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)
    - Erythromycin (preferred if pregnant & penicillin allergy)

- **Influenza**: treat ‘at risk’ patients in line with [PHE Influenza guidance](#)

- **Scarlet Fever**: [PHE, CKS](#)
  
  - First line: phenoxymethylpenicillin
  
  - Second line: (if penicillin allergy): azithromycin

- **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
  
  - 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 Otozyme® 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, Bronchitis**: [CKS, NICE CG69](#)
  
  First line: avoid antibiotics where possible; advise self-care and safety net; provide RTI leaflet
  
  Second line:
  
  - First option: doxycycline or amoxicillin
  
  - If penicillin allergy: clarithromycin
  
  - Second option/ if risk of resistance: co-trimoxazole

- **Acute Exacerbation of COPD**: [NICE CG101, Gold](#)
  
  First line: doxycycline or amoxicillin
  
  Second option: clarithromycin
  
  Second option: if risk of resistance: co-trimoxazole

- **Community Acquired Pneumonia**: [BTS 2009 Guideline, CKS, NICE CG191](#)

  - CRB65 Score 0 - First option: doxycycline; second option: amoxicillin or clarithromycin (if penicillin allergy)
  
  - CRB65 Score 1,2 & at home - First option: doxycycline alone; Second option: amoxicillin plus clarithromycin
  
  - CRB65 Score 3-4: IM benzylpenicillin

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 RTI 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 comorbidity: 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 2-page visual summary, 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 current culture sensitive:
    o Nitrofurantoin or trimethoprim
    o Methenamine hippurate

• UTI in pregnancy: NICE NG109 3-page visual summary, PHE UTI diagnosis
  o First line (if GFR>45): nitrofurantoin (avoid at term)
  o Second line: amoxicillin (if susceptible) or cefalexin

• Lower UTI in children and young people: NICE NG109 3-page visual summary, PHE UTI diagnosis
  o First line: trimethoprim (if low risk of resistance) or nitrofurantoin (if GFR>45)
  o 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.
  o First line: cefalexin or co-amoxiclav (if susceptible)
  o 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
  o Cefalexin, or co-amoxiclav (if susceptible); or trimethoprim (if susceptible); or ciprofloxacin (consider safety issues)
  o If ESBL risk: contact microbiologist

• Acute prostatitis: NICE NG110 2-page visual summary, PHE UTI diagnosis
  First line:
    o First option (if susceptible): ciprofloxacin or ofloxacin
    o Second option (if susceptible): trimethoprim
  Second line: (after discussion with specialist)
    o Levofloxacin or co-trimoxazole

• Oral candidiasis: CKS
  o Miconazole oral gel
  o Nystatin oral gel (if miconazole not tolerated)
  o Fluconazole capsules if extensive/severe

• Infectious diarrhoea:
  Avoid antibiotics unless systemically unwell or pregnant:
  o Clarithromycin if campylobacter suspected,
  o Otherwise, contact microbiologist for advice via Musgrove Park Hospital switchboard: 01823 333444

• Giardiasis: BNF, BNFc
  o First line: metronidazole
  o Second line: tinidazole

• Acute diverticulitis: NICE
  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 < 4x10³/L
  o Doxycycline plus metronidazole

• Eradication of H. pylori: NICE CG184, NICE PPI doses, PHE H.pylori, CKS

Gastro-intestinal Tract Infections:

• Clostridium difficile: DoH, PHE
  Stop unnecessary antibiotics, PPIs and antiperistaltic agents:
  o First episode & not severe CDI: metronidazole
  o Second episode/severe/type 027: vancomycin
  o Recurrent: fidaxomicin (AMBER drug)

• Travellers’ diarrhoea: CKS
  Only for patients at high risk of severe illness or visiting high risk areas:
  o Stand-by: azithromycin
  o Prophylaxis/treatment: bismuth subsalicylate (Pepto-Bismol tab®) ‘off label’ + metronidazole + tetracycline
  o Relapse & previous MZ + clari: PPI with amoxicillin + tetracycline or levofloxacin

• Threadworms: CKS
  Treat all household contacts at same time and advise hygiene measures for 2 weeks:
  o ≥6 months: mebendazole (‘off label’ under the age of 2 years)
  o <6 months: six weeks hygiene measures

Genital Tract Infections:

• STI Screening: BASHH
• Chlamydia trachomatis: BASHH, PHE
  First line:
    o First option: doxycycline (contraindicated in pregnancy)
    o 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, PHE
- Topical options: clotrimazole (available OTC)
- Oral options (not if pregnancy or breastfeeding):
  - fluconazole (available OTC)
  - Orfam 
- Recurrent: fluconazole capsule induction followed by maintenance

**Bacterial vaginosis:** BASHH, CKS, PHE
- First line: metronidazole or topical metronidazole or topical clindamycin
- Second line: lactose acid gel (Balance Activ BV	extsuperscript{®})
  - (not for prophylaxis), or dequalinium chloride (Flumazin	extsuperscript{®}) vaginal tablet

**Genital herpes:** BASHH
Advised: 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.

- Susceptibility NOT known: ceftriaxone IM stat
- Susceptibility KNOWN: ciprofloxacin po stat

**Trichomoniasis:** BASHH, PHE, 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:**
- First option: metronidazole + ofloxacin
- Second option: moxifloxacin

**Second line/high risk of gonococcal PID:** ceftriaxone IM + doxycycline + metronidazole

**Skin Infections:**

- Impetigo: CKS, PHE
  - Oral flucloxacinil
  - Oral clarithromycin (if penicillin allergy)
  - Topical (‘off-label’) options: sulfadiazine cream (Flamazine	extsuperscript{®}) (if unavailable, SurgihoneyRO	extsuperscript{®})
  - Topical mupirocin (MRSA only)

- Cold sores: CKS
  - Only if frequent, severe, predictable triggers – oral aciclovir

- Eczema: CKS
  - Only if visible signs of infection – as for impetigo

- Leg ulcers: CKS, PHE
  - Only for active infection
  - Flucloxacinil
  - If penicillin allergy: clarithromycin
  - If penicillin allergy and taking statins: doxycycline

- Diabetic foot infections: MPH guidance – PEDIS grading and treatment options

  **PEDIS Grade 1:** no antibiotics

  **PEDIS Grade 2 (mild infection):** flucloxacinil; 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

**Acne:** CKS, Somerset Prescribing Formulary – topical preparations for acne
- First line: self-care
- Second line:
  - First option (if available OTC): benzoyl peroxide 4% or 5% (Panoxyl	extsuperscript{®}, Quinoderm	extsuperscript{®}, Brevoxyl	extsuperscript{®} or Acnecide	extsuperscript{®}); Second option: adapalene (Differine	extsuperscript{®})
  - Third line: First option: Epiduo	extsuperscript{®} gel; Second option: Treclin	extsuperscript{®} gel or Ducu Once Daily	extsuperscript{®} gel
  - If treatment failure/severe:
    - oral oxytetracycline or oral doxycycline

**Cellulitis:** CKS
- Flucloxacinil
- If penicillin allergy: clarithromycin
- If penicillin allergy and taking statins: doxycycline
- If facial: co-amoxiclav

**Bites (human and animal):** CKS
- Prophylaxis or treatment: co-amoxiclav
- If penicillin allergy - human bite: metronidazole + clarithromycin
- If penicillin allergy – animal bite: metronidazole + doxycycline
- If pregnant and history of rash after penicillin: ceftriaxone IM or IV

**Scabies:** BASHH, CKS
- Permethrin cream
- If allergic to permethrin: malathion aqueous liquid

Further detail, including doses, available under separate document ‘Managing common infections - Guidance for Primary Care’

- Mastitis: CKS
  - Flucloxacillin
  - If penicillin allergy: erythromycin or clarithromycin
- Fungal skin infection: CKS body & groin, CKS foot, CKS scalp
  - Topical terbinafine OR topical imidazole
  - 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
  - First line: aciclovir
  - Second line for shingles if poor compliance: valacoclovir
  - Third line for shingles if poor compliance: Famiclovir
- Varicella zoster (chickenpox) & Herpes zoster (shingles): CKS, PHE
  - First line for chickenpox and shingles: aciclovir
  - Second line for shingles if poor compliance: valacoclovir
  - Third line for shingles if poor compliance: Famiclovir
- Lyme disease: NICE NG05 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: IFR Benign skin lesions
  - 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 or chloramphenicol eye ointment alone (available OTC for adults and children ≥ 2 yrs old)
- Blepharitis: Moorfields Eye Hospital NHS Foundation Trust BNF PHE PVL-SA
  - First line/dry eye: hypropemolose 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 IFR Benign skin lesions
  - 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 ≥ 2 yrs 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 abscesses:
  - Phenoxymethylpenicillin or amoxicillin
  - If spreading infection: add metronidazole
  - If penicillin allergy: metronidazole

Further detail, including doses, available under separate document ‘Managing common infections - Guidance for Primary Care’