**Principles of Treatment**

1. This guidance is based on the best available evidence but its application must be modified by professional judgement.
2. A dose and duration of treatment is suggested. In severe or recurrent cases consider a larger dose or longer course.
3. Prescribe an antibiotic only when there is likely to be a clear clinical benefit.
4. Consider a no, or delayed, antibiotic strategy for acute sore throat, common cold, acute cough and acute sinusitis.
5. Limit prescribing over the telephone to exceptional cases.
6. Use simple generic antibiotics first whenever possible. Avoid broad spectrum antibiotics (eg co-amoxiclav, quinolones and cephalosporins) when narrow spectrum antibiotics remain effective, as they increase risk of *Clostridium difficile*, MRSA and resistant UTIs.
7. Avoid widespread use of topical antibiotics (especially those agents also available as systemic preparations).
8. In pregnancy AVOID tetracyclines, aminoglycosides, quinolones, *high dose* metronidazole. Short-term use of trimethoprim (theoretical risk in first trimester in patients with poor diet, as folate antagonist) or nitrofurantoin (at term, theoretical risk of neonatal haemolysis) is unlikely to cause problems to the foetus.
9. Generic clarithromycin has fewer side effects than erythromycin and tablets are now similar in cost; clarithromycin suspensions still remain more expensive and the use of erythromycin suspension remains a cost effective choice.
10. Where a ‘best guess’ therapy has failed or special circumstances exist, microbiological advice can be obtained from 0161 206 5030.

### ILLNESS

**Upper respiratory tract infections:** Consider delayed antibiotic prescriptions.

<table>
<thead>
<tr>
<th>Illness</th>
<th>Comments</th>
<th>Drug</th>
<th>Dose</th>
<th>Duration of TX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td>Annual vaccination is essential for all those at risk of influenza. For otherwise healthy adults, antivirals are not recommended. Treat ‘at risk’ patients, only when influenza is circulating in the community, within 48 hours of onset. At risk: 65 years or over, chronic respiratory disease (including COPD and asthma) significant cardiovascular disease (not hypertension), immunocompromised, diabetes mellitus, chronic renal disease and chronic liver disease. Use oseltamivir 75 mg oral capsule BD (for OD prophylaxis see Influenza NICE) or zanamivir 10 mg (2 inhalations by diskhaler) BD for 5 days. Patients under 13 years see HPA influenza link attached or website.</td>
<td>First line penicillin phenoxymethylpenicillin</td>
<td>500 mg QDS</td>
<td>10 days</td>
</tr>
<tr>
<td>Pharyngitis / sore throat / tonsillitis</td>
<td>The majority of sore throats are viral: most patients do not benefit from antibiotics. Consider a delayed antibiotic strategy and explain soreness will take about 8 days to resolve. Patients with 3 of 4 centor criteria (history of fever, purulent tonsils, cervical adenopathy, absence of cough) or history of otitis media may benefit more from antibiotics. Antibiotics only shorten duration of symptoms by 8 hours. You need to treat 30 children or 145 adults to prevent one case of otitis media.</td>
<td>Clarithromycin if allergic to penicillin</td>
<td>250 - 500 mg BD</td>
<td>10 days</td>
</tr>
<tr>
<td>Otitis media (child doses)</td>
<td>Many are viral. Illness resolves over 4 days in 80% without antibiotics. Prescribe a NSAID or paracetamol for pain and to reduce any temperature. Antibiotics do not reduce pain in first 24 hours, subsequent attacks or deafness. Need to treat 20 children &gt;2y and seven 6-24m old to get pain relief in one at 2-7 days. It is important that analgesia is also provided with any antibiotic prescribed. Haemophilus is an extracellular pathogen, thus macrolides, which concentrate intracellularly, are less effective treatment.</td>
<td>Amoxicillin first line</td>
<td>40 mg/kg/day in 3 divided doses Maximum 1g TDS</td>
<td>5 days*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Erythromycin if allergic to penicillin</td>
<td>&lt;2 yrs 125 mg QDS 2-8 yrs 250 mg QDS</td>
<td>5 days*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9yrs plus: 250-500 mg BD</td>
<td>5 days*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Azithromycin second line if allergic to penicillins</td>
<td>15-25kg 200 mg OD 26-35kg 300 mg OD 36-45kg 400 mg OD</td>
<td>5 days*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-6 yrs 156 mg TDS 6-12 yrs 312 mg TDS</td>
<td>5 days*</td>
<td></td>
</tr>
</tbody>
</table>

*Standing Medical Advisory Committee guidelines suggest 3 days. In otitis media, relapse rate is slightly higher at 10 days with a 3-day course but long-term outcomes are similar. A+ = systematic review; D = informal opinion

**Note:** Doses are oral and for adults unless otherwise stated. Please refer to BNF for further information.
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<tbody>
<tr>
<td><strong>UPPER RESPIRATORY TRACT INFECTIONS:</strong> Consider delayed antibiotic prescriptions. Continued</td>
<td></td>
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</tr>
<tr>
<td>Acute sinusitis</td>
<td>Many are viral. Symptomatic benefit of antibiotics is small - 69% resolve without antibiotics; and 84% resolve with antibiotics. Reserve for severe or symptoms (&gt;10 days). Cochrane review concludes that amoxicillin and phenoxymethylpenicillin have similar efficacy to the other recommended antibiotics. If failure to respond use another first line antibiotic then second line.</td>
<td>amoxicillin A+ or doxycycline OR clarithromycin</td>
<td>500 mg TDS 200 mg stat/100 mg OD 250 mg -500mg BD</td>
<td>7 days 7 days 7 days</td>
</tr>
<tr>
<td>Acute cough, bronchitis</td>
<td>In Primary Care antibiotics have marginal benefits in otherwise healthy adults. Patient leaflets can reduce antibiotic use.</td>
<td>amoxicillin OR doxycycline</td>
<td>500 mg TDS 200 mg stat/100 mg OD</td>
<td>5 days 5 days</td>
</tr>
<tr>
<td>Acute exacerbation of COPD</td>
<td>30% viral, 30-50% bacterial, rest undetermined. Use antibiotics if increased dyspnoea and increased purulence of sputum volume. Antibiotics may also be considered if inflammatory markers are raised or temperature &gt;38°C (without other source of infection identified and either increasing volume of sputum or persisting shortness of breath is present.</td>
<td>amoxicillin If penicillin allergic use: Clarithromycin 2nd Line use: doxycycline</td>
<td>500 mg TDS 500 mg BD 200 mg stat/100 mg OD</td>
<td>5 days 5 days 5 days</td>
</tr>
<tr>
<td>Community-acquired pneumonia - treatment in the community</td>
<td>Start antibiotics immediately. If no response in 48 hours consider admission or add clarithromycin first line or a tetracycline to cover Mycoplasma infection (rare in over 65s). In severely ill give parenteral benzylpenicillin before admission and seek risk factors for Legionella and Staph. aureus infection.</td>
<td>amoxicillin OR clarithromycin Consider adding if no response after 48 hours doxycycline</td>
<td>500 mg - 1g TDS 500 mg BD 200 mg stat/100 mg OD</td>
<td>Up to 7 days Up to 7 days</td>
</tr>
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</table>

**LOWER RESPIRATORY TRACT INFECTIONS**

**Note:** Avoid tetracyclines in pregnancy. Low doses of penicillins are more likely to select out resistance. The quinolones ciprofloxacin and ofloxacin have poor activity against pneumococci. However, they do have use in PROVEN pseudomonal infections. Levofloxacin has some anti-Gram-positive activity but should not be needed as first line treatment.

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<td>amoxicillin OR clarithromycin Consider adding if no response after 48 hours doxycycline</td>
<td>500 mg - 1g TDS 500 mg BD 200 mg stat/100 mg OD</td>
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**MENINGITIS**

**Suspected meningococcal disease**

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<tr>
<td>Transfer all patients to hospital immediately. Administer benzylpenicillin prior to admission, unless history of anaphylaxis, NOT allergy. Ideally IV but IM if a vein cannot be found.</td>
<td>IV or IM benzylpenicillin</td>
<td>Adults and children 10 yr and over: 1200 mg Children 1-9 yr: 600mg Children &lt;1 yr: 300mg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prevention of secondary case of meningitis:**

Only prescribe following advice from Public Health Doctor: 9 am – 5 pm: ☎ 0161 789 6710 Out of hours: Contact on-call doctor via Tameside switchboard: ☎ 0161 331 6000

**PROPHYLAXIS**

**Endocarditis**

**Prophylaxis in Adult patients**

<table>
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<tbody>
<tr>
<td>When to offer prophylaxis</td>
<td>Do not offer antibiotic prophylaxis against infective endocarditis:</td>
<td></td>
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<tr>
<td>to people undergoing dental procedures</td>
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<tr>
<td>to people undergoing non-dental procedures at the following sites:</td>
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<tr>
<td>- upper and lower gastrointestinal tract</td>
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<tr>
<td>- genitourinary tract; this includes urological, gynaecological and obstetric procedures, and childbirth</td>
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<tr>
<td>- upper and lower respiratory tract; this includes ear, nose and throat procedures and bronchoscopy.</td>
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<tr>
<td>Do not offer chlorhexidine mouthwash as prophylaxis against infective endocarditis to people at risk undergoing dental procedures.</td>
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**Note:** Doses are oral and for adults unless otherwise stated. Please refer to BNF for further information.
### URINARY TRACT INFECTIONS

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<tr>
<td><strong>URINARY TRACT INFECTIONS</strong></td>
<td>HPA UTI quick reference guidance</td>
<td>ESBLs</td>
<td>Prodigy</td>
<td></td>
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</tbody>
</table>

**Note:** Amoxicillin resistance is common, therefore ONLY use if culture confirms susceptibility. In the elderly (>65 years), do not treat asymptomatic bacteriuria; it occurs in 25% of women and 10% of men and is not associated with increased morbidity. In the presence of a catheter, antibiotics will not eradicate bacteriuria; only treat if systemically unwell or pyelonephritis likely.

- Uncomplicated UTI i.e. no fever or flank pain in men or women
- **HPA UTI quick reference guidance**

| Uncomplicated UTI | Use urine dipstick to exclude UTI -ve nitrile and leucocyte 95% negative predictive value. There is less relapse with trimethoprim than cephalosporins or pivmecillinam. Community multi-resistant E. coli with Extended-spectrum Beta-lactamase enzymes are increasing so perform culture in all treatment failures. | **First line nitrofurantoin**<sup>A+</sup> | **If contraindicated use trimethoprim**<sup>B+</sup> | 100 mg m/r BD | 200 mg BD | 3 days<sup>B+</sup> 7 days in men |

**second line** - depends on susceptibility of organism isolated e.g. amoxicillin, cefalexin, quinolone, doxycycline. ESBLs are multi-resistant but may remain sensitive to nitrofurantoin.

**UTI in pregnancy**

Send MSU for culture. Short-term use of trimethoprim or nitrofurantoin in pregnancy is unlikely to cause problems to the foetus.<sup>B+</sup>

| Children | Refer children <3 months to specialist. Send MSU in all for culture and susceptibility. If ≤3 years, use positive nitrite to start antibiotics. Refer children post UTI for imaging. Upper – UTI – co-amoxiclav. | **trimethoprim OR nitrofurantoin** | **second line cefalexin** | nitrofurantoin OR trimethoprim | 100 mg m/r BD | 200 mg BD | 500 mg BD | 7 days | 7 days | 7 days |

**Acute pyelonephritis**

Send MSU for culture; remember to modify treatment according to sensitivity results, if necessary. RCT shows 7 days ciprofloxacin is as good as 14 days co-trimoxazole if no response within 24 hours admit. Do not use nitrofurantoin.

| Acute pyelonephritis | Send MSU for culture; remember to modify treatment according to sensitivity results, if necessary. RCT shows 7 days ciprofloxacin is as good as 14 days co-trimoxazole if no response within 24 hours admit. Do not use nitrofurantoin. | **co-amoxiclav** | **If susceptible use trimethoprim** | | | | | | | |

### GASTRO-INTESTINAL TRACT INFECTIONS

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<td><strong>GASTRO-INTESTINAL TRACT INFECTIONS</strong></td>
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</table>

**Eradication of Helicobacter pylori**

- **NICE** See Salford PCT guidance.
- **Managing symptomatic relapse**

| Eradication of Helicobacter pylori | Eradication is beneficial in DU, GU and low grade MALTOMA, but NOT in GORD.<sup>A</sup> In NUD, 8% of patients benefit. Triple treatment attains >85% eradication.<sup>A+</sup> Do not use clarithromycin or metronidazole if used in the past year for any infection.<sup>C</sup> DU/GU: Retest for helicobacter if symptomatic NUD: Do not retest, treat as functional dyspepsia. In treatment failure consult gastroenterologist or microbiology. | **first line**<sup>A+</sup> cheapest option omeprazole PLUS clarithromycin AND metronidazole (MZ) OR amoxicillin (AM) | Alternative regimen<sup>A+</sup> PPI PLUS bismuthate (DE-NOL tablets) PLUS 2 antibiotics: amoxicillin clarithromycin<sup>A+</sup> metronidazole oxytetracycline | 20 mg BD | 250 mg BD with MZ 500mg BD with AM 400 mg BD 1g BD | BD 240 mg BD 1 g BD 500 mg BD 400 mg BD 500 mg QDS | All for 7 days<sup>A</sup> 14 days in relapse or maltoam | |

**Infectious diarrhoea**

- **CKS**

**Antibiotic therapy not indicated unless patient systematically unwell or post-antibiotic, suggesting Clostridium Difficile.**
<table>
<thead>
<tr>
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<tr>
<td><strong>GASTRO-INTESTINAL TRACT INFECTIONS Continued.</strong></td>
<td></td>
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</tr>
<tr>
<td>Traveller’s diarrhoea</td>
<td>Limit prescription of antibacterial to be carried abroad and taken if illness develops (ciprofloxacin 750 mg single dose) to people travelling to remote areas and for people in whom an episode of infective diarrhoea could be dangerous. In areas of high ciprofloxacin resistance (Asia) can advise prophylactic bismuth subsalicylate.</td>
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</tr>
<tr>
<td>Clostridium Difficile Infection</td>
<td>CDAD is a common cause of diarrhoea and usually follows antibiotic therapy. Hand washing with soap and water is important as alcohol gels are not effective against C. Diff. spores. Discontinue current antibiotic therapy if or necessary change to antibiotic less likely to cause CDAD – confirm with Microbiology. Antimotility drugs are contraindicated. If symptoms not resolving or worsening after 6-7 days use vancomycin. Do not retest samples within 28 days unless negative. Re-test if 2nd episode occurs after more than one month.</td>
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<tr>
<td>Traveller’s diarrhoea</td>
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</tr>
<tr>
<td>Traveller’s diarrhoea</td>
<td>First &amp; Second episode: metronidazole 400mg TDS 10 days</td>
<td>vancomycin 125mg QDS 14 days</td>
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</tr>
<tr>
<td><strong>GENITAL TRACT INFECTIONS – UK NATIONAL GUIDELINES</strong></td>
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</tr>
<tr>
<td>Note: Refer patients with risk factors for STIs (&lt;25y, no condom use, recent (&lt;12mth) or frequent change of sexual partner, previous STI, symptomatic partner) to GUM clinic or general practices with level 2 or 3 expertise in GUM.</td>
<td></td>
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<tr>
<td>Vaginal candidiasis</td>
<td>All topical and oral azoles give 80-95% cure. A In pregnancy avoid oral azole B</td>
<td>clotrimazole 10% OR clotrimazole OR fluconazole</td>
<td>5 g vaginal cream 500 mg pessary 150 mg orally</td>
<td>stat stat stat</td>
</tr>
<tr>
<td><strong>Note:</strong> Refer patients with risk factors for STIs (&lt;25y, no condom use, recent (&lt;12mth) or frequent change of sexual partner, previous STI, symptomatic partner) to GUM clinic or general practices with level 2 or 3 expertise in GUM.</td>
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<tr>
<td>Bacterial vaginosis</td>
<td>A 7 day course of oral metronidazole is slightly more effective than 2 g stat. A Avoid 2g stat dose in pregnancy. Topical treatment gives similar cure rates B but is more expensive.</td>
<td>metronidazole A OR metronidazole 0.75% vag gel A OR clindamycin 2% cream A</td>
<td>400 mg BD 5 g applicatorful at night 5 g applicatorful at night</td>
<td>7 days 5 days 7 days</td>
</tr>
<tr>
<td>Chlamydia trachomatis Chlamydia quick reference guide</td>
<td>Tetracyclines are contra-indicated in pregnancy. Treat partners Refer contacts to GUM clinic</td>
<td>doxycycline A OR azithromycin A</td>
<td>100 mg BD 1 g stat</td>
<td>7 days 1 hr before or 2 hrs after food</td>
</tr>
<tr>
<td>Uncomplicated anogenital Gonorrhoea HPA guidelines</td>
<td>Refer to GUM. Treat partners simultaneously. Infection must have been confirmed by laboratory results. Possible co-infection with Trichomonas vaginalis, Candida albicans and Chlamydia trachomatis.</td>
<td>cefixime Note: this is an unlicensed indication</td>
<td>400mg</td>
<td>stat</td>
</tr>
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Next Review: February 2010
### GENITAL TRACT INFECTIONS – UK NATIONAL GUIDELINES

**Vaginal discharge quick reference guide**

**BASHH**

**Continued.**

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<tr>
<td>Pelvic Inflammatory Disease (PID) BASHH guidelines</td>
<td>Essential to test for <em>N. gonorrhoea</em> (as increasing antibiotic resistance) and <em>Chlamydia</em>. Microbiological and clinical cure are greater with ofloxacin than with doxycycline. Refer contacts to GUM clinic.</td>
<td>metronidazole plus ofloxaacin⁵ or metronidazole plus doxycycline⁵</td>
<td>400 mg BD 400 mg BD 400 mg BD 100 mg BD</td>
<td>14 days 14 days 14 days 14 days</td>
</tr>
<tr>
<td>Acute prostatitis BASHH guidelines</td>
<td>4 weeks treatment may prevent chronic infection. Therapy may need to be modified in line with culture results.</td>
<td>trimethoprim⁵ or ciprofloxacin</td>
<td>200 mg BD 500 mg BD</td>
<td>28 days 28 days</td>
</tr>
</tbody>
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**SKIN / SOFT TISSUE INFECTIONS**

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<tr>
<td>Impetigo CKS</td>
<td>Systematic review indicates topical and oral treatment produces similar results. As resistance is increasing reserve topical antibiotics for very localised lesions. Reserve Mupirocin for MRSA.</td>
<td>flucloxacillin or erythromycin</td>
<td>First line flucloxacillin or erythromycin alone co-amoxiclav</td>
<td>Oral 500 mg QDS Oral 500 mg QDS Topically QDS Topically QDS</td>
</tr>
<tr>
<td>Eczema CKS</td>
<td>Using antibiotics, or adding them to steroids, in eczema does not improve healing unless there are visible signs of infection.</td>
<td>Lymecycline</td>
<td>408 mg BD</td>
<td>Supply monthly with frequent review.</td>
</tr>
<tr>
<td>Acne CKS</td>
<td>Topical preparations should be used to treat mild to moderate acne. Oral antibiotics should be used for moderate or severe acne where topical preparations are not tolerated or are ineffective or where application to the site is difficult. Severe acne should be referred to the dermatology service.</td>
<td>flucloxacillin</td>
<td>500 mg QDS 500 mg QDS</td>
<td>7 – 14 days 7 – 14 days</td>
</tr>
<tr>
<td>Cellulitis CKS</td>
<td>If patient afebrile and healthy other than cellulitis flucloxacillin may be used as single drug treatment. If febrile and ill, admit for IV treatment. In facial cellulitis use co-amoxiclav.</td>
<td></td>
<td>625 mg TDS</td>
<td>7 – 14 days</td>
</tr>
<tr>
<td>Leg ulcers CKS</td>
<td>Bacteria will always be present. Antibiotics do not improve healing. Culture swabs and antibiotics are only indicated if there is evidence of clinical infection such as inflammation/redness/cellulitis; increased pain; purulent exudate; rapid deterioration of ulcer or pyrexia. Sampling for culture requires cleaning then vigorous curettage and aspiration – superficial swabs are of limited use.</td>
<td>1st line for Grade 0 &amp; Grade 1: flucloxacillin plus amoxycillin Penicillin allergic: erythromycin</td>
<td>1000 mg QDS 500 mg QDS 500 mg QDS</td>
<td>7 to 14 days, if no improvement at 14 days refer to multidisciplinary foot clinic.</td>
</tr>
<tr>
<td>Animal bite CKS</td>
<td>Surgical toilet most important. Assess tetanus and rabies risk. Antibiotic prophylaxis advised for puncture wound; bite involving hand, foot, face, joint, tendon, ligament; immunocompromised, diabetics, elderly, asplenic</td>
<td>First line animal &amp; human prophylaxis and treatment co-amoxiclav⁶</td>
<td>375-625 mg TDS 200-400 mg TDS 100 mg BD</td>
<td>7 days 7 days 7 days</td>
</tr>
<tr>
<td>Human bite CKS</td>
<td>Antibiotic prophylaxis advised. Assess HIV/hepatitis B &amp; C risk</td>
<td>2nd Line: clindamycin PLUS ciprofloxacin</td>
<td>300 mg QDS or 450 mg TDS 500 mg BD</td>
<td>7 days 7 days</td>
</tr>
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<tr>
<td>Conjunctivitis</td>
<td>Most bacterial infections are self-limiting (64% resolve on placebo(^A^+)). They are usually unilateral with yellow-white mucopurulent discharge.</td>
<td>chloramphenicol 0.5% drops + 1% ointment gentamcin 0.3% drops</td>
<td>2 hrly reducing to QDS at night 2 hrly reducing to QDS</td>
<td>All for 48 hours after resolution</td>
</tr>
<tr>
<td>Scabies</td>
<td>Treat whole body including scalp, face, neck, ears, under nails. Treat all household contacts.</td>
<td>permethrin(^A^+) Second line if above contraindicated: malathion</td>
<td>5% cream 0.5%aqueous liquid</td>
<td>2 applications one week apart</td>
</tr>
<tr>
<td>Head Lice</td>
<td>Only patients referred into GPs, from the Community Pharmacy Head Lice Scheme due to resistance, should be treated.</td>
<td>Referred due to resistance: carbaryl</td>
<td>1% Aqueous Liquid or 0.5% Alcoholic Lotion</td>
<td>2 applications one week apart</td>
</tr>
<tr>
<td>Dermatophyte infection of the proximal fingernail or toenail</td>
<td>Take nail clippings: Start therapy only if infection is confirmed by laboratory. Idiosyncratic liver reactions occur rarely with terbinafine. For infections with yeasts and non-dermatophyte moulds use itraconazole.(^C) Itraconazole can also be used for dermatophytes</td>
<td>5% amorolfine nail lacquer(^C) (for superficial) terbinafine(^A^+) itraconazole</td>
<td>1-2x/weekly fingers toes 250 mg OD fingers toes 200 mg BD fingers toes</td>
<td>6 months 12 months 6 – 12 weeks 3 – 6 months 7 days monthly 2 courses 7 days monthly 3 courses</td>
</tr>
<tr>
<td>Dermatophyte infection of the skin</td>
<td>Take skin scrapings for culture. Treatment: 1 week terbinafine is as effective as 4 weeks azole.(^A) If intractable consider oral itraconazole. Discuss scalp infections with specialist.</td>
<td>Topical 1% terbinafine(^A^+) Topical undecenoic acid or 1% azole(^A^+)</td>
<td>OD - BD 1-2x/daily</td>
<td>1 week(^A^+) 4 – 6 weeks(^A^+)</td>
</tr>
<tr>
<td>Varicella zoster/ Chicken pox &amp; Herpes zoster/shingles</td>
<td>If pregnant seek advice re treatment and prophylaxis Chicken pox: Clinical value of antivirals minimal unless immunocompromised, severe pain, adult, on steroids, secondary household case AND treatment started &lt;24h of onset of rash.(^A) Shingles: Always treat ophthalmic. Non-opthalmic: Treat &gt;60 yrs if &lt;72h of onset of rash, as post-herpetic neuralgia rare in &lt;50 yrs but occurs in 20% &gt;60y(^A^+). Treatment of herpes simplex should start as early as possible and usually within 5 days of the appearance of infection. In severe infection or immunocompromised individuals use oral treatment.</td>
<td>For chicken pox use: aciclovir For shingles use: aciclovir or valaciclovir or famciclovir Ophthalmic treatment: aciclovir 3% eye ointment For herpes labialis: aciclovir 5% cream or penciclovir 1% cream</td>
<td>800 mg 5x/day 800 mg 5x/day 1 g TDS 250 mg TDS Child doses – see BNF Apply 5 times a day Apply to lesions every 4 hours (5 times daily) Apply every 2 hours during waking hours</td>
<td>7 days 7 days 7 days 7 days until 3 days after healing 5 – 10 days 4 days</td>
</tr>
<tr>
<td>Dental Abscess</td>
<td>Initiate antibiotic therapy if necessary, refer to a Dentist</td>
<td>amoxicillin or metronidazole</td>
<td>250mg TDS 200mg TDS</td>
<td>5 days 5 days</td>
</tr>
</tbody>
</table>

**Note:** Doses are oral and for adults unless otherwise stated. Please refer to BNF for further information.

Letters indicate strength of evidence:

\(^A^+\) = systematic review; \(D\) = informal opinion

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The following references were used when developing these guidelines:

This guidance was initially developed in 1999 by practitioners in South Devon, as part of the S&W Devon Joint Formulary Initiative, and Cheltenham & Tewkesbury Prescribing Group and modified by the PHLS South West Antibiotic Guidelines Project Team, PHLS Primary Care Co-ordinators and members of the Clinical Prescribing Sub-group of the Standing Medical Advisory Committee on Antibiotic Resistance. It was further modified following comments from Internet users. The guidance has been updated annually as significant research papers, systematic reviews and guidance have been published. The Health Protection Agency works closely with Prodigy.

These guidelines have been further reviewed to reflect local antibiotic resistance patterns and guidelines. This has been carried out by the Medicines Management Team of Salford PCT in conjunction with Microbiology at Salford Royal Foundation Trust.

Grading of guidance recommendations

The strength of each recommendation is qualified by a letter in parenthesis.

<table>
<thead>
<tr>
<th>Study design</th>
<th>Recommendation grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good recent systematic review of studies</td>
<td>A+</td>
</tr>
<tr>
<td>One or more rigorous studies, not combined</td>
<td>A-</td>
</tr>
<tr>
<td>One or more prospective studies</td>
<td>B+</td>
</tr>
<tr>
<td>One or more retrospective studies</td>
<td>B-</td>
</tr>
<tr>
<td>Formal combination of expert opinion</td>
<td>C</td>
</tr>
<tr>
<td>Informal opinion, other information</td>
<td>D</td>
</tr>
</tbody>
</table>

UPPER RESPIRATORY TRACT INFECTIONS

Influenza

http://www.hpa.org.uk/infections/topics_az/influenza/seasonal/default.htm


Pharyngitis/sore throat/tonsillitis


Clinical Knowledge Summaries @ http://www.cks.library.nhs.uk/sore_throat_acute Accessed 29.09.08

Zwart Sjoerd, Sachs APE, Ruijs G, Gubbels JW, Hoes AW, de Melker RA. Penicillin for acute sore throat: randomised double blind trial of seven days versus three days treatment or placebo in adults. Brit Med J 2000;320:150-4. RCT showing 7 days penicillin V at 500 mg was better than 3 days in terms of time of symptom resolution, bacterial resolution and relapse.


Otitis media

Dagan R, Klugman KP, Craig WA. Baquero F. Evidence to support the rationale that bacterial eradication in respiratory tract infection is an important aim of antimicrobial therapy. J Antimicrob Chemother 2001;47:129-140. (Discusses penetration of antibiotics in OM)


**Rhinosinusitis**


Clinical Knowledge Summaries @ [http://www.cks.library.nhs.uk/sinusitis](http://www.cks.library.nhs.uk/sinusitis) Accessed 08.06.07


**LOWER RESPIRATORY TRACT INFECTIONS**

**Acute bronchitis**


**Note:** Doses are oral and for adults unless otherwise stated. Please refer to BNF for further information.

Treatment of cough available in Clinical Knowledge Summaries website: http://www.cks.library.nhs.uk/sore_throat_acute/about_this_topic Accessed 29.09.08

COPD


Exacerbation of COPD guidelines from Salford Royal Foundation Trust.

Community-acquired pneumonia


MENINGITIS


Pre-admission benzylpenicillin for suspected meningococcal disease: other antibiotics not needed in the GP bag. CDR Weekly 15 February 2001.

Health Protection Agency Meningococcus Forum with Public Health Medicine Environmental Group, the Scottish Centre for Infection and Environmental Health, CDSC Wales, CDSC Northern Ireland, the Association of Medical Microbiologists, and the Community Infection Control Nurses Network. Guidelines for public health management of meningococcal disease in the UK. Updated August 2006 http://www.hpa.org.uk/infections/topics_az/meningo/meningococcalguidelines.pdf Accessed 08.06.07

URINARY TRACT INFECTIONS

Elderly


Uncomplicated UTI


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Livermore D, & Woodford N. Laboratory detection of bacteria with extended-spectrum beta-lactamases. CDR Weekly 2004;14 No. 27.


**UTI in pregnancy**

Information from the National Teratology Information Service (Tel: 0191 230 2036, Fax: 0191 232 7692) states:

Trimethoprim is a folate antagonist. In some women low folate levels have been associated with an increased risk of malformations. However, in women with normal folate status, who are well nourished, therapeutic use of trimethoprim for a short period is unlikely to induce folate deficiency.

A number of retrospective reviews and case reports indicate that there is no increased risk of foetal toxicity following exposure to nitrofurantoin during pregnancy. Serious adverse reactions eg peripheral neuropathy, severe hepatic damage and pulmonary fibrosis are extremely rare. Nitrofurantoin can cause haemolysis in patients with G6PD deficiency. Foetal erythrocytes have little reduced glutathione and there is a theoretical possibility that haemolysis may occur. However, haemolytic disease of the new-born has not been reported following in utero exposure to nitrofurantoin.

**Children**


**Acute pyelonephritis**

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Talan DA, Stamm WE, Hooton TM, Moran GJ, Burke T, Irvani A, Reuning-Scherer J and Church DA. Comparison of ciprofloxacin (7 days) and trimethoprim-sulfamethoxazole (14 days) for acute uncomplicated pyelonephritis in women. A randomized trial. JAMA 2000;283:1583-90. Evidence for 7 days ciprofloxacin.


GASTRO-INTESTINAL TRACT INFECTIONS

Eradication of Helicobacter pylori


NICE dyspepsia guidance. August 2004. Evidence indicates once daily PPI plus metronidazole 400mg BD + clarithromycin 250mg BD is as effective as using BD PPI or 500mg clarithromycin. This regimen is cheaper than using BD PPI or higher dose clarithromycin. [http://www.nice.org.uk/pdf/CG017fullguideline.pdf](http://www.nice.org.uk/pdf/CG017fullguideline.pdf) Accessed 05.12.06

Gastroenteritis


Gastroenteritis guidance in Prodigy: [http://www.cks.library.nhs.uk/gastroenteritis](http://www.cks.library.nhs.uk/gastroenteritis) Accessed 08.06.07


Traveller’s diarrhoea


GENITAL TRACT INFECTIONS


Sexually Transmitted Infections 1999;75:Suppl 1. UK National Guidelines on Sexually Transmitted Infections and Closely Related Conditions. These guidelines are fully comprehensive and extensively referenced.

Note: Doses are oral and for adults unless otherwise stated. Please refer to BNF for further information.
SKIN/SOFT TISSUE INFECTIONS

Impetigo


Eczema


Clinical Knowledge Summaries – atopic eczema. http://www.cks.library.nhs.uk/eczema_atopic/about_this_topic/have_i_got_the_right_topic Accessed 29.09.08

Cellulitis

Dilemmas when managing cellulitis. Drugs & Therapeutic Bulletin 2003;41:43-46. (Review of the management of cellulitis)


Diabetic leg ulcer


Animal/human bites


Note: Doses are oral and for adults unless otherwise stated. Please refer to BNF for further information.

Letters indicate strength of evidence:
A+ = systematic review; D = informal opinion


**Conjunctivitis**


**Scabies**


**Dermatophytes**


**Chickenpox/shingles**


Hope-Simpson RE. Postherpetic neuralgia. *Brit J Gen Pract* 1975;25:571-75. Study showing that incidence of post-herpetic neuralgia in a general practice population increases with age and is much more common in over 60 year olds.

*Note:* *Doses are oral and for adults unless otherwise stated. Please refer to BNF for further information.*

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