

This document has been produced by NHS Greater Glasgow & Clyde and contains dosing information on a range of alternative antibiotic preparations.

This is supplemental information to the information produced by the NHS Grampian Antibiotic Management Team (AMT).

The AMT information document relating to antibiotic choices should be used within NHS Grampian and the information below used to support with appropriate dosing only.



Antibiotic management of Group A Streptococcus (GAS, *Strep. pyogenes*) infection in children

Interim guidance (07/12/22): Antibiotic Management of Group A Streptococcus (GAS)

Purpose and scope:

The purpose of this guidance is to inform the antimicrobial management of suspected or confirmed GAS infections in children presenting to primary, secondary and unscheduled care settings across NHS Greater Glasgow and Clyde. This guidance provided healthcare provider setting with suitable alternative treatments where there are disruptions in the supply chain of particular antibiotics.

The scope of this guidance includes antibiotic choice, formulation choice, dosing information and duration of treatment. Practical guidance on the administration of solid oral dosage forms to children is also included.

Clinical diagnosis and decision to treat is out with the scope of this guidance.

Background:

The UKHSA and PHS have reported on an unusually high number of children presenting with lower respiratory tract GAS infection, including pulmonary empyema. A large proportion of cases have indicated co-infection with respiratory viruses including RSV, influenza, human metapneumovirus (hMPV) and enterovirus. Within NHS GGC we have also been experiencing an increase cases of tonsillitis and scarlet fever.

This has placed an unprecedented pressure on the medication supply chain in both Primary and Secondary care across the UK. National Procurement are working with the Medicines Supply Team at the DHSC to manage supplies across the UK regions. Acute shortages are however being noted across all sectors at this time.

The antibiotic recommendations included within this guidance are based on our knowledge of both the local and national epidemiology and resistance patterns.

Under Part 7 of the Drug Tariff (Shortages), pharmacies are permitted to offer an alternative formulation and/or drug where the prescribed medication cannot be supplied. This can be done under the guidance below.

General principles:

- Encourage use of solid oral dosage formulations in older children
- Production selection for each drug should follow the priority lists below based on age/weight and dosage administered.
- Switch to the most appropriate product where available. If not available, switch to an alternative formulation of the same drug.
- Where the drug is not available, any of the drugs contained within this document can be substituted. Follow the priority list for formulation as shown.

****Caution in penicillin allergy – use clarithromycin/erythromycin****

**Supplemental Information
REFERENCE FOR DOSING ONLY**

SEE NHSG AMT INFORMATION RE ANTIBIOTIC CHOICES.

Guidance: Antibiotic management of Group A Streptococcus (GAS)

- 1) Assess all patients aged 5 years and over for ability to swallow solid oral dosage forms**
 - a. Ask parent/carer/patient if they can and/or are willing to swallow tablets or capsules
 - b. Utilise information provided in the KIDZMEDS programme. This can be found at [Healthier Together | Pill Swallowing \(Kidzmed\) \(nenc-healthiertogether.nhs.uk\)](https://www.healthiertogether.nhs.uk/healthier-together/pill-swallowing-kidzmed)
 - c. Refer to Specialist Pharmacy Service resource on using solid oral dosage forms in children at <https://www.sps.nhs.uk/articles/using-solid-oral-dosage-form-antibiotics-in-children/>
- 2) Penicillin V remains the first line choice for suspected GAS infection (unless penicillin allergic), however where Penicillin V is unavailable pharmacies/ED setting should provide ANY of the following antibiotics, unless the patient has a known penicillin allergy**
 - a. Assess the patient for contraindications and drug interactions
 - b. Offer appropriate antibiotic therapy with whichever agent is in stock/available.

Penicillin V - doses as per BNF-c

For acute sore throat – 5 day course. For fever continuing at day 5, offer additional 5 days course.
For Scarlet fever – 10 day course. If systemically unwell and/or no improvement at 48hrs, refer to PED

Children aged 1-11 months: 62.5mg *four times a day*

- 125mg/5ml liquid
- 250mg/5ml liquid: Give 1.3ml (*Supply oral syringe for administration*)

Children aged 1-5 years: 125mg *four times a day*

- 250mg/5ml liquid
- 125mg/5ml liquid
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Children aged 6-11years: 250mg *four times a day*

- 250mg tablets
- 500mg tablets: Consider halving tablets if scored.
- 250mg/5ml liquid
- 125mg/5ml liquid

Children aged 12 years and above: 500mg *four times a day*

- 500mg tablets
- 250mg tablets
- Liquid preparations reserved for exceptional circumstances

Please select most appropriate formulation based on the priority list above.

**Supplemental Information
REFERENCE FOR DOSING ONLY**

**SEE NHSG AMT INFORMATION
RE ANTIBIOTIC CHOICES.**

Amoxicillin - doses as per BNF-c

For acute sore throat – 5 day course. For fever continuing at day 5, offer additional 5 days course.
For Scarlet fever – 10 day course. If systemically unwell and/or no improvement at 48hrs, refer to PED

Children aged 1-11 months: 125mg *three times a day*

- 125mg/5ml liquid
- 250mg/5ml liquid

Children aged 1-4 years: 250mg *three times a day*

- 250mg/5ml liquid
- 125mg/5ml liquid

Children aged 5-11years: 500mg *three times a day*

- 500mg capsules
- 250mg capsules.
- 250mg/5ml liquid
- 125mg/5ml liquid

Children aged 12 years and above: 500mg *three times a day*

- 500mg capsules
- 250mg capsules
- Liquid preparations reserved for exceptional circumstances

Please select most appropriate formulation based on the priority list above

**Supplemental Information
REFERENCE FOR DOSING ONLY**

***SEE NHSG AMT INFORMATION
RE ANTIBIOTIC CHOICES.***

Clarithromycin - doses as per BNF-c****Note – first line for penicillin allergy****

For acute sore throat – 5 day course. For fever continuing at day 5, offer additional 5 days course.
For Scarlet fever – 10 day course. If systemically unwell and/or no improvement at 48hrs, refer to PED

Children aged 1 month - 11 years

- Body weight 8-11kg : 62.5mg *twice a day*
 - Liquid 125mg/5ml
 - Liquid 250mg/5ml: Give 1.3ml (*Supply oral syringe for administration*)

- Body weight 12-19kg: 125mg *twice a day*
 - 1-4 years:
 - Liquid 250mg/5ml
 - Liquid 125mg/5ml
 - 5 -11 years:
 - Tablets 250mg
 - Liquid 250mg/5ml
 - Liquid 125mg/5ml

- Body weight 20-29kg: 187.5mg *twice a day*
 - *All ages – liquid preparations as this dose cannot be measured using tablet formulations*
 - Liquid 250mg/5ml

- Body weight 30-40kg: 250mg *twice a day*
 - 1-4 years:
 - Liquid 250mg/5ml
 - Liquid 125mg/5ml
 - 5-11 years:
 - Tablets 250mg
 - Tablets 500mg. *Consider halving tablets if scored.*
 - Liquid 250mg/5ml
 - Liquid 125mg/5ml

Children aged 12 years and above (body weight >40kg) 500mg *twice a day*

- 500mg tablets
- 250mg tablets
- Liquid preparations reserved for exceptional circumstances

Please select most appropriate formulation based on the priority list above

Prescribing note: Consider drug-drug interactions for patients taking medication metabolized through the cytochrome P450 pathways.

**Supplemental Information
REFERENCE FOR DOSING ONLY**

**SEE NHSG AMT INFORMATION
RE ANTIBIOTIC CHOICES.**

Erythromycin - doses as per BNF-c

For acute sore throat – 5 day course. For fever continuing at day 5, offer additional 5 days course.
For Scarlet fever – 10 day course. If systemically unwell and/or no improvement at 48hrs, refer to PED

Children aged 1-23 months: 125mg four times a day

- 125mg/5ml liquid
- 250mg/5ml liquid

Children aged 2-7 years: 250mg four times a day

- 2-4 years: 250mg/5ml liquid
125mg/5ml liquid
- 5-7 years: 250mg tablets
500mg tablets. *Consider halving tablets if scored.*
250mg/5ml liquid
125mg/5ml liquid

Children aged 8 years -11 years: 500mg four times a day

- 500mg tablets
- 250mg tablets.
- 250mg/5ml liquid
- 125mg/5ml liquid

Children aged 12 years and above: 500mg four times a day

- 500mg tablets
- 250mg tablets
- Liquid preparations reserved for exceptional circumstances

Please select most appropriate formulation based on the priority list above

**Supplemental Information
REFERENCE FOR DOSING ONLY**

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RE ANTIBIOTIC CHOICES.**

Co-amoxiclav - doses as per BNF-c **contains penicillin**

For acute sore throat – 5 day course. For fever continuing at day 5, offer additional 5 days course.
For Scarlet fever – 10 day course. If systemically unwell and/or no improvement at 48hrs, refer to PED

Children aged 1-11 months: 0.5ml/kg *three times a day*

- 125mg/31mg per ml liquid

Children aged 1-5 years: see below

- 125mg/31mg per 5ml: 5ml *three times a day*
- 250mg/62mg per 5ml: 2.5ml *three times a day*

Children aged 6-11 years: see below

- 250mg/62mg per 5ml: 5ml *three times a day*
- 125mg/31mg per 5ml: 10ml *three times a day*

Children aged 12 years and above:

- 250mg/125mg tablets: 1 tablet *three times a day*
- Liquid preparations reserved for exceptional circumstances

Please select most appropriate formulation based on the priority list above

Cefalexin - doses as per BNF-c **caution in penicillin allergy**

For acute sore throat – 5 day course. For fever continuing at day 5, offer additional 5 days course.
For Scarlet fever – 10 day course. If systemically unwell and/or no improvement at 48hrs, refer to PED

Children aged 1-11 months: 125mg *twice a day*

- 125mg/5ml liquid
- 250mg/5ml liquid

Children aged 1-4 years: 125mg *three times a day*

- 250mg/5ml liquid
- 125mg/5ml liquid

Children aged 5-11 years: 250mg *three times a day*

- 250mg capsules.
- 250mg/5ml liquid
- 125mg/5ml liquid

Children aged 12 years and above: 500mg *three times a day*

- 500mg capsules
- 250mg capsules
- Liquid preparations reserved for exceptional circumstances

Please select most appropriate formulation based on the priority list above

**Supplemental Information
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****Advice on the use of solid oral dosage forms in children.**

For all children aged 5 year and above, assess for ability to swallow tablets/capsules. Penicillin tablets are small and easily swallowed using good technique. Advice can be found at [Healthier Together | Pill Swallowing \(Kidzmed\)](https://www.healthier-together.nhs.uk/healthier-together/kidzmed) ([nenc-healthiertgether.nhs.uk](https://www.healthier-together.nhs.uk)), along with practical information for parents/carers.



Using solid oral dosage form antibiotics in children – SPS - Specialist Pharmacy Service – The first stop for professional medicines advice

<https://www.sps.nhs.uk/articles/using-solid-oral-dosage-form-antibiotics-in-children/>