epididymitis:** [BASHH](#), [CKS](#)
 - Low STI risk & >35yrs: First line: doxycycline; Second line: ofloxacin or ciprofloxacin
 - STI risk or <35yrs (+refer to GUM): ceftriaxone IM PLUS oral doxycycline
- **Vaginal candidiasis:** [BASHH](#), [CKS](#)
 - Topical options: clotrimazole (+available OTC) fenticonazole, miconazole
 - Oral option (not if pregnancy or breastfeeding): fluconazole (+available OTC)
 - Recurrent: fluconazole capsule induction followed by maintenance
- **Bacterial vaginosis:** [BASHH](#), [CKS](#)
 - First line: oral metronidazole, or topical metronidazole or topical clindamycin
 - Second line: lactic acid gel (Balance Activ BV[®]) (for treatment; +OTC if prophylaxis), or dequalinium chloride (Fluomizin[®]) vaginal tablet
- **Genital herpes:** [BASHH](#)
Advise: saline bathing, analgesia, or topical lidocaine for pain, and discuss transmission.
 - First episode: treat within five days if new lesions or systemic symptoms, and refer to GUM
 - Recurrent: self-care if mild, or immediate short course antiviral treatment, or suppressive therapy if more than 6 episodes per year

- If antivirals indicated: first line: aciclovir; second line: valaciclovir; third line: famciclovir
- **Gonorrhoea:** [BASHH](#)
Antibiotic resistance is now very high. Please refer to GUM for cultures before treatment, test of cure and partner notification. SWISH contacts: <https://swishservices.co.uk/> / booking line 0300 124 5010.
 - Susceptibility NOT known: ceftriaxone IM stat
 - Susceptibility KNOWN: ciprofloxacin po stat
- **Trichomoniasis:** [BASHH](#), [CKS](#)
 - Oral metronidazole
 - Topical clotrimazole
- **Pelvic inflammatory disease:** [BASHH](#), [CKS](#)
Delaying treatment increases risk of long-term sequelae. Refer woman and sexual contacts to GUM service. SWISH contacts: <https://swishservices.co.uk/> / booking line 0300 124 5010.
First line: ceftriaxone IM + doxycycline + metronidazole
Second line:
 - First option: metronidazole + ofloxacin
 - Second option: moxifloxacin
 - *2nd line* Trimethoprim

Skin Infections:

- **Acne:** [CKS](#), [Somerset Prescribing Formulary – topical preparations for acne](#)
 - First line: self-care
 - Second line: First option (+available OTC): benzoyl peroxide 4% or 5% (Panoxyl[®], Quinoderm[®], Brevoxyl[®] or Acnecide[®]); Second: option: adapalene (Differin[®])
 - Third line: First option: Epiduo[®] gel; Second option: Treclin[®] gel or Duac Once Daily[®] gel
 - If treatment failure/severe: oral oxytetracycline or oral doxycycline
- **Impetigo:** [CKS](#), [PHE](#), [NICE guidance](#)
Localised
 - Hydrogen peroxide 1% cream or sulfadiazine 1% cream (Flamazine[®]) – do not use either around the eyes.

- Fusidic acid 2% cream - use only for localised impetigo around the eyes[®]
- Mupirocin 2% nasal ointment - use only for localised impetigo around the eyes when fusidic acid resistance. Otherwise reserve for MRSA.
- Widespread non-bullous
 - Oral flucloxacillin
 - Oral clarithromycin (if penicillin allergy) or erythromycin (pregnancy)
 Do not offer combination treatment with topical and oral antibiotics. See full Somerset Guidance for further info.
- **Cold sores:** [CKS](#)
 - Only if frequent, severe, predictable triggers – oral acyclovir
- **Eczema:** [CKS](#)
 - Only if visible signs of infection – as for impetigo
- **Leg ulcers:** [NICE NG152 2-page visual summary](#)
Only for active infection
 - Flucloxacillin
 - If penicillin allergy: clarithromycin or erythromycin (in pregnancy)
 - If penicillin allergy and taking statins: doxycycline
- **Cellulitis & erysipelas:** [NICE NG141 3-page visual summary](#); [CKS](#)
 - Flucloxacillin
 - If penicillin allergy: clarithromycin or erythromycin (in pregnancy)
 - If penicillin allergy and taking statins: doxycycline
 - If facial: co-amoxiclav; if penicillin allergy: clarithromycin AND metronidazole (only add in children if anaerobes suspected)
- **Diabetic foot infection:** [NICE NG19 3-page visual summary](#); [MPH & YDH guidance – PEDIS grading and treatment options](#)
PEDIS Grade 1: no antibiotics
PEDIS Grade 2 (mild infection): flucloxacillin; if allergic to penicillin: doxycycline. Review at 48-72 hours or as appropriate
PEDIS Grade 2 + evidence of ischaemia, and Grade 3 or 4: refer to secondary care

- **Bites (human and animal):** [CKS](#), [NICE](#)
Do not offer antibiotics if the skin is not broken
 - Prophylaxis or treatment: co-amoxiclav
 - If penicillin allergy - human bite: azithromycin + clarithromycin
 - If penicillin allergy – animal bite: metronidazole + doxycycline (not under 12s)
- **Scabies:** [BASHH](#), [CKS](#)
 - Permethrin cream
 - If allergic to permethrin: malathion aqueous liquid
- **Mastitis:** [CKS](#)
 - Flucloxacillin
 - If penicillin allergy: erythromycin or clarithromycin
- **Fungal skin infection:** [CKS body & groin](#), [CKS foot](#), [CKS scalp](#)
All +available OTC
 - Topical terbinafine OR topical imidazole
 - Topical undecenoates i.e. tolnaftate**If infection confirmed with skin scrapings**
 - Oral terbinafine or itraconazole
- **Fungal nail Infection:** [CKS](#)
 - Amorolfine nail lacquer (superficial only)
 - First line: oral terbinafine
 - Second line: oral Itraconazole
- **Varicella zoster(chickenpox):** [CKS](#), [PHE](#)
& **Herpes zoster (shingles):** [CKS](#), [PHE](#)
 - First line for chickenpox and shingles: aciclovir
 - Second line for shingles if poor compliance: valaciclovir
 - Third line for shingles if poor compliance: Famciclovir
- **Insect and Spider Bites and Stings** [NICE](#)
Most insect bites and stings will not need antibiotics and secondary infection is rare. Self-care: + oral antihistamines. If signs or symptoms of a systemic allergic reaction follow [NICE guidance anaphylaxis](#).

- **Lyme disease:** [NICE NG95 visual summary](#), [CKS](#), [PHE](#)
First line (suitable for Lyme with or without focal symptoms, and Lyme carditis): doxycycline
Second line:
 - First option (suitable for Lyme with or without focal symptoms): amoxicillin (especially for children, pregnancy and breastfeeding)
 - Second option (suitable for Lyme without focal symptoms): azithromycin
- **Epidermoid and pilar cysts:** [EBI Benign skin lesion](#)
Advise self-care measures.
If infected cyst:
 - Flucloxacillin
 - If penicillin allergy: clarithromycin
- **Boils and carbuncles:** [CKS PHE PVL-SA](#)
Advise self-care measures.
 - Flucloxacillin
 - If penicillin allergy: clarithromycin

Eye Infections:

- **Conjunctivitis:** [CKS](#)
 - First line: self-care (+available OTC)
 - Second line: chloramphenicol eye drops + eye ointment (+available OTC for adults and children ≥ 2yrs old)
 - Third line: Ciprofloxacin 0.3% eyedrops (preserved)
 - Fourth line: Levofloxacin 0.5% eye drops (preserved) OR Azithromycin 1.5% eye drops (preservative free)
- **Blepharitis:** [Moorfields Eye Hospital NHS Foundation Trust](#), [BNF](#), [PHE PVL-SA](#)
 - First line/dry eye: hypromellose eye drops (+available OTC)
 - Second line: chloramphenicol eye ointment
 - If resistant/recurrent: consider microbiology advice
 - Third line (oral): oxytetracycline or doxycycline

- **Chalazion (meibomian cyst):** [Moorfields Eye Hospital NHS Foundation Trust](#); [EBI Benign skin lesion](#)
Advise self-care measures.
 - Acute infection: chloramphenicol ointment
- **Stye:** [Moorfields Eye Hospital NHS Foundation Trust](#)
 - First line: self-care measures
 - Second line: chloramphenicol eye ointment (+available OTC for adults and children ≥ 2yrs old)

Dental Infections:

GPs should not routinely be involved in dental treatment

- **Mucosal ulceration and inflammation:**
 - First line: simple saline mouth wash
 - Second line: chlorhexidine gluconate mouth wash (+available OTC)
 - Third line: hydrogen peroxide mouthwash BP 6% (+available OTC)
 - **Acute necrotising ulcerative gingivitis:**
 - First line: metronidazole
 - Second line: amoxicillin; *if treatment failure with amoxicillin:* co-amoxiclav
- PLUS (if pain limits oral hygiene):
- First line: chlorhexidine gluconate mouth wash (+available OTC)
 - Second line: hydrogen peroxide mouthwash BP 6% (+available OTC)
- **Pericoronitis:**
 - amoxicillin or metronidazole
- PLUS (if pain limits oral hygiene):
- First line: chlorhexidine gluconate mouth wash (+available OTC)
 - Second line: hydrogen peroxide mouthwash BP 6% (+available OTC)
- **Dental abscess:**
 - Phenoxymethylpenicillin or amoxicillin
 - If spreading infection: add metronidazole
 - If penicillin allergy: metronidazole