# Greater Manchester Antimicrobial Guidelines

August 2026

Version 17

Planned review date: November 2026


*NICE uses 'offer' when there is more certainty of benefit and 'consider' when evidence of benefit is less clear.
Any errors or changes identified should be reported to nuth.enquiries.gmmmg@nhs.net or gmicb-old.medsman@nhs.net

# DOCUMENT CONTROL

**Document location**

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## Revision history

The latest and master version of this document is held by Greater Manchester Health and Care Commissioning Medicines Optimisation team:

| REVISION DATE | ACTIONED BY | SUMMARY OF CHANGES | VERSION |
|---|---|---|---|
| March 2024 | GM Executive | Approved v 15 | **15.0** |
| 24/6/2024 | Elaine Radcliffe | Amended wording around course length: AOM and Acute sore throat | 15.1 |
| 20/8/2024 | Elaine Radcliffe | Added all disease codes for GP systems and amended some broken links | 15.1 |
| 21/8/2024 | Elaine Radcliffe | Updated meningitis section | 15.1 |
| Oct 2024 | Gm executive | Approved v16 | 16.0 |
| 14/07/2026 | Absar Bajwa | Updated in line with NICE, BASHH and UKHSA guidance and GMMMG decisions; revised antimicrobial recommendations (including gonorrhoea, recurrent UTI, scabies, cellulitis, COPD exacerbation, prostatitis and paediatric CAP), plus updated links and references. | 16.1 |
| Oct 2024 | GM Executive | Approved v17 | 17.0 |

## Approvals

This document has been provided for information to:

| NAME | DATE OF ISSUE | VERSION |
|---|---|---|
| GMMMG Upload | January 2024 | V15 |
| AMS Guideline T&F grp | July 2024 | V15.1 |
| AMS virtual approval | Aug 2024 | V15.1 |
| GMMMG, CEG, EXEC sign off | September, October 2024 | V16 |
| GMMMG, CEG, EXEC sign off | Sept, October 2026 | V17 |

**Changes to version 17.0– see end of document.**



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# Aims

- **to provide a simple, empirical approach to the treatment of common infections**
- **to promote the safe and effective use of antibiotics**
- **to minimise the emergence of bacterial resistance in the community**

# Principles of Treatment

1. This guidance is based on the best available evidence, but use professional judgement and involve patients in decisions.
2. Please ensure you are using the most up to date version. The latest version will be held on the GMMMG website.
3. Prescribe an antibiotic only when there is likely to be a clear clinical benefit.
4. When recommending analgesia or treatment with products available from pharmacies please follow the guidance issued by NHS England (Conditions for which over the counter items should not routinely be prescribed in primary care: Guidance for CCGs [Gateway approval number: 07851]). See the guidance for exceptions to recommending self-care.
5. Community pharmacy teams are active partners in antimicrobial stewardship in Greater Manchester. A number of the infections in this guideline are also managed under the NHS Pharmacy First service, which has its own nationally specified clinical pathways and formulary. Prescribers should be aware of the Pharmacy First pathways when advising patients on self-care and referral.
6. Consider a no, or delayed, antibiotic strategy for acute self-limiting infections e.g. upper respiratory tract infections.
7. When prescribing an antibiotic it should be based on the severity of symptoms, risk of developing complications, previous laboratory tests and any previous antibiotic use.
8. Limit prescribing over the telephone to exceptional cases. Except during a pandemic where face-to-face contact should be minimised by using telephone or video consultations
9. A dose and duration of treatment for adults is usually suggested, but may need modification for age, weight and renal function. In severe or recurrent cases consider a larger dose or longer course.
10. Unless treatment choice is listed separately for children, then choices given are considered appropriate for adults and children; bearing in mind any specific age limitations for use listed in the BNF for Children. A link to the UK Paediatric Antimicrobial Guidelines can be found here
11. Lower threshold for antibiotics in immunocompromised or those with multiple morbidities; consider culture and seek advice.
12. Use simple generic antibiotics if possible. Avoid broad spectrum antibiotics (eg co-amoxiclav, quinolones and cephalosporins) when narrow spectrum antibiotics remain effective, as they increase risk of Clostridiodes difficile, MRSA and resistant UTIs.
13. Where Off-label use is recommended: Prescribers should follow relevant professional guidance, taking full responsibility for the decision, and obtaining and documenting informed consent. See the GMC's Good practice in prescribing and managing medicines for more information.
14. Avoid widespread use of topical antibiotics (especially those agents also available as systemic preparations, e.g. fusidic acid).
15. In pregnancy AVOID tetracyclines, aminoglycosides, quinolones and high dose metronidazole.
16. We recommend clarithromycin as the preferred macrolide as it has less side-effects than erythromycin, greater compliance as twice rather than four times daily & generic tablets are similar cost. The syrup formulation of clarithromycin is only slightly more expensive than erythromycin and could also be considered for children. Erythromycin remains the drug of choice in pregnancy and should be used where clarithromycin is indicated.
17. Always advise to seek medical help if symptoms worsen at any time or do not improve within 48 hours of starting an antibiotic or the person becomes systemically unwell.
18. Review antibiotic choice once culture and susceptibility results are available.
19. **Where an empirical therapy has failed or special circumstances exist, microbiological advice can be obtained from your local hospital microbiology department.**
20. **Follow local microbiology guidance if local resistance is identified.**
21. This guidance should not be used in isolation; it should be supported with patient information about back-up/delayed antibiotics, infection severity and usual duration, clinical staff education, and audits. Materials are available on the RCGP TARGET website.
22. This guidance is developed alongside the NHS England Antibiotic Quality Premium (QP). In 2017/19 QP expects: at least a 10% reduction in the number of E. coli blood stream infections across the whole health



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economy; at least a 10% reduction in trimethoprim:nitrofurantoin prescribing ratio for UTI in primary care, and at least a 10% reduction in trimethoprim items in patients > 70 years, based on CCG baseline data from 2015/16; and sustained reduction in antimicrobial items per STAR-PU.



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23. This guidance should be facilitated by the adoption of Antibiotic Stewards from front line to board level within organisations, in line with NICE NG15: Antimicrobial stewardship, August 2015 . This sets out key activities and responsibilities for individuals and organisations in responding to the concern of antimicrobial resistance.
24. Please note MHRA Drug Safety Update (issued 22 January 2024): Fluoroquinolone antibiotics: ciprofloxacin, levofloxacin, moxifloxacin, ofloxacin. Systemic (by mouth, injection, or inhalation) fluoroquinolones can cause long-lasting (up to months or years), disabling and potentially irreversible side effects, sometimes affecting multiple body systems and senses. Systemic fluoroquinolones must now only be prescribed when other commonly recommended antibiotics are inappropriate.
    Situations in which other antibiotics are considered to be inappropriate and where a fluoroquinolone may be indicated are where:
    >there is resistance to other first-line antibiotics recommended for the infection
    >other first-line antibiotics are contraindicated in an individual patient
    >other first-line antibiotics have caused side effects in the patient requiring treatment to be stopped
    >treatment with other first-line antibiotics has failed

    This goes further than previous measures which set out that fluoroquinolones should not be prescribed for non-severe or self-limiting infections, or non-bacterial conditions, for example non-bacterial (chronic) prostatitis. These measures are still in place Key details are below and referenced where the relevant antimicrobials are advised in the guideline.

    Advise patient to stop taking fluoroquinolone antibiotic and contact their doctor immediately if they have any of the following signs of a side effect:
    >tendon pain or swelling – if this happens, rest the painful area until you can see your doctor
    >pain in your joints or swelling in joints such as in the shoulders, arms, or legs
    >abnormal pain or sensations (such as persistent pins and needles, tingling, tickling, numbness, or burning), weakness in the legs or arms, or difficulty walking
    >severe tiredness, depressed mood, anxiety, problems with your memory or severe problems sleeping
    >changes in your vision, taste, smell or hearing

    Full Information for 2024 Drug Safety Update can be viewed at https://www.gov.uk/drug-safety-update/fluoroquinolone-antibiotics-must-now-only-be-prescribed-when-other-commonly-recommended-antibiotics-are-inappropriate
    https://www.gov.uk/drug-safety-update/fluoroquinolone-antibiotics-suicidal-thoughts-and-behaviour 26 Sept 2023
    https://www.gov.uk/drug-safety-update/fluoroquinolone-antibiotics-reminder-of-the-risk-of-disabling-and-potentially-long-lasting-or-irreversible-side-effects 30 August 2023
25. https://www.gov.uk/drug-safety-update/fluoroquinolone-antibiotics-new-restrictions-and-precautions-for-use-due-to-very-rare-reports-of-disabling-and-potentially-long-lasting-or-irreversible-side-effects 21 March 2019"Where a patient is antibody/immune deficient, and are therefore prone to bacterial infections, please refer to “action to GP” section from immunology clinic letters. If the clinical presentation is not covered in clinic letters, contact the local Clinical Immunology and/ or Microbiology department for further advice.
26. Please note MHRA safety alert (issued 26 April 2023): Nitrofurantoin: reminder of the risks of pulmonary and hepatic adverse drug reactions. Healthcare professionals prescribing nitrofurantoin should be alert to the risks of pulmonary and hepatic adverse drug reactions and advise patients to be vigilant for the signs and symptoms in need of further investigation. Full advice can be viewed at Nitrofurantoin: reminder of the risks of pulmonary and hepatic adverse drug reactions - GOV.UK (www.gov.uk)
27. Ensure diseases are coded correctly in patient notes so antibiotic prescribing can be attributed to specific disease areas. If all prescribers use the same codes then more efficient GM auditing, including links to antibiotic resistance, can be identified. Codes are listed inder each indication and in a separate document in Appendix 2.


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# Microbiology Susceptability Tests

In performing antimicrobial susceptibility tests we follow European (EUCAST) guidelines. Definitions of susceptibility testing categories S, I and R have recently been changed as follows and we are adopting these moving forward:

- S – Susceptible. Standard dosing regimen: a microorganism is categorised as "susceptible, standard dosing regimen", when there is a high likelihood of therapeutic success using a standard dosing regimen of the agent.
- I – Susceptible. Increased exposure: a microorganism is categorised as "susceptible, increased exposure" when there is a high likelihood of therapeutic success because exposure to the agent is increased by adjusting the dosing regimen or by its concentration at the site of infection. (Exposure is a function of how the mode of administration, dose, dosing interval, infusion time, as well as distribution and excretion of the antimicrobial agent will influence the infecting organism at the site of infection). **Note that high doses of antimicrobial agents will be required in these cases.**
- R - Resistant: A microorganism is categorised as "Resistant" when there is a high likelihood of therapeutic failure even when there is increased exposure (high dose).

The categories above have been in use locally but in practice the 'I' results have generally been suppressed on our reports. However, following the latest updates to testing criteria, users may see more bug-drug combination results that fall into the 'I' category. The following tables may help in demonstrating the difference between standard and high dose antimicrobial agents.

**It is important to note that standard doses continue to be used for empirical antimicrobial treatments and these are set out in our Antimicrobial Guidelines. High dose regimens will only apply to certain bug-drug combinations where we isolate specific organisms that test as 'I' for specific antibiotics, which we will make clear on our reports, and where you consider that these isolates are clinically significant.**

Examples of standard and high **oral** dosages are shown in the following table (adapted from EUCAST Clinical Breakpoint Tables v. 11.0, 2021).

| Agent | Oral Standard dose | Oral High dose |
|---|---|---|
| Amoxicillin | 500 mg TDS | 750 mg-1g TDS |
| Amoxicillin-clavulanic acid | (500 mg amoxicillin,125 mg clavulanic acid) TDS | (875 mg amoxicillin, 125 mg clavulanic acid) TDS |
| Clarithromycin | 250 mg BD | 500 mg BD |
| Clindamycin | 300 mg BD | 300 mg QDS |
| Doxycycline | 100 mg OD | 200 mg OD |
| Ciprofloxacin | 500 mg BD | 750 mg BD |
| Levofloxacin | 500 mg OD | 500 mg BD |

Note that actual standard/high doses may vary due to age/weight/renal/hepatic function


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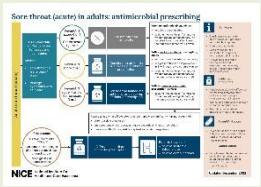
# Greater Manchester Antimicrobial Guidelines

## UPPER RESPIRATORY TRACT INFECTIONS

| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Acute sore throat**<br>  <br>NICE NG 84<br>*Back to Contents*<br>***SNOMED (EMIS, System1)***<br>Pain in throat (finding) 162397003<br>Tonsillitis (disorder) 90176007<br>READ CODES (Vision)<br>Throat pain 1CB3.<br>Acute Tonsillitis H03.. | **Avoid antibiotics as 90% resolve in 7 days without, and pain only reduced by 16 hours.**<br>**Advise self-care in line with NHS England guidance.** | | |
| | Use **FeverPAIN** Score:<br>▪ ***F***ever in last 24 hours<br>▪ ***P***urulence<br>▪ ***A***ttend rapidly under 3days<br>▪ severely ***I***nflamed tonsils<br>▪ ***N***o cough or coryza<br>Score:<br>**0 to 1: Do not offer an antibiotic.** Likelihood 13 to 18% streptococci. **2 to 3: Consider* no antibiotic or a back-up antibiotic prescription.** 34 to 40% streptococci<br>**Greater than 4: Consider* an immediate antibiotic or a back-up antibiotic prescription**. 62 to 65% streptococci.<br><br>Or CENTOR<br>Centor criteria: score 1 point for each (maximum score of 4).<br>▪ ***Tonsillar exudate.***<br>▪ ***Tender anterior cervical lymphadenopathy or lymphadenitis.***<br>▪ ***History of fever (over 38°C).***<br>▪ ***Absence of cough.***<br>**Score:**<br>**0, 1 or 2 Do not offer an antibiotic.** 3-17% likelihood of isolating streptococcus.<br>**3 or 4: Consider* an immediate antibiotic or a back-up antibiotic prescription**. 32-56% likelihood of isolating streptococcus.<br><br>See **NICE NG84** (Sore throat (acute): antimicrobial prescribing). | Phenoxymethylpenicillin 500mg four times a day or<br>1g twice a day<br><br>Duration: **5** to 10 days<br><br>Five days of phenoxymethylpenicillin may be enough for symptomatic cure, but a 10-day course may increase the chance of microbiological cure<br><br>Follow FeverPAIN or CENTOR criteria, if antibiotics advised then give 5 days only, unless severe or recurrent illness or microbiological lab results show an infection then give 10 days.<br><br>Phenoxymethylpenicillin is first choice due to a significantly lower rate of resistance in Group A streptococcus compared with clarithromycin. | ***Penicillin Allergy***:<br>Clarithromycin 500mg twice a day<br><br>Duration: 5 days<br><br>**Alternative first choice for penicillin allergy in pregnancy**<br><br>Erythromycin 500mg Four times a day or<br>1g twice a day<br><br>Duration: 5 days |

| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Scarlet Fever (GAS: Group A Streptococcus)**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>30242009<br>READ CODES (Vision)<br>A341 | **Optimise analgesia and give safety netting advice** | | |
| | **Prompt treatment** with appropriate antibiotics significantly reduces the risk of complications. Vulnerable individuals (immunocompromised, the comorbid, or those with skin disease) are at increased risk of developing complications. | Phenoxymethylpenicillin 500mg four times a day<br><br>Duration: 10 days | ***Penicillin Allergy***:<br>Clarithromycin 250mg to 500mg twice a day<br><br>Duration: 5 days |
| **Influenza treatment**<br>*Back to Contents*<br>SNOMED (disorder) 6142004<br>READ Codes H27.. | Annual vaccination is essential for all those at risk of influenza. For otherwise healthy adults antivirals not recommended.<br>Treat 'at risk' patients, when influenza is circulating in the community and ideally within 48 hours of onset (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), 65 years or over, chronic respiratory disease (including COPD and asthma) significant cardiovascular disease (not hypertension), immunocompromised, diabetes mellitus, chronic neurological, renal or liver disease, morbid obesity (BMI 40 or greater). See UKHSA seasonal influenza guidance for current treatment | | |



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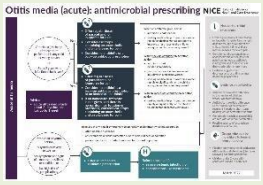
<table>
<tr><th>ILLNESS</th><th>GOOD PRACTICE POINTS</th><th>PREFERRED CHOICE</th><th>ALTERNATIVE</th></tr>
<tr><td rowspan="2">Acute otitis media<br>  <br>NICE Visual Summary NG 91<br>Back to Contents<br><br>SNOMED<br>AOM (disorder)<br>3110003<br><br>READ code<br>AOM with effusion<br>F5100</td><td colspan="3">No antibiotics – 80% resolve without antibiotics. Advise self-care in line with NHS England guidance.</td></tr>
<tr><td>Recommend appropriate analgesia.<br><br>Acute otitis media lasts about 3 days but can last up to 1 week.<br>60% are better in 24hrs without antibiotics, which only reduce pain at 2 days and do not prevent deafness.<br><br>Consider eardrops containing an anaesthetic and an analgesic for pain. Use only if an immediate oral antibiotic prescription is not given, and there is no eardrum perforation or otorrhoea<br>Phenazone 40 mg/g with lidocaine 10 mg/g<br>Apply 4 drops two or three times a day for up to 7 days<br><br>Consider 3-day delayed or immediate antibiotics for pain relief if:<br>➢ Less than 2 years AND bilateral acute otitis media or<br>➢ any age with otorrhoea<br>See NICE NG91 (Otitis media (acute): antimicrobial prescribing).</td><td>If Antibiotic required:<br>Amoxicillin<br><br>18 years+:<br>500mg to 1000mg three time a day<br><br>1 to 11 months:<br>125 mg three times a day<br><br>1 to 4 years: 250 mg three times a day<br><br>5 to 17 years: 500 mg three times a day<br><br>Duration: 5 days<br><br>5-day course may be sufficient for many children, reserving 7-day courses for those with a clinical assessment of more severe or recurrent infection. [NICE NG91 2018]</td><td>Penicillin Allergy:<br>18 years+:<br>Clarithromycin 500mg twice a day<br><br>1 month to 11 years:<br>Under 8 kg: 7.5 mg/kg twice a day<br>8 to 11 kg: 62.5 mg twice a day<br>12 to 19 kg: 125 mg twice a day<br>20 to 29 kg: 187.5 mg twice a day<br>30 to 40 kg: 250 mg twice a day<br>12 to 17 years:<br>250 mg to 500 mg twice a day<br><br>Duration: 5 days</td></tr>
<tr><td rowspan="4">Acute otitis externa<br>Back to Contents<br><br>SNOMED<br>AOE (disorder)<br>30250000<br><br>READ code<br>Acute swimmers’ ear<br>F5013</td><td colspan="3">Mild infection: No antibiotics. Advise self-care in line with NHS England guidance.</td></tr>
<tr><td>First recommend analgesia.<br><br>Cure rates similar at 7 days for topical acetic acid (available to purchase over the counter) or antibiotic plus or minus a steroid.</td><td>Moderate infection:<br><br>Acetic acid 2% (EarCalm®)<br>1 spray three times a day<br><br>Duration: 7 days</td><td>Moderate infection:<br>Neomycin sulphate with corticosteroid<br>3 drops three times a day<br>Duration: 7 to 14 days</td></tr>
<tr><td>If cellulitis or disease extends outside ear canal, or systemic signs of infection.<br>If the inner ear is exposed, treat as per Acute Otitis Media</td><td colspan="2">Severe infection:<br>Flucloxacillin 500mg four times a day Duration: 7 days</td></tr>
<tr><td>If microbiology is consistent with pseudomonas infection</td><td colspan="2">Pseudomonas infection for age >1year:<br>Ciprofloxacin (as hydrochloride) 2 mg/ ml Ear drops<br>Instil contents of one ampoule into affected ear twice daily<br>Duration: 7 days</td></tr>
</table>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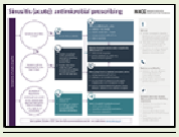
## Acute Sinusitis



NICE Visual summary NG 79

*Back to Contents*

SNOMED
(disorder) 15805002

READ code
H01..

**No antibiotics – 80% resolve in 14 days and only 2% are complicated by bacterial infection. Advise self-care in line with NHS England guidance.**

**Symptoms less than 10 days**: No antibiotics. **Recommend self-care.** Paracetamol / ibuprofen for pain / fever. Nasal decongestant may help.

**Symptoms greater than 10days**: Only consider back-up antibiotics if no improvement in symptoms.

Consider* high dose nasal steroid if older than 12 years.

**At any time if the person is:**

- systemically very unwell,
- or has symptoms and signs of a more serious illness or condition,
- or has high risk of complications

Offer* immediate antibiotic or investigate and manage in line with NICE guidance on respiratory tract infections (self-limiting)

See **NICE NG79** (Sinusitis (acute): antimicrobial prescribing)

Amoxicillin
500mg to 1g three times a day

Duration: 5 days

NICE recommends phenoxymethylpenicillin as 1st choice due to a narrower spectrum of activity than amoxicillin and its use therefore having a lower risk of resistance. Due to only small numbers of patients needing antibiotics, Greater Manchester believes amoxicillin has better therapeutic levels and therefore remains 1st line option.

*Mometasone 50microgram nasal spray*.
Two actuations (100mcg) in each nostril twice a day for 14 days (off-label use)

***Preferred choice if systemically very unwell, symptoms and signs of a more serious illness or condition, or at high risk of complications:***

Co-amoxiclav 625mg three times a day

Duration: 5 days

***Penicillin allergy:***

Doxycycline (not for under 12 years) 200mg stat then 100mg daily

Duration: 5 days

**For children under 12 years:**

Clarithromycin

Duration 5 days



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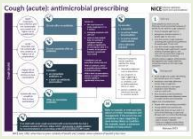
# LOWER RESPIRATORY TRACT INFECTIONS

*Low doses of penicillins are more likely to select out resistance, we recommend at least 500mg of amoxicillin. Do not use quinolone (ciprofloxacin, ofloxacin) first line due to poor pneumococcal activity. Reserve all quinolones for proven resistant organisms.*

## Acute cough bronchitis



NICE Visual summary NG 120

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SNOMED (EMIS, System1)

Acute bronchitis (disorder) 10509002

*READ code (Vision)*

Acute bronchitis H060.

**Only offer* / consider* treatment if:**
**Acute cough and higher risk of complications[$] (at face-to-face examination):** consider* immediate or back-up antibiotic.

**Acute cough and systemically very unwell (at face to face examination):** offer* immediate antibiotic.

| | | |
|---|---|---|
| **Acute cough with upper respiratory tract infection:** no antibiotic.<br>**Acute bronchitis:** no routine antibiotic. Advise self-care in line with NHS England guidance.<br>Do not offer a mucolytic, an oral or inhaled bronchodilator, or an oral or inhaled corticosteroid unless otherwise indicated. | Doxycycline 200mg stat then 100mg daily<br>Duration: 5 days<br>***Preferred choice for children less than 12 years:***<br>Amoxicillin<br>Duration 5 days | Amoxicillin 500mg three times a day.<br>Duration: 5 days<br>**For children less than 12 years with Penicillin allergy:**<br>Clarithromycin<br>Duration 5 days |

[$]Higher risk of complications includes people with pre-existing comorbidity; 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.

## Acute exacerbation of Bronchiectasis (non-cystic fibrosis)

NICE Visual summary NG 117

*Back to Contents*

SNOMED (EMIS, System1)

Bronchiectasis 12295008

READ code (Vision)

An acute exacerbation of bronchiectasis is sustained worsening of symptoms from a person's stable state.

Send a sputum sample for culture and susceptibility testing. When results available, review choice of antibiotic.

Offer* an antibiotic

When choosing antibiotics, take account of:

- the severity of symptoms
- previous exacerbations,hospitalisations and risk of complications
- **previous sputum culture and susceptibility results**

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| Amoxicillin 500mg three times a day<br>Duration[#]: 7 to 14 days[#] | Doxycycline 200mg stat, then 100mg daily<br>OR<br>Clarithromycin 500mg twice a day<br>Duration[#]: 7 to 14 days[#] |

[#]Course length based on an assessment of the person's severity of bronchiectasis, exacerbation history, severity of exacerbation symptoms, previous culture and susceptibility results, and response to treatment.

Where a person is receiving antibiotic prophylaxis, treatment should be with an antibiotic from a different class.

**Prophylaxis should only be offered on specialist advice.**



*NICE uses 'offer' when there is more certainty of benefit and 'consider' when evidence of benefit is less clear.

Any errors or changes identified should be reported to nuth.enquiries.gmmmg@nhs.net or gmicb-old.medsman@nhs.net

<table>
<tr><th>ILLNESS</th><th>GOOD PRACTICE POINTS</th><th>PREFERRED CHOICE</th><th>ALTERNATIVE</th></tr>
<tr><td rowspan="3">Acute exacerbation of COPD<br> <br>NICE Visual summary NG 114<br>Back to Contents<br><br>SNOMED (EMIS, System1)<br>Acute exacerbation of chronic obstructive airways disease (disorder) 195951007<br>READ code (Vision)<br>Acute exacerbation of COAD H3122</td><td colspan="3">Many exacerbations (including some severe exacerbations) are not caused by bacterial infections so will not respond to antibiotics.</td></tr>
<tr><td>Sending sputum samples for culture is not recommended in routine practice.<br>Consider* an antibiotic:<br>▪ Based on the severity of symptoms, particularly sputum colour changes and increases in volume or thickness from the patient's normal.<br>▪ Previous exacerbations and hospital admission history, and the risk of developing complications<br>▪ Previous sputum culture and susceptibility results where available.<br>▪ The risk of AMR with repeated courses of antibiotics.</td><td>Doxycycline 200mg stat, then 100mg daily<br>or<br>Amoxicillin 500mg three times a day<br>Duration: 5 days.</td><td>In severe infection:<br>Doxycycline 200mg stat, then 100mg twice a day<br>or<br>Amoxicillin 1g three times a day<br>Duration 5 days</td></tr>
<tr><td colspan="3">A COPD exacerbation is a sustained worsening of respiratory symptoms beyond normal day-to-day variation. Antibiotics are not indicated for all exacerbations, as many are non-bacterial; sputum colour, volume and thickness should inform antibiotic use.<br>Initial management: Continue regular maintenance inhaled therapy. If symptoms are predominantly wheeze and/or breathlessness, increase short-acting bronchodilator therapy as per the personalised action plan, ensuring correct inhaler technique and spacer use where appropriate.<br>Oral corticosteroid, Start prednisolone 30 mg once daily for 5 days if:<br>• breathlessness is clearly worse than baseline; and<br>• symptoms are affecting usual daily activities, e.g. washing, dressing, walking indoors or sleep.<br>Antibiotics: Start antibiotic therapy only if there is evidence suggestive of bacterial exacerbation:<br>• sputum is clearly more purulent/discoloured than usual; and<br>• sputum volume has increased or consistency has become noticeably thicker.<br>Consider a rescue pack only for a person who has had an exacerbation within the previous year and remains at risk, after maintenance treatment, inhaler technique and relevant non-pharmacological measures have been optimised. The person must have an individualised action plan, be able to recognise an exacerbation, understand the separate indications and risks of prednisolone and antibiotics, and know when to seek clinical advice. The person should notify the practice whenever treatment is started. Before replacement, review whether the medicines were used appropriately and whether further clinical assessment is required.</td></tr>
<tr><td rowspan="3">Acute exacerbation of COPD – PROPHYLAXIS<br>Back to Contents<br>SNOMED (EMIS, System1)<br>Antibiotic prophylaxis indicated (situation) 413555000<br>READ code (Vision)<br>Antibiotic prophylaxis indicated 8BG8.</td><td rowspan="3">Refer to a respiratory specialist for a decision to prescribe oral prophylactic antibiotic therapy in patients with COPD.<br>Consider* treatment only for people if they:<br>▪ do not smoke and<br>▪ have optimised non-pharmacological management and inhaled therapies, relevant vaccinations and (if appropriate) have been referred for pulmonary rehabilitation and<br>▪ continue to have 1 or more of the following, particularly if they have significant daily sputum production:<br>• frequent (typically 4 or more per year) exacerbations with sputum production<br>• prolonged exacerbations with sputum production<br>• exacerbations resulting in hospitalisation.<br><br>NICE guidance - Chronic obstructive pulmonary disease in over 16s: diagnosis and management (NG115)</td><td colspan="2">Duration: Review treatment after the first 3 months and then at least every 6 months. Only continue treatment if continued benefits outweigh the risks.</td></tr>
<tr><td colspan="2">Before starting prophylactic antibiotics, ensure that the person has had:sputum culture and sensitivity (including tuberculosis culture), to identify other possible causes of persistent or recurrent infection that may need specific treatment<br>▪ training in airway clearance techniques to optimise sputum clearance<br>▪ a CT scan of the thorax to rule out bronchiectasis and other lung pathologies.<br>Also carry out the following:<br>▪ an electrocardiogram (ECG) to rule out prolonged QT interval and<br>▪ baseline liver function tests.<br>For people who are still at risk of exacerbations, provide an antibiotic from a different class. to keep at home as part of their 'rescue pack'<br>Be aware that it is not necessary to stop prophylactic treatment during an acute exacerbation of COPD.</td></tr>
<tr><td colspan="2">Monitoring for long-term therapy: See BNF</td></tr>
</table>


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| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Community acquired pneumonia treatment in the community (Adults)**<br> <br>NICE Visual summary<br>*Back to Contents*<br><br>SNOMED (EMIS, System1)<br>CAP (disorder) 385093006<br>READ code (Vision)<br>H2B.. | Use clinical judgement and CRB65 score to guide mortality risk, place of care & antibiotics.<br>Each CRB65 parameter scores 1:<br>**Confusion** – abbreviated Mental Test score less than 8;<br>**Respiratory rate** – 30 breaths per minute or more;<br>**Blood pressure** – diastolic 60 mmHg or less, or systolic less tha 90 mmHg;<br>**Age** – 65 years or greater.<br>Score 0 low risk: consider home based care;<br>Score 1 to 2 intermediate risk: consider hospital assessment;<br>Score 3 to 4: consider* urgent hospital admission.<br><br>⍝Stop antibiotic treatment after 5 days unless microbiological results suggest a longer course is needed or the person is not clinically stable (fever in the past 48 hours, or more than 1 sign of clinical instability [systolic BP <90 mm Hg, heart rate >100/min, respiratory rate >24/min, arterial oxygen saturation <90% or PaO2 <60 mmHg in room air]). | IF CRB65 = 0<br>Amoxicillin 500mg three times a day<br>Duration: 5 days⍝<br><br>If CRB65 = 1 or 2 & at home:<br>Amoxicillin 500mg three times a day<br>***PLUS (if atypical pathogens suspected)*** Clarithromycin 500mg twice a day<br>Duration: 5 days⍝<br><br>If CRB65 = 3 or 4 & patient able to take oral medicines and safe to remain at home<br>Co-amoxiclav 625mg three times a day<br>AND<br>Clarithromycin 500mg twice a day<br>Duration 5 days⍝ | IF CRB65 = 0<br>Clarithromycin 500mg twice a day<br>Duration: 5 days⍝<br>OR<br>Doxycycline 200mg stat then 100mg daily<br>Duration: 5 days⍝<br>If CRB65 = 1 or 2 & at home:<br>Clarithromycin 500mg twice a day<br>Duration: 5 days⍝<br>OR<br>Doxycycline 200mg on first day, then 100mg once a day<br>Duration: 5 days⍝<br><br>If CRB65 = 3 or 4 & patient able to take oral medicines and safe to remain at home<br>If preferred choice not suitable consult microbiology or consider* urgent referral to hospital.<br>If unable to take oral medication refer urgently to hospital. |
| **Community acquired pneumonia treatment in the community (Children and young people under 18 years)**<br><br>SNOMED (EMIS, System1)<br>CAP (disorder) 385093006<br>READ code (Vision)<br>H2B.. | Offer an antibiotic as soon as possible and within **4 hours** of establishing the diagnosis.<br><br>Assess severity using **clinical judgement**.<br><br>Give advice about:<br>• possible adverse effects of antibiotics;<br>• seeking medical help if symptoms worsen rapidly or significantly, do not improve within **3 days**, or the person becomes systemically very unwell.<br><br>Review antibiotic treatment at the end of the recommended course. Do not continue antibiotics routinely beyond the recommended duration. Consider extending treatment only if the person is not clinically stable (for example, respiratory distress or oxygen saturation has not improved as expected) or microbiological results indicate that a longer course is required. | **Children aged 1 month and over – non-severe symptoms or signs (based on clinical judgement) (NICE NG250)**<br><br>**Amoxicillin**<br>**Duration:**<br>• 1–2 months**: 5 days**<br>• 3 months (corrected gestational age) to 11 years without complications or underlying disease**: 3 days**<br>• 12–17 years**: 5 days**<br><br>**Severe symptoms or signs (based on clinical judgement)**<br><br>**Co-amoxiclav**<br>**PLUS (if atypical pathogen suspected)**<br>**Clarithromycin**<br>**Duration: 5 days** | **Children aged 1 month and over – non-severe symptoms or signs**<br><br>**Clarithromycin**<br>Duration:<br>• 1–2 months**: 5 days**<br>• 3 months to 11 years**: 3 days**<br>• 12–17 years**: 5 days**<br><br>**Alternative choice for children aged 12 years to 17 years.**<br>Doxycycline 200mg on first day, then 100mg once a day.<br>Duration: **5 days** |


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| **MENINGITIS** | | | |
| **Suspected meningococcal disease**<br>NICE NG240<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Bacterial meningitis (disorder) 95883001<br>READ code (Vision)<br>Bacterial meningitis F00 | **Transfer all patients to hospital immediately.**<br>If time before hospital admission and if suspected meningococcal septicaemia or non-blanching rash, give intravenous or intramuscular benzylpenicillin as soon as possible.<br>Rash or cyanotic skin symptoms may be difficult to see on brown, black or tanned skin.<br>Do not give antibiotics if there is a definite history of anaphylaxis; rash is not a contraindication. | Benzylpenicillin by intravenous or intramuscular injection<br>Age — SINGLE IV or IM DOSE STAT<br>Adult and 10 plus years: 1200mg<br>Children 1 to 9 years: 600mg<br>Children less than1 years: 300mg<br>Give by intramuscular injection if vein cannot be found. | |
| **Prevention of secondary case of meningitis.**<br>Only prescribe following advice from UKHSA Health Protection Team: ☎ 0344 225 0562 option 3 (GM Team) | | | |
| **URINARY TRACT INFECTIONS** | | | |
| *As antimicrobial resistance and E. coli bacteraemia is increasing use nitrofurantoin first line. Always give safety net and self-care advice and consider risks for resistance.* **Nitrofurantoin: reminder of the risks of pulmonary and hepatic adverse drug reactions.**<br>*Give the appropriate* **TARGET Treat Your Infection UTI** *leaflet.*<br>***Do not perform urine dipsticks – For men and women over 65 years***<br>*Dipsticks become more unreliable with increasing age over 65 years. Up to half of older adults, and most with a urinary catheter, will have bacteria present in the bladder/urine without an infection. This "asymptomatic bacteriuria" is not harmful, and although it causes a positive urine dipstick, antibiotics are not beneficial and may cause harm.*<br>*For guidance on diagnosing UTIs and the need for dipsticks, in all ages, see UKHSA's quick reference tool for primary care.* | | | |
| **Lower UTI in Non-pregnant Women**<br> <br>NICE Visual summary NG 109<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Lower urinary tract infectious disease (disorder) 4009004<br>READ code (Vision)<br>Urinary tract infect.unsp.site K190. | **Treat women with severe/or 3 or more symptoms.**<br>**Women mild/or 2 or less symptoms advise self-care in line with NHS England guidance and consider* back up / delayed prescription.**<br>**People over 65 years: do not treat asymptomatic bacteriuria;** it is common but is not associated with increased morbidity. Treat if fever AND dysuria OR 2 or more other symptoms.<br>***In treatment failure: always perform culture.*** | Nitrofurantoin MR (if eGFR 45 ml/minute or greater) 100mg twice a day<br>Duration: 3 days<br>(See MHRA Safety Alert – principle 25 page 4)<br>***If low risk⁺ of resistance and preferably if susceptibility demonstrated & no risk factors£ (below):***<br>Trimethoprim 200mg twice a day<br>Duration: 3 days | ***If preferred choice unsuitable use the option which is sensitivity tested in the microbiology lab you use:***<br>***Microbiology labs differ in their sensitivity testing for second line choices. Oldham lab (NCA) test for pivmecillinam. Tameside FT and Bolton FT test for fosfomycin. MFT, Stockport FT, Salford lab (NCA), and WWL FT test for both pivmecillinam and fosfomycin as a second line choice.***<br>***Fosfomycin***<br>***3 g single dose sachet***<br>***Pivmecillinam***<br>***Initially 400 mg for 1 dose, then 200 mg every 8 hours to a total of 10 tablets***<br>***Duration: 3 days*** |
| | **Symptoms:**<br>Increased need to urinate.<br>Pain or discomfort when urinating.<br>Sudden urges to urinate.<br>Feeling unable to empty bladder fully.<br>Pain low down in your tummy.<br>Urine is cloudy, foul-smelling or contains blood.<br>Feeling unwell, achy and tired. | ⁺**A lower risk** of resistance may be more likely if not used in the past 3 months, previous urine culture suggests susceptibility (but this was not used) or it is the first presentation of a UTI, and in younger women.<br>£**Risk factors for increased resistance include:** care home resident, recurrent UTI, hospitalisation for greater than 7 days in the last 6 months, unresolving urinary symptoms, recent travel to a country with increased resistance, previous known UTI resistant to trimethoprim, cephalosporins or quinolones.<br>**If risk of resistance** send urine for culture for susceptibility testing & give safety net advice. | |


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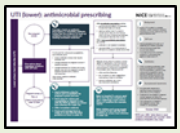
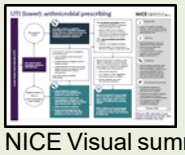
<tr><td rowspan="6">Catheter associated UTI<br> <br>NICE Visual summary NG 113<br>Back to Contents<br>SNOMED (EMIS, System1)<br>700372006<br>READ code (Vision)<br>SP07Q</td><td rowspan="6">DO NOT DIPSTICK<br>Do not treat asymptomatic bacteriuria in people with a catheter.<br>Advise paracetamol for pain.<br>Advise drinking enough fluids to avoid dehydration.<br>Advise seeking medical help if symptoms worsen at any time or do not start to improve within 48 hours, or the person becomes systemically very unwell<br>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 considered appropriate.<br>Send a urine sample for culture and susceptibility testing.<br>When results of urine culture are available:<br>▪ review choice of antibiotic<br>▪ change antibiotic according to susceptibility results if bacteria are resistant, using narrow spectrum antibiotics when possible</td><td colspan="2">Lower UTI symptoms</td></tr>
<tr><td>Nitrofurantoin MR (if eGFR 45 ml/minute or greater) 100mg twice a day<br>Duration: 7 days<br>(See MHRA Safety Alert – principle 25 page 4)<br>OR<br>Trimethoprim (if low risk▼ of resistance) 200mg twice a day<br>Duration: 7 days</td><td>Pivmecillinam<br>400mg initial dose, then 200mg three times a day<br>Duration: 7 days</td></tr>
<tr><td colspan="2">Upper UTI symptoms</td></tr>
<tr><td>Cefalexin 500mg twice or three times a day (up to 1g to 1.5g three times a day or four times a day for severe infections)<br>Duration: 7 to 10 days</td><td>Ciprofloxacin 500mg twice a day<br>Duration: 7 days<br>(See MHRA Safety Alert – note 23 page 4)</td></tr>
<tr><td colspan="2">Pregnant women aged 12 years and over</td></tr>
<tr><td>Cefalexin 500mg twice or three times a day (up to 1g to 1.5g three times a day or four times a day for severe infections)<br>Duration: 7 to 10 days</td><td>If vomiting, unable to take oral antibiotics or severely unwell refer to hospital.</td></tr>
<tr><td colspan="3">▼Low risk of resistance is likely if not used in the past 3 months and previous urine culture suggests susceptibility (but this was not used) or it is the first presentation of a UTI . Higher risk of resistance is likely with recent use.</td></tr>
<tr><td>Lower UTI in pregnancy<br>  <br>NICE Visual summary NG 109<br>Back to Contents<br>SNOMED (EMIS, System1)<br>307534009<br>READ code (Vision)<br>L166z</td><td>Send MSU for culture and start antibiotics.<br>Short-term use of nitrofurantoin in pregnancy is unlikely to cause problems to the foetus but avoid at term (from 34 weeks onwards).<br>Treatment of asymptomatic bacteriuria in pregnant women: choose from nitrofurantoin (avoid at term), amoxicillin or cefalexin based on recent culture and susceptibility results.</td><td>Up to 34 weeks<br>Nitrofurantoin MR (if eGFR 45 ml/minute or greater) 100mg twice a day<br>Duration: 7 days<br>After 34 weeks use alternative<br>(See MHRA Safety Alert – principle 25 page 4)</td><td>Amoxicillin (only if culture results available and susceptible) 500mg to 1g three times a day<br>OR<br>Cefalexin 500mg twice a day<br>Duration: All for 7 days</td></tr>
<tr><td>Lower UTI in Men<br>  <br>NICE Visual summary NG 109<br>SNOMED 4009004<br>READ code K190.</td><td>Consider prostatitis and send pre-treatment MSU<br>Consider STIs.</td><td>Trimethoprim 200mg twice a day<br>Duration: 7 days<br>Or<br>Nitrofurantoin MR (if eGFR 45 ml/minute or greater and no prostate involvement) 100mg twice a day<br>Duration: 7 days<br>(See MHRA Safety Alert – principle 25 page 4)</td><td>Consider alternative diagnoses basing antibiotic choice on recent culture and susceptibility results</td></tr>
</table>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<tr>
<td rowspan="2">Recurrent UTI in non-pregnant women (2 or more UTIs in 6 months or 3 or more in 12 months)<br> <br>NICE Visual summary NG 112<br>Back to Contents<br><br>SNOMED (EMIS, System1)<br>197927001<br>READ code (Vision)<br>K1903</td>
<td rowspan="2">First offer behavioural and personal hygiene measures and self-care advice to reduce the risk of recurrent UTI.<br><br>See the NHS Greater Manchester Recurrent UTI Guidance for assessment, investigation and ongoing management.<br><br>Use a stepwise approach to prevention:<br>1. Behavioural and personal hygiene measures and self-care.<br>2. For peri- and postmenopausal women, consider vaginal oestrogen (review response within 12 months).<br>3. If UTIs are associated with an identifiable trigger (for example sexual intercourse), consider single-dose antibiotic prophylaxis (review within 6 months).<br>4. If there is no identifiable trigger, or single-dose prophylaxis is ineffective, consider methenamine hippurate as a non-antibiotic alternative to daily antibiotic prophylaxis where appropriate.<br>5. If methenamine hippurate is unsuitable or ineffective, consider a trial of continuous low-dose antibiotic prophylaxis (review within 6 months).<br>Provide advice about:<br>• how and when to take prophylactic treatment (particularly single-dose prophylaxis)<br>• possible adverse effects of treatment<br>• seeking medical advice if symptoms of an acute UTI develop<br>• attending for review after 3 to 6 months (or earlier if clinically indicated).</td>
<td colspan="2">Choice should be based on culture and susceptibility results.</td>
</tr>
<tr>
<td>Continuous non-antibiotic prophylaxis<br><br>Methenamine hippurate 1 g twice daily<br><br>• Alternative to daily antibiotic prophylaxis where behavioural measures, vaginal oestrogen (where appropriate) and other preventive strategies have been ineffective, inappropriate or are not suitable.<br><br>• Review within 6 months, then every 12 months if treatment is continued.<br><br>• Do not use to treat an acute UTI.<br><br>• Avoid in hepatic impairment and severe renal impairment (eGFR <10 mL/min/1.73 m²).<br><br>Continuous antibiotic prophylaxis<br><br>• Trimethoprim 100 mg at night<br>or<br><br>• Nitrofurantoin i/r 50–100 mg at night (if eGFR ≥45 mL/min/1.73 m²)<br><br>(See MHRA Nitrofurantoin Safety Update ).)<br><br>Duration: 3–6 months, then review with a view to stopping.<br><br>Single-dose prophylaxis (off-label)<br><br>Use only where recurrent UTIs are associated with an identifiable trigger (e.g. sexual intercourse). Base treatment on previous urine culture and susceptibility results where available.<br><br>• Trimethoprim 200 mg single dose OR<br><br>• Nitrofurantoin i/r 50–100 mg single dose (if eGFR ≥45 mL/min/1.73 m²)<br><br>Review after 3–6 months.</td>
<td>Continuous antibiotic prophylaxis (off-label)<br><br>Use only if other preventive measures (including methenamine hippurate where appropriate) have been ineffective or are unsuitable. Base treatment on previous urine culture and susceptibility results where available.<br><br>• Amoxicillin 250 mg at night (where urine culture confirms susceptibility)<br><br>Single-dose prophylaxis (off-label)<br><br>• Amoxicillin 500 mg single dose (where urine culture confirms susceptibility)<br><br>If resistance, intolerance or contraindications limit treatment options, seek microbiology advice. Duration: 3–6 months, then review with a view to stopping.</td>
</tr>
<tr>
<td colspan="2">Monitoring for long-term therapy: See BNF</td>
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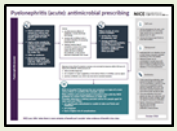
| **Acute prostatitis**<br> <br>NICE Visual summary NG 110<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>79411002<br>READ code (Vision)<br>K210. | Send MSU for culture and start antibiotics.<br>Review antibiotic treatment after 14 days and either stop antibiotics or continue for a further 14 days if needed (based on assessment of history, symptoms, clinical examination, urine and blood tests). | **Ciprofloxacin 500mg twice a day**<br>Duration: 14 days (NG110)<br>(See MHRA Safety Alert ) | ***If unable to take quinolone:***<br>**Trimethoprim 200mg twice a day**<br>Duration: 14 days |
| **Acute pyelonephritis in adults (Upper UTI)**<br>  <br>NICE Visual summary NG 111<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>36689008<br>READ code (Vision)<br>K101. | Send MSU for culture & susceptibility.<br>Offer an antibiotic.<br>When prescribing antibiotics, take account of severity of symptoms, risk of complications, previous urine culture and susceptibility results, previous antibiotic use which may have led to resistant bacteria.<br>If no response within 24 hours, admit for IV antibiotics. | Cefalexin 500mg twice a day or three times a day (up to 1g to 1.5g three times a day or four times a day for severe infections)<br>Duration: 7 to 10 days<br>If known ESBL positive in urine, please discuss with microbiologist.<br>**Pregnant women:**<br>Consider referral.<br>If cefalexin contraindicated or not tolerated consult microbiologist. | Co-amoxiclav (only if culture results available and susceptible) 500/125mg three times a day<br>Duration: 7 to 10 days Or<br>Trimethoprim (only if culture results available and susceptible) 200mg twice a day<br>Duration: 14 days Or<br>Ciprofloxacin (See<br>Duration: 7 days |

| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
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| **Lower UTI in children**<br> <br>NICE Visual summary NG 109<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>4009004<br>READ code (Vision)<br>K190. | **Child under 3 mths: refer urgently for assessment.** | | |
| | **Child ≥ 3 mths:** use positive nitrite to guide. Start antibiotics, also send pre-treatment MSU.<br>**If recurrent UTI, refer to paediatrics. If antibiotics required in recurrent UTI, seek specialist advice.** | **3 months and over**<br>Nitrofurantoin (if eGFR 45 ml/minute or greater)<br>[If children can swallow them, 100mg M/R capsules (older than 12yrs) should be used in preference to the liquid formulation. 50mg tablets can be considered for lower doses. **Do not crush tablets or open capsules**]<br>(See MHRA Safety Alert – principle 25 page 4)<br>OR<br>Trimethoprim (if low risk of resistance$^{\Omega}$)<br>Duration: 3 days | **3 months and over**<br>Amoxicillin (only if culture results available and susceptible)<br>OR<br>Cefalexin<br>Duration: 3 days |
| | $^{\Omega}$A lower risk of resistance may be more likely if not used in the past 3 months and previous urine culture suggests susceptibility (but this was not used) or it is the first presentation of a UTI . A higher risk of resistance may be more likely with recent use. | | |
| | **Refer children under 3 months to paediatric specialist** | | |


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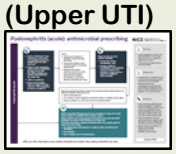
| **Acute pyelonephritis in children under 16 years**<br>**(Upper UTI)**<br>  <br>NICE Visual summary NG 109<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>36689008<br>READ code (Vision)<br>K101. | Send a urine sample for culture and susceptibility testing in line with the NICE guideline, Urinary tract infection in under 16s: diagnosis and management (CG54).<br>Offer* an antibiotic.<br>When prescribing antibiotics, take account of severity of symptoms, risk of complications, previous urine culture and susceptibility results, previous antibiotic use which may have led to resistant bacteria.<br>If no response within 24 hours, admit for intravenous antibiotics. | Cefalexin<br>Duration: 7 to 10 days | Co-amoxiclav (only if culture results available and susceptible)<br>Duration: 7 to 10 days |
| | | Assess and manage fever in under 5s in line with NICE guidance – Fever in under 5s: assessment and initial management (CG160) | |
| **GASTRO INTESTINAL TRACT INFECTIONS** | | | |
| **Oral candidiasis**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Candidiasis of mouth (disorder) 79740000<br>With HIV 71349004<br><br>READ code (Vision)<br>Oral candidiasis AB20. | **Oral candidiasis is a minor condition that can be treated without the need for a GP consultation or prescription in the first instance.**<br>**Advise self-care in line with NHS England guidance.** | | |
| | **Topical azoles** are more effective than topical nystatin.<br>Oral candidiasis rare in immunocompetent adults. | Fluconazole capsules 50mg to 100mg daily<br>Duration: 7 days & further 7 days if persistent<br>Or<br>Miconazole oral gel 2.5ml four times a day after meals<br>Duration: 7 days or until 2 days after symptoms. | If miconazole not tolerated: Nystatin suspension 100,000 units four times a day after meals<br>Duration: 7 days or until 2 days after symptoms |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## Eradication of Helicobacter pylori

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SNOMED (EMIS, System1)
281897000
READ code (Vision)
8BAC.

Refer to **BNF** or **GMMMG**

**Do not offer eradication for GORD. (PPI for 4 weeks).**

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

Retest for *H.pylori* post DU/GU or relapse after second line therapy: using breath or stool test OR consider endoscopy for culture and susceptibility.

Bismuth quadruple therapy (Pylera®) (bismuth subcitrate potassium 140mg / metronidazole 125mg / tetracycline 125mg).
**DOSE**: 3 capsules four times a day WITH omeprazole 20mg twice a day. **Duration:** 10 days.
**Restricted – use ONLY when ALL of the following apply**:

- H. pylori positively identified on testing; **AND**
- A true penicillin allergy is documented; **PLUS either**
- Previous clarithromycin **OR** previous fluoroquinolone use; **AND**
- The patient is likely to be confused by multiple separate packs and reasonable adjustments (e.g. prompt sheets, family/carer support) are unsuitable or have been exhausted, OR the individual drugs cannot be sourced separately.

**Counselling**: take all 3 capsules together after meals and at bedtime with a full glass of water; complete the full 10 days; avoid alcohol during and for 48 hours after treatment (metronidazole). The tetracycline component is contraindicated in pregnancy, breastfeeding and children under 12 years, causes photosensitivity, and should be separated from milk, antacids, iron and zinc by 2 hours. Bismuth may darken the stools and tongue. Check interactions (anticoagulants, lithium, phenytoin).

## Infectious diarrhoea

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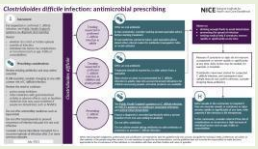
SNOMED (EMIS, System1)
19213003
READ code (Vision)
A082.

Refer previously healthy children with acute painful or bloody diarrhoea to exclude *E. coli* 0157 infection.**Antibiotic therapy usually not indicated unless systemically unwell.** If systemically unwell and campylobacter suspected consider Clarithromycin 250 to 500mg twice a day for 7 days, if treated within 3 days of onset.

| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Clostridioides difficile**<br>*Back to Contents*<br>  <br>NICE Visual summary NG 199<br>SNOMED (EMIS, System1)<br>186431008<br>READ code (Vision)<br>A3Ay2 | ***Consult microbiology for all cases.***<br>Stop unnecessary antibiotics and/or PPIs and gastro drugs e.g. laxatives<br>Review Medicines that may cause problems during dehydration. E.g. NSAIDs, ACEi, AIIRA, diuretics<br>Treating suspected or confirmed C. difficile infection in adults<br>Offer an oral antibiotic In the community, consider seeking prompt specialist advice before starting treatment If oral medicines cannot be taken, seek specialist advice about other enteral routes for antibiotics (nasogastric tube or rectal catheter)<br>ADVICE:<br>• drinking enough to avoid dehydration<br>• preventing the spread of infection<br>• seek medical help if symptoms worsen rapidly or significantly at any time<br>Use clinical judgement to determine whether antibiotic treatment for *C. difficile* is ineffective. It is not usually possible to determine this until day 7 because diarrhoea may take 1 to 2 weeks to resolve.<br>Consider referring people in the community to hospital if they could be at high risk of complications or recurrence because of individual factors such as age, frailty or comorbidities. | ***First episode; mild moderate or severe:***<br>Vancomycin<br>125mg four times a day<br>Duration: 10 days<br>**CHECK AVAILABILITY AS NOT ALL PHARMACIES HOLD STOCK.**<br>*Further episode (**relapsed** within 12 weeks of symptom resolution):*<br>Fidaxomicin<br>200 mg orally twice a day<br>Duration: 10 days<br>*Further episode (**recurrence** more than 12 weeks after symptom resolution):*<br>Vancomycin<br>125mg four times a day<br>Duration: 10 days | ***First episode; mild moderate or severe:***<br>Fidaxomicin<br>200 mg orally twice a day<br>Duration: 10 days<br>If first and second line ineffective for the first episode<br>REFER for specialist advice in secondary care<br>*Further episode (**recurrence** more than 12 weeks after symptom resolution):*<br>Fidaxomicin<br>200 mg orally twice a day<br>Duration: 10 days |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| | With severe symptoms (below) review progress closely and/or consider hospital referral.<br>**Definition of severe:** Temperature greater than 38.5°C, or WCC greater than 15, or rising creatinine or signs/symptoms of severe colitis. | | |

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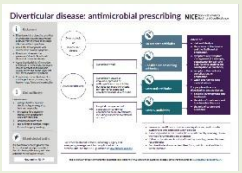
|---|---|---|---|
| **Acute Diverticulitis**<br>*Back to Contents*<br>  <br>**ng147-visual-summary**<br><br>SNOMED (EMIS, System1)<br>307496006<br>READ code (Vision)<br>J511. | **Consider watchful waiting if person**:<br>▪ Systemically well<br>▪ No co-morbidities<br>▪ No suspected infection.<br>Advise analgesia (**avoid** NSAIDs and opioids), clear liquids with gradual reintroduction of solid food if symptoms improve. Consider checking for raised white cell count and CRP, which may suggest infection.<br>Patients should be reviewed after 72 hours and if there is no improvement, and/or fever and leukocytosis persist, urgent hospital admission is advised. | ***For patients who do not require urgent hospital admission and infection is suspected:***<br>Co-amoxiclav 625mg three times a day<br>Duration: 5 days | Trimethoprim 200mg BD PLUS metronidazole 400mg TDS<br><br>**Only if switching from IV ciprofloxacin with specialist advice; consider safety issues**<br>Ciprofloxacin (See MHRA Safety Alert – note 23 page 4) 500mg twice a day<br>PLUS<br>Metronidazole 400mg three times a day<br>Duration: 5 days |
| | | **Arrange immediate urgent hospital admission for those with:**<br>Rectal bleeding<br>Unmanageable abdominal pain<br>Dehydrated or at risk of dehydration<br>Unable to take or tolerate oral antibiotics (if needed) at home<br>Frail / significant co-morbidities and or / is immunocompromised. | |
| **Traveller's diarrhoea**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>11840006<br>READ code (Vision)<br>A082. | **Prophylaxis rarely, if ever indicated. Only consider standby antibiotics for** high risk areas for people at high-risk of severe illness. | If standby treatment appropriate give azithromycin 500mg each day for 3 days on a **private prescription**. | If prophylaxis / treatment consider bismuth subsalicylate (Pepto Bismol) (**Private purchase**) 2 tablets four times a day for 2 days. |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| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **GENITAL TRACT INFECTIONS** | | | |
| **STI screening**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>171128005<br>READ code (Vision)<br>6832. | People with risk factors should be screened for chlamydia, gonorrhoea, HIV, syphilis. Refer individual and partners to GUM service.<br>**Risk factors:** less than 25 years, no condom use, recent (less than 12momths)/frequent change of partner, symptomatic partner, area of high HIV. | | |
| **Chlamydia trachomatis/ urethritis**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Chlamydial infection (disorder) 105629000<br>Nongonococcal urethritis (disorder) 84619001<br>Urethritis (disorder) 31822004<br><br>READ code (Vision)<br>Chlamydial infection A78A.<br>Nonspecific urethritis A994.<br>Other urethritis K17y. | Opportunistically screen all sexually active patients aged 15 to 24 years for chlamydia annually and on change of sexual partner.<br>If positive, treat index case, refer to GUM and initiate partner notification, testing and treatment.<br>As single dose azithromycin has led to increased resistance in GU infections, doxycycline should be used first line for chlamydia and urethritis.<br>Consider referring all patients with symptomatic urethritis to GUM as testing should include Mycoplasma genitalium and Gonorrhoea.<br>If M.genitalium is proven, use doxycycline followed by azithromycin using the same dosing regimen and advise to avoid sex for 14 days after start of treatment and until symptoms have resolved. | Doxycycline 100mg twice a day<br>Duration: 7 days | *Pregnant, breastfeeding, allergy, or intolerance:*<br>Azithromycin 1g stat, then 500mg daily for the following 2 days. |
| | | Advise patient with chlamydia to abstain from sexual intercourse until doxycycline is completed or for 7 days after treatment with azithromycin (14 days after azithromycin started and until symptoms resolved if urethritis).<br>If chlamydia, test for reinfection at 3 to 6 months following treatment if under 25 years; or consider if over 25 years and high risk of re-infection.<br>As lower cure rate in pregnancy, test for cure at least 3 weeks after end of treatment. | |
| **Epididymitis**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>31070006<br>READ code (Vision)<br>K241. | For suspected epididymitis in men over 35 years with low risk of STI.<br>(**High risk, refer to GUM)** | Ofloxacin 200mg twice a day (See MHRA Safety Alert – note 23 page 4)<br>Duration : 14 days | Doxycycline 100mg twice a day<br>Duration: 14 days |
| **VulvoVaginal candidiasis**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>72934000<br>READ code (Vision)<br>AB211 | All topical and oral azoles give 75% cure.<br>**In pregnancy:** avoid oral azoles and use intravaginal treatment for 7 days. | Fluconazole 150mg orally stat<br>*Pregnant:*<br>Clotrimazole 100mg pessary at night<br>Duration: 6 nights | Clotrimazole 500mg pessary or 10% cream stat<br>*Pregnant:*<br>Miconazole 2% cream, 5g intravaginally twice a day<br>Duration: 7 days |
| **Bacterial vaginosis**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>419760006<br>READ code (Vision)<br>K4219 | Oral metronidazole is as effective as topical treatment and is cheaper.<br>Less relapse with 7 day than 2g stat.<br>**Pregnant/breastfeeding:** avoid 2g stat.<br>Treating partners does not reduce relapse. | Metronidazole 400mg twice a day<br>Duration: 7 days<br>Or<br>Metronidazole 2g stat (use 5 x 400mg tablets) | Metronidazole 0.75% vaginal gel 5g applicator at night<br>Duration: 5 nights<br>or<br>Clindamycin 2% cream 5g applicator at night.<br>Duration: 7 nights |


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|---|---|---|---|
| **Gonorrhoea**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>15628003<br>READ code (Vision)<br>A98z. | **Refer to GUM for treatment.** | | |
| | Antibiotic resistance is now very high. | **Ceftriaxone 1g** by intramuscular injection as a single dose (all uncomplicated urogenital, rectal and pharyngeal gonorrhoea). (BASHH 2025) | **Ciprofloxacin 500 mg orally as a single dose** ONLY if susceptibility has been confirmed (phenotypically or genotypically).<br>(See MHRA Fluoroquinolone Safety Advice) |
| **Trichomoniasis**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Infection caused by Trichomonas (disorder) 56335008<br>Trichomonal vaginitis (disorder) 276877003<br>READ code (Vision)<br>Trichomoniasis – trichomonas AD1..<br>Trichomonal vaginitis AD101 | Treat partners and refer to GUM service.<br>In pregnancy or breastfeeding: avoid 2g single dose metronidazole.<br>Consider clotrimazole for symptom relief (not cure) if metronidazole declined. | Metronidazole 400mg twice a day<br>Duration: 7 days<br>OR<br>Metronidazole 2g stat (use 5 x 400mg tablets) | Clotrimazole 100mg pessary at night<br>Duration: 6 nights |

| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Pelvic inflammatory disease**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Female pelvic inflammatory disease (disorder) - 198130006<br>Acute pelvic inflammatory disease (disorder) 237037006<br><br>READ code (Vision)<br>Female pelvic inflamm.diseases K4...<br>Acute pelvic inflamm disease K409. | **Children under 12 years must be referred to a paediatrician.** | | |
| | **Refer woman and contacts to GUM service for treatment.**<br>**Raised CRP** supports diagnosis, absent pus cells in HVS smear good negative predictive value.<br>**Exclude:** ectopic pregnancy, appendicitis, endometriosis, UTI, irritable bowel, complicated ovarian cyst, functional pain.<br>Moxifloxacin has greater activity against likely pathogens, but always test for gonorrhoea, chlamydia, and M. genitalium.<br>**Ofloxacin and moxifloxacin should be avoided in patients who are at high risk of gonococcal PID.** | Ceftriaxone 1g stat by intramuscular injection **[This is an essential part of treatment – refer patients to local services if injection not available via GP practice]**<br>**PLUS**<br>Metronidazole 400mg twice a day<br>**PLUS**<br>Doxycycline 100mg twice a day<br>Duration : 14 days | ***These treatment choices should only be used for true cephalosporin allergy and a low risk of gonococcal PID.***<br>Metronidazole 400mg twice a day<br>**PLUS**<br>Ofloxacin 400mg twice a day<br>Or<br>Moxifloxacin 400mg daily **alone**.<br>(If M. genitalium tests positive use moxifloxacin as an alternative.)<br>(See MHRA Safety Alert – note 23 page 4)<br>Duration : 14 days |


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<table>
<tr><th>ILLNESS</th><th>GOOD PRACTICE POINTS</th><th colspan="2">PREFERRED CHOICE</th><th>ALTERNATIVE</th></tr>
<tr><td colspan="5">SKIN INFECTIONS</td></tr>
<tr><td>MRSA<br>Back to Contents<br>SNOMED (EMIS, System1)<br>266096002<br>READ code (Vision)<br>A3B11</td><td colspan="4">For active MRSA infection, refer to microbiology and only treat according to antibiotic susceptibilities confirmed by lab results.<br>If identified as part of pre-op screening, treatment should be provided at that time by secondary care.</td></tr>
<tr><td rowspan="6">Impetigo<br> <br>NICE Visual summary NG 153<br>Back to Contents<br>SNOMED (EMIS, System1)<br>48277006<br>READ code (Vision)<br>M05..</td><td rowspan="6">Advise people with impetigo, and their parents or carers if appropriate, about good hygiene measures to reduce the spread of impetigo to other areas of the body and to other people.<br>Do not prescribe mupirocin (reserved for MRSA), unless advised by microbiology.<br>Do not offer combination treatment with a topical and oral antibiotic to treat impetigo.<br>Advise people with impetigo, and their parents or carers if appropriate, to seek medical help if symptoms worsen rapidly or significantly at any time, or have not improved after completing a course of treatment.<br>See NICE NG153 (Impetigo: antimicrobial prescribing) for further guidance.<br>§A 5-day course is appropriate for most people with impetigo but can be increased to 7 days based on clinical judgement, depending on the severity and number of lesions.<br>¥Dosage can be increased to 500 mg twice a day, if needed for severe infections.</td><td colspan="3">Localised non-bullous impetigo (not systemically unwell or at high risk of complications)</td></tr>
<tr><td>Consider*:<br>Hydrogen peroxide 1% cream<br>Apply two or three times a day<br>Duration: 5 days§</td><td colspan="2">If hydrogen peroxide unsuitable (e.g., if impetigo is around eyes) or ineffective:<br>Fusidic acid 2% cream<br>Apply thinly three times a day<br>Duration: 5 days§</td></tr>
<tr><td colspan="3">Widespread non-bullous impetigo who are not systemically unwell or at high risk of complications.</td></tr>
<tr><td>Fusidic acid 2% cream<br>Apply thinly three times a day<br>Duration: 5 days§<br>Or:<br>Flucloxacillin 500mg four times a day<br>Duration: 5 days§</td><td colspan="2">Penicillin allergy or flucloxacillin unsuitable:<br>Clarithromycin 250mg¥ twice a day<br>Duration: 5 days§</td></tr>
<tr><td colspan="3">Bullous impetigo or impetigo in people who are systemically unwell or at high risk of complications</td></tr>
<tr><td>Flucloxacillin 500mg four times a day<br>Duration: 5 days§</td><td colspan="2">Penicillin allergy or flucloxacillin unsuitable:<br>Clarithromycin 250mg¥ twice dailyDuration: 5 days§</td></tr>
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| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Eczema**<br> <br>NICE Visual summary NG 190<br><br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>43116000<br>READ code (Vision)<br>M12z1 | If no visible signs of infection, **do not** use antibiotics (alone or with steroids) as this encourages resistance and does not improve healing.<br>Do not routinely take a skin swab for microbiological testing in people with secondary bacterial infection of eczema at the initial presentation.<br><br>In people who are not systemically unwell, do not routinely offer either a topical or oral antibiotic for secondary bacterial infection of eczema.<br>Prescribing considerations Take account of: • the evidence, which suggests a limited benefit with antibiotics • the risk of antimicrobial resistance with repeated courses of antibiotics • the extent and severity of symptoms or signs • the risk of complications | | |
| | Symptoms and signs of bacterial secondary infection can include weeping, pustules, crusts, no treatment response, rapidly worsening eczema, fever and malaise Not all eczema flares are caused by a bacterial infection, even if there are crusts and weeping Eczema is often colonised with bacteria but may not be clinically infected | IF choosing between a topical or oral antibiotic (topical might be more appropriate if the infection is localised and not severe), also take account of:<br>• patient preferences<br>• possible adverse effects<br>• previous topical antibiotic use<br>• local antimicrobial resistance data<br><br>First Choice TOPICAL:<br>Fusidic acid 2%: Apply three times a day<br>Duration: 5 to 7 days<br>For localised infections only. Extended or recurrent use may increase the risk of developing antimicrobial resistance.<br><br>First Choice ORAL:<br>Flucloxacillin: 500 mg four times a day<br>Duration: 5 to 7 days | ***Alternative ORAL:***<br>***For Penicillin allergy or flucloxacillin unsuitable or***<br><br>Clarithromycin: 250 mg twice a day<br>Duration: 5 to 7 days<br>The dosage can be increased to 500 mg twice a day for severe infections<br><br>***Pregnancy:***<br>Erythromycin: 250 mg to 500 mg four times a day<br>Duration: 5 to 7 days |


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<table>
<tr><th>ILLNESS</th><th>GOOD PRACTICE POINTS</th><th>PREFERRED CHOICE</th><th>ALTERNATIVE</th></tr>
<tr><td rowspan="3">Leg ulcer<br> <br>NICE Visual summary NG 152<br><br>Back to Contents<br>SNOMED (EMIS, System1)<br>95344007<br><br>READ code (Vision)<br><br>M271.</td><td>Background:<br>▪ There are many causes of leg ulcer; any underlying conditions, such as venous insufficiency and oedema, should be managed to promote healing<br>▪ Few leg ulcers are clinically infected<br>▪ Most leg ulcers are colonised by bacteria<br>▪ Antibiotics don’t promote healing when a leg ulcer is not clinically infected<br>Symptoms and signs of an infected leg ulcer include:<br>▪ redness or swelling spreading beyond the ulcer<br>▪ localised warmth<br>▪ increased pain<br>▪ fever<br>When choosing an antibiotic, take account of:<br>▪ the severity of symptoms or signs<br>▪ the risk of complications<br>▪ previous antibiotic use<br><br>Reassess if symptoms<br><br>▪ worsen rapidly / significantly any time,<br>▪ don’t start to improve within 2 / 3 days,<br>▪ person becomes systemically unwell<br>▪ or has severe pain out of proportion to the infection.</td><td colspan="2">If active infection</td></tr>
<tr><td>Flucloxacillin 500mg to 1g four times a day#<br>Duration: 7 days☒</td><td>If penicillin allergic:<br>Clarithromycin 500mg twice a day<br>or<br>Doxycycline 200mg stat then 100mg twice a day<br>Duration: All 7 days☒</td></tr>
<tr><td colspan="2">Do not take a sample for microbiological testing at initial presentation, even if the ulcer might be infected.<br><br>Refer to hospital if there are symptoms or signs of a more serious illness or condition such as sepsis, necrotising fasciitis or osteomyelitis<br><br>Consider* referring or seeking specialist advice if the person:<br>▪ has a higher risk of complications because of comorbidities such as diabetes or immunosuppression<br>▪ has lymphangitis<br>▪ has spreading infection not responding to oral antibiotics<br>▪ cannot take oral antibiotics (to explore possible options for intravenous or intramuscular antibiotics at home or in the community)<br>☒A longer course (up to a further 7 days) may be needed based on clinical assessment. However, skin does take some time to return to normal, and full resolution of symptoms at 7 days is not expected.</td></tr>
<tr><td colspan="4"># The upper dose of 1 g four times a day would be off-label. Prescribers should follow relevant professional guidance, taking full responsibility for the decision, and obtaining and documenting informed consent. See the GMC’s Good practice in prescribing and managing medicines for more information.</td></tr>
<tr><td rowspan="3">Cellulitis in Diabetic Foot<br> <br>NICE Visual summary NG 19<br><br>Back to Contents<br>SNOMED (EMIS, System1)<br><br>200687002<br><br>READ code (Vision)<br><br>M0372</td><td>In diabetes, all foot wounds are likely to be colonised with bacteria.<br>Diabetic foot infection has at least 2 of:<br>▪ local swelling or induration<br>▪ erythema<br>▪ local tenderness or pain<br>▪ local warmth<br>▪ purulent discharge<br><br>Severity is classified as:<br>▪ Mild – local infection with 0.5 to less than 2 cm erythema<br>Refer the following to hospital:<br>▪ Moderate – local infection withmore than 2 cm erythema or involving deeper structures (such as abscess, osteomyelitis, septic arthritis or fasciitis)<br>▪ Severe – local infection with signs of a systemic inflammatory response.</td><td>Flucloxacillin 500mg to 1g four times a day#<br>Duration: 7 days☒</td><td>If penicillin allergic:<br>Clarithromycin 500mg twice a day<br>or<br>Doxycycline 200mg on first day then 100mg twice a day<br>Duration: All 7 days☒</td></tr>
<tr><td colspan="2">Refer to hospital immediately and inform multidisciplinary foot care service if there are limb- or life-threatening problems such as:<br>▪ ulceration with fever or any signs of sepsis, or<br>▪ ulceration with limb ischaemia, or<br>▪ suspected deep-seated soft tissue or bone infection, or<br>▪ gangrene<br>For all other active diabetic foot problems, refer to foot service within 1 working day<br>☒A longer course (up to a further 7 days) may be needed based on clinical assessment. However, skin does take some time to return to normal, and full resolution of symptoms at 7 days is not expected.</td></tr>
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| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Cellulitis and erysipelas**<br> <br>NICE Visual summary NG141<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Cellulitis (disorder) 128045006<br>READ code (Vision)<br>Cellulitis NOS M03z0 | Exclude other causes of skin redness (inflammatory reactions or non-infectious causes).<br>Consider marking extent of infection with a single-use surgical marker pen.<br>Offer an antibiotic. Take account of severity, site of infection, risk of uncommon pathogens, any microbiological results and MRSA status.<br>Infection around eyes or nose is more concerning because of serious intracranial complications.<br>Consider referring to hospital or seeking specialist advice if the person:<br>▪ is severely unwell or has lymphangitis<br>▪ has infection near the eyes or nose<br>▪ may have uncommon pathogens e.g. after a penetrating injury, exposure to water-borne organisms, or an infection acquired outside the UK<br>▪ has spreading infection not responding to oral antibiotics<br>▪ cannot take oral antibiotics (to explore giving IV antibiotics at home or in the community if appropriate)<br>Refer people to hospital if they have any symptoms or signs suggesting a more serious illness or condition, such as orbital cellulitis, osteomyelitis, septic arthritis, necrotising fasciitis or sepsis.<br># The upper dose of 1 g four times a day would be off-label. Prescribers should follow relevant professional guidance, taking full responsibility for the decision, and obtaining and documenting informed consent. See the GMC's Good practice in prescribing and managing medicines for more information. | Flucloxacillin 500mg to 1g four times a day#<br>Give oral unless person unable to take oral or severely unwell.<br>***If infection near eyes or nose (consider seeking specialist advice):***<br>Co-amoxiclav 625mg three times a day<br>Duration: All 5 to 7 days (a longer course up to 14 days may be needed).<br>◈A longer course (up to 14 days in total) may be needed but skin takes time to return to normal, and full resolution at 5 to 7 days is not expected.<br>If not responding after 14 days of antibiotic therapy then a holistic review of the wound and prescribing to date should be undertaken.<br>Consider:<br>▪ other possible diagnoses, such as an inflammatory reaction to an immunisation or an insect bite, gout, superficial thrombophlebitis, eczema, allergic dermatitis or deep vein thrombosis<br>▪ any underlying condition that may predispose to cellulitis or erysipelas, such as oedema, diabetes, venous insufficiency or eczema<br>▪ any symptoms or signs suggesting a more serious illness or condition, such as lymphangitis, orbital cellulitis, osteomyelitis, septic arthritis, necrotising fasciitis or sepsis<br>▪ any results from microbiological testing<br>▪ any previous antibiotic use, which may have led to resistant bacteria. | **If penicillin allergic:**<br>Clarithromycin 500mg twice a day<br>Give oral unless person unable to take oral or severely unwell.<br>Clarithromycin 500mg twice a day IV<br>or<br>Doxycycline 200mg stat then 100mg once a day<br>**Pregnancy:**<br>Erythromycin 500mg four times a day<br>***If infection near eyes or nose (Consider seeking specialist advice):***<br>Clarithromycin 500mg twice a day AND<br>Metronidazole 400mg three times a day (only add in children if anaerobes suspected).<br>Duration: All 7 days◈. |
| **Mastitis – Lactational**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Cellulitis (disorder) 274131006<br>READ code (Vision)<br>**L451.** | **Most cases of lactational mastitis are not caused by an infection and do not require antibiotics.**<br>Advice is to take paracetamol or ibuprofen to reduce pain and fever, drink plenty of fluids, rest and apply a warm compress.<br>**Breastfeeding**: oral antibiotics are safe and appropriate, where indicated. Women should continue feeding, including from the affected breast and be advised to monitor the child for adverse drug reactions e.g. diarrhoea and thrush. | Flucloxacillin 500mg to 1g four times a day<br>Duration: 7 to 14 days<br>♦Epidemiologic evidence indicates that the risk of hypertrophic pyloric stenosis in infants might be increased by use of maternal macrolides, especially in infants exposed in the first 2 weeks after birth. The risk may be greater with erythromycin, which is why clarithromycin is recommended here. | ***If penicillin allergic:***<br>Clarithromycin♦ 500mg twice a day<br>Duration: 7 to 14 days |


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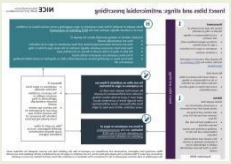
| | | | |
|---|---|---|---|
| **Mastitis – Non-Lactational**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Cellulitis (disorder)<br>83620003<br>READ code (Vision)<br>**K310.** | If immediate admission or referral is not indicated then prescribe an oral antibiotic for ***all*** women with non-lactational mastitis.<br>Advise the woman to seek immediate medical advice if symptoms worsen or fail to settle after 48 hours of antibiotic treatment. | Co-amoxiclav 500/125mg three times a day<br>Duration: 10 to 14 days | Clarithromycin 500 mg twice a day<br>**PLUS**<br>Metronidazole 400 mg three times a day<br>Duration: 10 to 14 days. |
| **ILLNESS** | **GOOD PRACTICE POINTS** | **PREFERRED CHOICE** | **ALTERNATIVE** |
| **Insect Bites and Stings**<br>  <br>NICE Visual summary NG 182<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>READ code (Vision) | Assessment Assess the type and severity of the bite or sting to identify:<br>• a local inflammatory or allergic skin reaction<br>• erythema migrans (bullseye rash), a sign of Lyme disease<br>• symptoms or signs of an infection<br>or systemic reaction<br>Most insect bites or stings will not need antibiotics.<br>Do not offer an antibiotic if there are no symptoms or signs of infection<br>Consider oral antihistamines to relieve itching (refer to a pharmacy for self-care)<br>**Refer people to hospital if they have symptoms or signs suggesting a more serious illness or condition, such as a systemic allergic reaction.**<br>**Advice:**<br>• see a community pharmacist for self-care options such as antihistamines<br>• redness and itching are common and may last up to 10 days<br>• avoid scratching to reduce inflammation and infection | **For people with a known or suspected tick bite**, follow the guidance on Lyme disease<br>**If there are symptoms or signs of infection,** follow the guidance on cellulitis and erysipelas | |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| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Bites- Human and Animal**<br> <br>**NICE Visual Summary NG 184**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>Human bite (event) 242605002<br>Bite of animal (event) 418975000<br>READ code (Vision)<br>Bite from human U120.<br>Animal bites TE6.. | • Be aware of potential safeguarding issues<br>• Seek specialist advice from a microbiologist for bites from a wild or exotic animal.<br>• Swab for microbiological testing to guide treatment if there is discharge.<br>• Offer an antibiotic for people with a human or animal bite if there are symptoms or signs of infection, such as increased pain, inflammation, fever, discharge or an unpleasant smell.<br>• Reassess bite if<br>➢ symptoms or signs of infection develop or worsen rapidly or significantly at any time, or do not start to improve within 24 to 48 hours of starting treatment **or**<br>➢ the person becomes systemically unwell **or**<br>➢ the person has severe pain that is out of proportion to the infection.<br><br>*High-risk bite areas include the hands, feet, face, genitals, skin overlying cartilaginous structures or an area of poor circulation<br>People at high risk include those at risk of a serious wound infection because of a co-morbidity (such as diabetes, immunosuppression, asplenia or decompensated liver disease) | | |
| | **Thorough irrigation and debridement is important.**<br>Assess risk of tetanus, rabies, or bloodborne viral infections e.g. HIV, hepatitis B/C.<br>**Human:**<br><u>NON-Broken skin:</u> Do NOT offer antibiotics<br><u>Broken skin but no blood</u>: CONSIDER antibiotics if wound or patient is high risk*<br><u>Broken skin and drawn blood</u>: OFFER antibiotics<br><br>**Cat**:<br><u>NON-Broken skin:</u> Do NOT offer antibiotics<br><u>Broken skin but no blood</u>: CONSIDER antibiotics if wound is deep<br><u>Broken skin and drawn blood</u>: OFFER antibiotics<br><br>**Dog or other traditional pets**:<br><u>NON-Broken skin:</u> Do NOT offer antibiotics<br><u>Broken skin but no blood</u>: Do NOT offer antibiotics<br><u>Broken skin and drawn blood</u>: CONSIDER antibiotics if wound or patient is high risk * | ***Antibiotics for prophylaxis and treatment in adults aged 18 years and over*** | |
| | | Prophylaxis or treatment:<br>Co-amoxiclav 625mg three times a day<br><br>Duration:<br>Prophylaxis 3 days<br>Treatment 5 days | ***If penicillin allergic or co-amoxiclav unsuitable:***<br>Doxycycline<br>200 mg on first day, then 100 mg or 200 mg daily<br>**PLUS**<br>Metronidazole 400mg three times a day<br><br>Duration:<br>Prophylaxis 3 days<br>Treatment 5 days |
| | | **Antibiotics for prophylaxis and treatment in children and young people under 18 years** | |
| | | Under 1 MONTH: Seek specialist advice<br><br>**For Prophylaxis or treatment:**<br>Co-amoxiclav three times a day<br><br>1 month to 11 months:<br>0.25ml/kg of 125/31 susp<br><br>1 year to 5 years:<br>5ml or 0.25ml/kg of 125/31 susp<br><br>6 years to 11 years:<br>5ml or 0.15mk/kg of 250/62 susp<br><br>12 years to 17 years:<br>250/125 mg or 500/125mg<br><br>Duration:<br>Prophylaxis 3 days<br>Treatment 5 days | ***If penicillin allergic or co-amoxiclav unsuitable:***<br>***UNDER 12 years:***<br>Co-trimoxazole (off-label use)<br><br>6 weeks to 5 months:<br>120 mg or 24 mg/kg twice a day<br>6 months to 5 years:<br>240 mg or 24 mg/kg twice a day<br>6 years to 11 years:<br>480 mg or 24 mg/kg twice a day<br><br>***12 years to 17 years:***<br>Doxycycline<br>200 mg on first day, then 100 mg or 200 mg daily<br>**PLUS**<br>Metronidazole 400mg three times a day<br><br>Duration:<br>Prophylaxis 3 days<br>Treatment 5 days |


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| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Lyme disease – Tick bites**<br> <br>NICE Visual summary NG 95<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>23502006<br>READ code (Vision)<br>A8710 | **Most tick bites do not transmit Lyme disease and prompt, correct removal of the tick reduces the risk of transmission. For correct tick removal and how to do this see the Public Health England website for information on removing ticks and supporting information.** | | |
| | Treat erythema migrans empirically; serology is often negative early in infection.<br>For other suspected Lyme disease such as neuroborreliosis (CN palsy, radiculopathy) seek advice.<br>See NICE guideline [NG95] | Doxycycline<br>100mg twice a day<br>Duration: 21 days | *Where preferred option is contraindicated or not licensed:*<br>Amoxicillin<br>1g three times a day<br>Duration: 21 days |
| **Dermatophyte infection – skin**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>47382004<br>READ code (Vision)<br>AB0z. | **Athlete's foot and ringworm are not serious fungal infections and are usually easily treated with over the counter treatments. Advise self-care and good hygiene in line with NHS England guidance.** | | |
| | **Most cases**: use terbinafine as fungicidal, so treatment time shorter and more effective than with fungistatic imidazoles or undecanoates.<br>If candida possible, use imidazole.<br>**If intractable or scalp**: send skin scrapings and if infection confirmed, use oral terbinafine/itraconazole.<br>**Scalp**: discuss with specialist, oral therapy indicated. | Terbinafine cream 1% twice a day<br>Duration: 1 to 2 weeks plus 2 weeks after healing | Imidazole:<br>Clotrimazole cream 1% or Miconazole cream 2% twice a day<br>or (athlete's foot only):<br>topical undecanoates twice a day (Mycota®)<br>Duration: 1 to 2 wks plus 2 weeks after healing |
| **Dermatophyte infection – nail (Onychomycosis)**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>402134005<br>READ code (Vision)<br>AB01. | Take nail clippings: start therapy only if infection is confirmed by laboratory.<br>Oral terbinafine is more effective than oral azole.<br>Liver reactions rare with oral antifungals.<br>If candida or non-dermatophyte infection confirmed, use oral itraconazole.<br>For children, seek specialist advice.<br>**Do not prescribe amorolfine 5% nail lacquer as very limited evidence of effectiveness.** | First line:<br>Terbinafine 250mg daily<br>Duration:<br>Fingers: 6 to 12 weeks<br>Toes: 3 to 6 months | Second line:<br>Itraconazole 200mg twice a day<br>Duration: 7 days per month<br>Fingers: 2 courses<br>Toes: 3 courses |
| **Varicella zoster/chicken pox**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>38907003<br>READ code (Vision)<br>**A52..** | **Most patients do not require treatment** | | |
| | **Pregnant/immunocompromised/ neonate:** seek urgent specialist advice<br>If onset of rash less than 24hrs & older than 14 years or severe pain or dense/oral rash or secondary household case or steroids or smoker consider aciclovir. | If indicated:<br>Aciclovir 800mg 5 times a day<br>Duration: 7 days | |
| **Herpes zoster/shingles**<br>*Back to Contents*<br>SNOMED **4740000**<br>READ code A53.. | Treat if older than 50 years and within 72 hours of rash (Post-herpetic neuralgia rare if less than 50 years); or if active ophthalmic or Ramsey Hunt or eczema. | If indicated:<br>Aciclovir 800mg five times a day<br>Duration: 7 days | Second line for shingles **only if compliance a problem** (as high cost):<br>Valaciclovir 1g three times a day<br>Duration: 7 days |


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| ILLNESS | GOOD PRACTICE POINTS | PREFERRED CHOICE | ALTERNATIVE |
|---|---|---|---|
| **Cold sores**<br>*Back to Contents*<br>SNOMED<br>**1475003**<br>READ code<br>A54z. | Cold sores resolve after 7 to 10 days without treatment.<br>Topical antivirals applied prodromally reduce duration by 12 to 24hours.<br>**For infrequent cold sores of the lip advise self-care in line with NHS England guidance.** | | |
| **Acne Vulgaris**<br>NICE NG198<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>11381005<br>READ code (Vision)<br>**M261X00** | NB: Antibiotics have no benefit in mild acne<br>Mild acne: DO NOT PRESCRIBE. In line with NHS England guidance, GM do not routinely support prescribing for conditions which are self-limiting or amenable to self-care. For further details see GM commissioning statement.<br>For acne, recommend non-antibiotic topical bactericidal products e.g. benzyl peroxide first line for up to 2 months.<br>**Patients should be encouraged to manage mild acne in line with NHS England self-care guidance.** | | |
| | Do not use the following to treat acne:<br>• monotherapy with a topical antibiotic<br>• monotherapy with an oral antibiotic<br>• a combination of a topical antibiotic and an oral antibiotic.<br><br>Discuss the importance of completing the course of treatment, because positive effects can take 6 to 8 weeks to become noticeable<br><br>Skin care advice<br>• use a non-alkaline (skin pH neutral or slightly acidic) synthetic detergent (syndet) cleansing product twice daily on acne-prone skin.<br>• For skin care products or make up (for example, moisturisers) and sunscreens avoid oil-based and comedogenic preparations and to remove make-up at the end of the day.<br>• persistent picking or scratching of acne lesions can increase the risk of scarring. | Offer people with acne a 12-week course of 1 of the following first-line treatment options, taking account of the severity of their acne and the person's preferences, and after a discussion of the advantages and disadvantages of each option:<br><br>**Any Severity**<br><br>fixed combination of topical adapalene with topical benzoyl peroxide (Epiduo): applied once daily in the evening<br><br>or<br><br>fixed combination of topical tretinoin with topical clindamycin (Treclin): applied once daily in the evening<br><br>**Moderate**<br><br>fixed combination of topical benzoyl peroxide with topical clindamycin (Duac Once Daily): applied once daily in the evening<br><br>**Moderate to Severe**<br><br>fixed combination of topical adapalene with topical benzoyl peroxide (Epiduo): applied ONCE daily in the evening<br>WITH<br>oral doxycycline 100mg caps: take one daily<br><br>or<br>topical azelaic acid applied twice daily<br>WITH<br>oral doxycycline 100mg caps: take one daily | topical benzoyl peroxide monotherapy<br><br>Consider this as an alternative treatment to the preferred choice options if:<br><br>• these treatments are contraindicated, or<br><br>• the person wishes to avoid using a topical retinoid, or an antibiotic (topical or oral).<br><br>**Moderate to Severe**<br><br>fixed combination of topical adapalene with topical benzoyl peroxide (Epiduo): applied ONCE daily in the evening<br>WITH<br>oral lymecycline 408mg caps take one daily<br><br>or<br>topical azelaic acid applied twice daily<br>WITH<br>oral lymecycline 408mg caps take one daily |


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| PARASITES | | | |
|---|---|---|---|
| **ILLNESS** | **GOOD PRACTICE POINTS** | **PREFERRED CHOICE** | **ALTERNATIVE** |
| **Scabies**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>128869009<br>READ code (Vision)<br>AD30. | Treat whole body from ear/chin downwards and under nails. If under 2 or elderly, also face/scalp.<br>Treat all home and sexual contacts within 24 hours.<br>Repeat treatment after 7 days. Itch can persist up to 6 weeks after successful treatment.<br>See the GM Scabies Guide for treatment-failure, crusted scabies, outbreak and full ivermectin dosing detail. | Permethrin 5% cream<br>Duration: 2 applications 1 week apart | ***If allergy:***<br>Malathion 0.5% liquid<br>Duration: 2 applications 1 week apart<br>**Oral ivermectin (second-line):**<br>200 micrograms/kg (round to nearest 3mg tablet) as a single dose, repeat after 7 days. Weight 15kg or over only; confirmed/clinical scabies only (not itch alone). Avoid in pregnancy; caution in breastfeeding. Take on an empty stomach. Reserve for: permethrin/pyrethroid hypersensitivity; broken or secondarily-infected skin; unreliable or impractical to use topical application |
| **Head lice**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>81000006<br>READ code (Vision)<br>**AD20.** | **Chemical treatment is only recommended in exceptional circumstances and self-care should be advised in line with NHS England guidance.** | | |
| | Head lice can be removed by combing wet hair meticulously with a plastic detection comb. | Dimeticone 4% lotion<br>Duration: 2 applications 1 week apart | Malathion 0.5% liquid<br>Duration: 2 applications 1 week apart |
| **Threadworms**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>266162007<br>READ code (Vision)<br>AC74. | **A prescription should not be routinely offered as this condition is appropriate for self-care.** | | |
| | **All household contacts should be advised to treat at the same time PLUS advise hygiene measures for 2 weeks (hand hygiene, pants at night, morning shower (include perianal area) PLUS wash sleepwear & bed linen, dust and vacuum.** | **All patients over 6 months**:<br>Mebendazole 100mg stat (off-label if less than 2yrs)<br>**Pregnant women and children under 6 months:**<br>Use hygiene measures alone for 6 weeks and perianal wet wiping or washes 3 hourly during the day. | |
| **EYE INFECTIONS** | | | |
| **Conjunctivitis**<br>*Back to Contents*<br>SNOMED (EMIS, System1)<br>9826008<br>READ code (Vision) | **No antibiotics – most are viral or self-limiting. Advise self-care in line with NHS England guidance.** | | |
| | **Only treat if severe.** Bacterial conjunctivitis is usually unilateral and also self-limiting. 65% resolve by day five. Fusidic acid has less Gram-negative activity. | ***If severe:***<br>Chloramphenicol eye drops 0.5% *<br>One drop every 2 hours for 2 days then reduce to 4 hourly and / or<br>eye ointment 1% Apply at night if used with drops or 3 -4 times a day if used alone. Duration: for 48 hours after healing. | Second line:<br>Fusidic acid 1% gel twice a day<br>Duration: for 48 hours after healing. |


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| | |
|---|---|
| F4C0. | *AGE <2years: MHRA Drug Safety Update July 2021<br>Chloramphenicol eye drops containing borax or boric acid buffers: use in children younger than 2 years<br><br>“Following a review of the available toxicological data and a calculation of daily exposure to boron from a typical dosing regimen, we have concluded that the balance between the benefits and risks of chloramphenicol eye drops containing borax or boric acid remains positive for children aged 0 to 2 years. Chloramphenicol eye drops can be safely administered to children aged 0 to 2 years where antibiotic eye drop treatment is indicated.” |

Adapted from NICE / UKHSA – Summary of antimicrobial prescribing guidance – managing common infections: October 2019 and respective NICE guidance.

To discuss treatment options or any concerns, please discuss with local microbiologist.
For training resources and patient information leaflets please see RCGP Target antibiotics toolkit.


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# Appendix 1

Changes to version 17.0 – *Back to Contents*

| Section | Change made | Detail |
|---|---|---|
| **Planned review date** | Nov 2026 | |
| **Principle of treatment** | Corrected hyperlink for point 4 and added point 5 to highlight pharmacy first service by community pharmacy | |
| **Acute Otitis Media** | Changed flucloxacillin dose dose from 250/500mg QDS to 500mg QDS | **Changed dose from 250/500mg QDS to 500mg QDS** |
| **Influenza** | Updated PHE to UKHSA | |
| **Cellulitis / erysipelas** | Changed duration<br>Changed doxycycline dose | Duration from 7 (up to 14 days) To 5 to 7 days (up to 14 if needed)<br>Doxycycline changed from 100mg BD to 100mg OD |
| **Gonorrhea** | Ceftriaxone dose changed to align with BASHH 2025 | Changedfrom Ceftriaxone 1g IM stat to Ceftriaxone 500mg IM stat (urogenital/rectal); 1g reserved for pharyngeal |
| **Acute prostatitis** | Ciprofloxacin<br>duration | From up to 28 days to 14 days as per NICE NG110 |
| **Recurrent UTI** | Change of definition and added methenamine as a treatment option | Old definition of recurrent UTI 3 or more UTIs per year changed to 2+ in 6 months or 3+ in 12 months as per NICE NG112. Methenamine Hippurate as non-antibiotic prophylaxis option 1g BD added (review 6mo then 12-monthly) NICE NG112 |
| **Paediatric CAP** | Change of duration | From Amoxicillin 5 days (all children) to 3 days for children 3 months–11 years with non-severe CAP in line with NICE NG250 |
| **Eradication of Helicobacter pylori** | Added bismuth quadruple regimen | Restricted Pylera entry + counselling added |
| **Scabies** | Oral ivermectin added as second line | |


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## APPENDIX 2

## Antibiotic prescribing indication national SNOMED + READ codes

## General principles

**• Correct coding allows clinicians to evidence they are working to NICE guidelines, Antimicrobial stewardship: systems and processes for effective antimicrobial medicine use**

**• These indications and codes should cover the majority of antibiotic prescribing scenarios**

| ***Broad spectrum specific GMMMG indications*** | ***SNOMED Code (For EMIS & System1 practices)*** | ***READ Code (For VISION practices)*** |
|---|---|---|
| Lower UTI in pregnancy | Urinary tract infection in pregnancy (disorder) **307534009** | UTI in pregnancy **L166z** |
| Lower UTI in children | Lower urinary tract infectious disease (disorder) **4009004** | Urinary tract infect.unsp.site **K190.** |
| Acute pyelonephritis in adults & children (Upper UTI) | Acute pyelonephritis (disorder) **36689008** | Acute pyelonephritis **K101.** |
| Acute prostatitis | Acute prostatitis (disorder) **79411002** | Acute prostatitis **K210.** |
| Pseudomonas infection | Infection caused by Pseudomonas (disorder) **63398001** | Pseudomonas infection **A3B7.** |
| Acute sinusitis *(If systematically very unwell, symptoms and signs of a more serious illness or condition or at high risk of complication.)* | Acute sinusitis (disorder) **15805002** | Acute sinusitis **H01..** |
| Community acquired pneumonia treatment in the community *(If high severity based on clinical judgement/ CRB65 = 3+ & patient able to take oral medicines and safe to remain at home.)* | Community acquired pneumonia (disorder) **385093006** | Community acquired pneumonia **H2B..** |
| Acute diverticulitis | Diverticulitis (disorder) **307496006** | Diverticulitis **J511.** |
| Epididymitis | Epididymitis (disorder) **31070006** | Epididymitis **K241.** |
| Gonorrhoea | Gonorrhea (disorder) 15628003 | Gonorrhea A98z. |
| Pelvic inflammatory disease | Female pelvic inflammatory disease (disorder) - **198130006**<br>Acute pelvic inflammatory disease (disorder) **237037006** | Female pelvic inflamm.diseases **K4...**<br>Acute pelvic inflamm disease **K409.** |
| Cellulitis (If infection near eyes or nose. Also seek specialist advice) | Cellulitis (disorder) **128045006** | Cellulitis NOS **M03z0** |
| Mastitis – Non-Lactational | Nonpuerperal mastitis (disorder) **83620003** | Mastitis – non puerperal **K310.** |
| Bites - Human | Human bite (event) **242605002** | [X] Bite from human **U120.** |
| Bites - Cat or dog | Bite of animal (event) **418975000** | Animal bites **TE6..** |



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## For other indications found on the GMMMG antibiotics guidelines, please see below:

| *SECTION* | *SNOMED Code (For EMIS and System1 practices)* | *READ Code (For VISION practices)* |
|---|---|---|
| GENERAL | | |
| Antibiotic prophylaxis indicated | Antibiotic prophylaxis indicated (situation) **413555000** | Antibiotic prophylaxis indicated **8BG8.** |
| Prophylactic antibiotic therapy | Prophylactic antibiotic therapy (procedure) **422181004** | Prophylactic antibiotic therapy **8B65.** |
| General respiratory disease rescue pack | Prescription of respiratory disease rescue medication (procedure) **913741000000100** | Prescription of respiratory disease rescue medication **8766.** |
| Medication requested (Can be used to track external antibiotic requests) | Medication requested (situation) **182888003** | Medication requested **8B3H.** |
| Hospital prescription | Hospital prescription (situation) **394995008** | Hospital prescription 8B2D. |
| UPPER RESPIRATORY TRACT INFECTIONS | | |
| General code (Respiratory) | Respiratory tract infection (disorder) **275498002** | Chest infection NOS **H06z0** |
| Influenza treatment | Influenza (disorder) **6142004** | Influenza **H27..** |
| Acute sore throat | Pain in throat (finding) **162397003**<br>Tonsillitis (disorder) **90176007** | Throat pain **1CB3.**<br>Acute Tonsillitis **H03..** |
| Acute Pharyngitis | Acute Pharyngitis (disorder) **363746003** | Acute Pharyngitis **H02..** |
| Acute otitis media | Acute otitis media (disorder) **3110003** | Acute otitis media with effusion **F5100** |
| Acute otitis externa | Acute otitis externa (disorder) **30250000** | Acute swimmers' ear **F5013** |
| General code (Ear) | Infection of ear (disorder) **129127001** | Infection ear **F52z.11** |
| Acute sinusitis | Acute sinusitis (disorder) **15805002** | Acute sinusitis **H01..** |
| LOWER RESPIRATORY TRACT INFECTIONS | | |
| Acute cough bronchitis | Acute bronchitis (disorder) 10509002 | Acute bronchitis H060. |
| Acute exacerbation of COPD | Acute exacerbation of chronic obstructive airways disease (disorder) **195951007**<br>Issue of chronic obstructive pulmonary disease rescue pack (procedure) **718241000000107** | Acute exacerbation of COAD **H3122**<br>Issue of COPD rescue pack **8BMW.** |
| Acute exacerbation of COPD – PROPHYLAXIS | Antibiotic prophylaxis indicated (situation) **413555000** | Antibiotic prophylaxis indicated **8BG8.** |
| Community acquired pneumonia treatment in the community (Adults) | Community acquired pneumonia (disorder) **385093006** | Community acquired pneumonia **H2B..** |
| Community acquired pneumonia treatment in the community (Children & young people under 18 years. | Community acquired pneumonia (disorder) **385093006** | Community acquired pneumonia **H2B..** |
| Tuberculosis | Tuberculosis (disorder) **56717001** | Tuberculosis **A1…** |



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| | | |
|---|---|---|
| MENINGITIS | | |
| Suspected meningococcal disease | meningitis (disorder) **95883001** | Bacterial meningitis **F00..** |
| URINARY TRACT INFECTION | | |
| UTI unspecified site | Urinary Tract infection **68566005** | Urinary Tract Infection unspecified site **K190.** |
| Lower UTI in non-pregnant women | Lowr urinary tract infectious disease (disorder) **4009004** | Urinary tract infect.unsp.site **K190.** |
| Catheter associated UTI | Urinary tract infection associated with catheter (disorder) **700372006** | Catheter-associated UTI **SP07Q** |
| Lower UTI in pregnancy | Urinary tract infection in pregnancy (disorder) **307534009** | UTI in pregnancy **L166z** |
| Lower UTI in men | Lower urinary tract infectious disease (disorder) **-4009004** | Urinary tract infect.unsp.site **K190.** |
| Recurrent UTI in non-pregnant women 3 or more UTIs per year | Recurrent urinary tract infection (disorder) **197927001** | Recurrent UTI **K1903** |
| Acute prostatitis | Acute prostatitis (disorder) **79411002** | Acute prostatitis **K210.** |
| Acute pyelonephritis in adults (Upper UTI) | Acute pyelonephritis (disorder) **36689008** | Acute pyelonephritis **K101.** |
| Lower UTI in children | Lower urinary tract infectious disease (disorder) **4009004** | Urinary tract infect.unsp.site **K190.** |
| Acute Pyelonephritis in children | Acute pyelonephritis (disorder) **36689008** | Acute pyelonephritis **K101.** |
| GASTRO INTESTINAL TRACT INFECTIONS | | |
| General code (Gastro) | Infection of gastrointestinal tract (disorder) **715852004** | Infectious colitis, enteritis **A080.** |
| Oral candidiasis | Candidiasis of mouth (disorder) **79740000** | Oral candidiasis **AB20.** |
| General code (Oral) | Oral infection (disorder) **275393007** | Infection mouth **J083z** |
| Eradication of Helicobacter pylori | Helicobacter eradication therapy (procedure) **281897000** | Helicobact eradication therapy **8BAC.** |
| Infectious diarrhoea | Infectious diarrheal disease (disorder) **19213003** | Infectious diarrhoea **A082.** |
| Clostridium difficile | Clostridium difficile infection (disorder) **186431008** | Clostridium difficile infect **A3Ay2** |
| Acute diverticulitis | Diverticulitis (disorder) **307496006** | Diverticulitis **J511.** |
| Travellers diarrhoea | Traveler's diarrhea (disorder) **11840006** | Travellers' diarrhoea **A082.** |



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| GENITAL TRACT INFECTIONS | | |
|---|---|---|
| STI screening | Venereal disease screening (procedure) - **171128005** | Venereal disease screening **6832.** |
| Chlamydia trachomatis/ urethritis | Chlamydial infection (disorder) **105629000**<br>Nongonococcal urethritis (disorder) **84619001**<br>Urethritis (disorder) **31822004** | Chlamydial infection **A78A.**<br>Nonspecific urethritis **A994.**<br>Other urethritis **K17y.** |
| Epididymitis | Epididymitis (disorder) **31070006** | Epididymitis **K241.** |
| Vaginal candidiasis | Candidiasis of vagina (disorder) **72934000** | Candidiasis of vagina **AB211** |
| Bacterial vaginosis | Bacterial vaginosis (disorder) **419760006** | Bacterial vaginosis **K4219** |
| Gonorrhoea | Gonorrhea (disorder) **15628003** | Gonorrhea **A98z.** |
| Trichomoniasis | Infection caused by Trichomonas (disorder) **56335008**<br>Trichomonal vaginitis (disorder) **276877003** | Trichomoniasis - trichomonas **AD1..**<br>Trichomonal vaginitis **AD101** |
| Pelvic inflammatory disease | Female pelvic inflammatory disease (disorder) - **198130006**<br>Acute pelvic inflammatory disease (disorder) **237037006** | Female pelvic inflamm.diseases **K4...**<br>Acute pelvic inflamm disease **K409.** |
| SKIN INFECTIONS | | |
| General code (Skin/soft tissue) | Infection of skin and/or subcutaneous tissue (disorder) **19824006** | Skin/subcutaneous infections **2Fd0.** |
| MRSA | Methicillin resistant Staphylococcus aureus infection (disorder) **266096002** | Methicillin resistant staph a **A3B11** |
| Impetigo | Impetigo (disorder) - **48277006** | Impetigo **M05..** |
| Eczema | Eczema (disorder) **43116000** | Eczema NOS **M12z1** |
| Cellulitis | Cellulitis (disorder) **128045006** | Cellulitis NOS **M03z0** |
| Acne | Acne (disorder) **11381005** | Acne, unspecified **M261X00** |
| Rosacea | Rosacea (disorder) **398909004** | Rosacea **M153.** |
| Leg ulcer | Ulcer of lower extremity (disorder) **95344007** | Leg ulcer NOS **M271.** |
| Diabetic Foot | Cellulitis in diabetic foot (disorder) **200687002** | Cellulitis in diabetic foot **M0372** |
| Mastitis - Lactational | Mastitis - obstetric (disorder) **274131006** | Purulent mastitis- obstetric **L451** |
| Mastitis - Non-Lactational | Nonpuerperal mastitis (disorder) **83620003** | Mastitis - non puerperal **K310.** |
| Bites - Human | Human bite (event) **242605002** | Bite from human **U120.** |



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|---|---|---|
| Bites - Cat or dog | Bite of animal (event) **418975000** | Animal bites **TE6..** |
| Lyme disease - Tick bite | Lyme disease (disorder) **23502006** | Lyme disease **A8710** |
| Dermatophyte infection - skin | Dermatophytosis (disorder) **47382004** | Dermatophytosis NOS **AB0z.** |
| Dermatophyte infection - nail | Onychomycosis caused by dermatophyte (disorder)- **402134005** | Dermatophytosis of nail **AB01.** |
| Varicella zoster/chicken pox | Varicella (disorder) **38907003** | Chickenpox - varicella **A52..** |
| Herpes zoster/shingles | Herpes zoster (disorder) **4740000** | Herpes zoster **A53..** |
| Scarlet Fever (GAS) | Scarlet fever (disorder) **30242009** | Scarlet fever **A341.** |
| Cold sores | Herpes labialis (disorder) **1475003** | Herpes labialis **A54z.** |
| PARASIITES | | |
| Scabies | Infestation by Sarcoptes scabiei var hominis (disorder) **128869009** | Scabies **AD30.** |
| Head lice | Pediculosis capitis (disorder) **81000006** | Pediculus capitis - head lice **AD20.** |
| Threadworms | Enterobiasis (disorder) **266162007** | Enterobiasis - threadworm **AC74.** |
| EYE INFECTIONS | | |
| General code (Eye) | Eye infection (disorder) **128351009** | Eye infection **F4C0.** |
| Conjunctivitis | Conjunctivitis (disorder) **9826008** | Conjunctivitis **F4C0.** |



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