# Upper respiratory tract infections

## Influenza

Annual vaccination is essential for all those ‘at risk’ of influenza.

Antivirals are not recommended for healthy adults.

**At risk patients include**: pregnant (and up to 2 weeks post-partum); children under 6 months; adults 65 years or older; chronic respiratory disease (including COPD and asthma); significant cardiovascular disease (not hypertension); severe immunosuppression; chronic neurological, renal or liver disease; diabetes mellitus, morbid obesity (BMI > 40).

PHE or DH will advise when influenza is considered to be circulating in the community. To check the current situation, please log onto PHE.

Last updated: Dec 2019

Treat at risk patients when influenza is circulating in the community or in a care home where influenza is likely. Treatment must be started within 48 hours of symptoms.

**Treatment**: oseltamivir 75 mg BD for 5 days.

**Prophylaxis**: oseltamivir 75 mg OD for 10 days.

Reduced dose of oseltamivir is required if CrCl < 60 mL/minute.

With severe immunosuppression, treatment will be dependent on the main circulating strain. Please see advice from PHE.

## Labyrinthitis

Antibiotics not indicated.

Last updated: Dec 2019

## Laryngitis, acute

Antibiotics not indicated.

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## Otitis externa, acute

**Caution**: topical neomycin has been known to cause ototoxicity and must not be used if there is a suspicion of ear drum perforation.

If cellulitis or disease extends outside ear canal, or systemic signs of ear infection, start oral antibiotic and refer to exclude malignant otitis externa.

**Laboratory diagnosis**: not indicated unless there are signs of cellulitis.

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**First line**: analgesia for pain relief and apply localised heat (such as a warm flannel).

**Second line**: [OTC] acetic acid 2% (Ear Calm®) 1 spray TDS for 7 days

**Third line**: topical neomycin sulphate with corticosteroid (Betnesol-N®, Otomize®, Otosporin®) 3 drops TDS (1 spray TDS for Otomize®) for 7 days.

**Tympanic membrane perforation**: ciprofloxacin 2 mg/ml (Cetraxal®) ear drops 0.25 ml twice a day for 7 days (off-label use).

**If cellulitis or extensive infection to outside of ear canal**: flucloxacillin 500 mg QDS for 7 days.

**Penicillin allergy**: clarithromycin 500 mg BD for 7 days.

## Otitis media, acute

Evidence does not support routine use of antibiotics. Consider back up prescription for antibiotics.

Acute otitis media (AOM) resolves in 60% of cases in 24 hours without antibiotics, which only reduce pain at 2 days (NNT 15) and do not prevent deafness. 80% of cases will resolve within 72 hours.

**Offer immediate antibiotic to**:

- People who are systemically unwell but do not require admission.
- People at high risk of serious complications because of significant heart, lung, renal, liver or neuromuscular disease, immunosuppression or cystic fibrosis, and young children who were born prematurely.

**Depending on severity, consider offering immediate antibiotic prescription to**:

- Children younger than 2 years of age with bilateral AOM.
- Otorrhoea in all ages.

**Laboratory diagnosis**: not routinely indicated.

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NICE acute otitis media 2-page visual summary

Last updated: Dec 2019

**Optimise analgesia.**

**First line**: amoxicillin 500 mg TDS for 5 days.

**Penicillin allergy**: clarithromycin 500 mg BD for 5 days **or** erythromycin (preferred in pregnancy) 500 mg QDS for 5 days.

**Second line**: co-amoxiclav 500/125 mg TDS for 5 days.

## Parotid gland infection

**Caution**: suppurative parotitis is potentially life threatening. Most patients require initial IV antibiotic treatment.

Ensure patient is hydrated.

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**If oral treatment is considered appropriate**: flucloxacillin 1 g QDS for 14 days **and** metronidazole 400 mg TDS for 14 days.

**Penicillin allergy**: clindamycin 450 mg QDS for 14 days.

## Perichondritis

Perichondritis confined to the pinna can be managed in primary care, but cellulitis spreading across the face needs referral to the local ENT unit and often results in admission for intravenous antibiotics due to the risk of haematogenous intracranial spread.

Most frequent causative agent is Pseudomonas aeruginosa. Less frequently Staphylococcus aureus can also be involved.

Consider referring patient to ENT due to risk of complications such as abscess formation or necrosis. Often associated with ear piercing, foreign body has to be removed.

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**First line**: ciprofloxacin 500 mg BD for 7 days.

**In cases of cellulitis**: refer and consider addition of flucloxacillin 500 mg QDS **or** clindamycin 300 mg QDS until ENT assessment.

## Scarlet fever

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.

Notify the local Public Health England (PHE) centre once a working diagnosis of scarlet fever is made.

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**Optimise analgesia and give safety netting advice**.

**First line**: phenoxymethylpenicillin 500 mg QDS for 10 days.

**Penicillin allergy**: clarithromycin 500 mg BD for 5 days

## Sinusitis, acute

Avoid antibiotics where possible as 80% of cases resolve in 14 days without, and they only offer marginal benefit after 7 days.

**Symptoms < 10 days**: no antibiotic.

**Symptoms with no improvement > 10 days**: no antibiotic or back up antibiotic if several of the following are present: discoloured or purulent nasal discharge, severe localised unilateral pain, fever or marked deterioration after initial milder phase.

**Serious signs and symptoms**: immediate antibiotic.

**Refer to hospital if signs and symptoms of acute sinusitis associated with any of the following**:

- Severe systemic infection.
- Intraorbital or periorbital complications including periorbital oedema or cellulitis, a displaced eyeball, double vision, ophthalmoplegia, or newly reduced visual acuity.
- Intracranial complications including swelling over the frontal bone, symptoms or signs of meningitis, severe frontal headache or focal neurological signs.

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NICE Sinusitis 2-page visual summary

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**First line**: phenoxymethylpenicillin 500 mg QDS for 5 days.

**Penicillin allergy**: doxycycline 200 mg on day 1, then 100 mg daily for 5 days in total **or**
clarithromycin 500 mg BD for 5 days **or**
erythromycin (preferred in pregnancy) 500 mg QDS or 1000 mg BD for 5 days.

**Second line** (or first line if systemically very unwell or high risk of complications): co-amoxiclav 500/125 mg TDS for 5 days.

Advise paracetamol or ibuprofen for pain.

**Consider high-dose nasal corticosteroid** (off-label use): mometasone 100 micrograms (2 sprays) into each nostril twice a day for at least one month depending on the disease course.

**Chronic sinusitis**: antibiotics are not routinely indicated except for acute exacerbations. Complex cases managed by secondary care.

## Sore throat, acute

**Avoid antibiotics**: 82% of cases resolve in seven days without, and pain is only reduced by 16 hours.

**Use FeverPAIN or Centor to assess symptoms**:

FeverPAIN 0-1 or Centor 0-2: no antibiotic.

FeverPAIN 2-3: no or back-up antibiotic.

FeverPAIN 4-5 or Centor 3-4: immediate or back-up antibiotic.

**Systemically very unwell or high risk of complications**: immediate antibiotic or refer to secondary care.

Take a throat swab only in persistent or relapsed infections lasting 3-4 weeks.

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NICE sore throat 2-page visual summary

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**Consider self-care and safety netting or a back-up prescription**.

**First choice**: phenoxymethylpenicillin 500 mg QDS or 1000 mg BD for 10 days.

**Severe symptoms**: phenoxymethylpenicillin 1000 mg QDS for 10 days.

**Penicillin allergy**: clarithromycin 500 mg BD for 5 days **or** erythromycin (preferred in pregnancy) 500 mg QDS or 1000 mg BD for 5 days.