Summary of key changes in the Group A Streptococcal Sore Throat Management Guideline: 2019 Update.

The Heart Foundation has three New Zealand guidelines for rheumatic fever:

- Diagnosis, Management and Secondary Prevention of Acute Rheumatic Fever and Rheumatic Heart Disease 2006. Updated 2014.
- Group A Streptococcal (GAS) Sore Throat Management 2008. Updated 2014 and 2019.
- Proposed Rheumatic Fever Primary Prevention Programme 2009.

In 2019 several sections of the GAS Sore Throat Management Guideline were updated, namely:

- a redefinition of 'high risk for rheumatic fever'
- revisions of Clinical Question 7 on the management of treatment failure and GAS recurrence, including the removal of cephalexin from antibiotic prescribing
- erythromycin regime change
- revision of household contact management.

Definition of high risk for ARF

The **definition of high risk for rheumatic fever** is now more precise. Whilst acknowledging that high risk includes the 3-35 years old, there is an **emphasis on children and adolescents aged 4-19 years old**, as they are the highest-risk age group for ARF and for spreading GAS amongst households.

The revised definition for 'high risk' now also includes Māori and Pacific in the 3-35 years age bracket (although emphasis remains on children and adolescents).

Management of treatment failure and GAS recurrence (Clinical Question 7)

Clinical Question 7 has been reformatted and revised to address the management of patients depending on whether they are at **high or low** risk for developing ARF. Key changes include:

- End of treatment swabbing, although not routine, is now recommended for:
    - GAS recurrence, where it is the child's or adolescent's third of more consecutive symptomatic GAS positive pharyngitis in a three-month period
    - those who remain symptomatic after completing their full course of antibiotics.

- Cephalexin has been removed as an option for management of recurrent group A streptococcal sore throat, as there is no evidence to support its use, when compared with clindamycin and co-amoxyclavulinate[1,2]

- An additional algorithm has been developed on managing recurrent treated group A streptococcal (GAS) positive sore throats in children and adolescents at high risk of rheumatic fever.

Household contact management

In high-risk settings for rheumatic fever, the previous (2008 and 2014) recommendations have been revised to emphasise swabbing child and adolescent household contacts, aged 4 to 19 years old:

- **Symptomatic** household members of a person with GAS pharyngitis should be throat swabbed, with emphasis on children and adolescents, and treated if GAS positive.
- Where there is a personal, family or household history of rheumatic fever, **all** household members (with emphasis on children and adolescents aged 4-19) of a person with GAS positive pharyngitis should be swabbed regardless of whether they are symptomatic or asymptomatic, as both have the potential risk of spreading GAS. This will also apply during an outbreak of rheumatic fever or acute post streptococcal glomerulonephritis. See below.
- Where **an individual** has had three or more episodes of GAS pharyngitis in the last three months, **all** household members (with emphasis on children and adolescents aged 4-19 years old), should be swabbed to identify and treat any pharyngeal GAS regardless of whether they are symptomatic or asymptomatic as both have the potential risk of spreading GAS.
- Where there have been three or more cases in **a household** in the last three months, all household members, with emphasis on children and adolescents, should be swabbed to identify and treat any GAS carriers who may be at potential risk of spreading GAS.
- **In an outbreak of GAS pharyngitis in a closed or semi-closed community** (e.g. a classroom or boarding school) **all** members should be swabbed, with emphasis on children and adolescents, to identify and treat any pharyngeal GAS, regardless of whether they are symptomatic or asymptomatic as both those with incident pharyngitis and carriers have the potential risk of spreading GAS. **Management of all community** members with GAS is desirable in order to control an outbreak.

Erythromycin recommendations

Erythromycin maximum daily dose has been increased to 1600mg.

Table of key medication changes

2014	2019
Routine Antibiotics – 1st or 2nd GAS pharyngitis	
Penicillin: Adolescents & Adults ≥20kg	Penicillin: Children & Adults ≥20kg
Roxithromycin – pending Pharmac approval	Roxithromycin approved
Erythromycin max daily dose: 1000mg	Erythromycin max daily dose: 1600mg
Routine Antibiotics – 3rd or more GAS in 3 months	
Cephalexin: Children and Adults	Cephalexin removed

References

1. Munck H, Jørgensen AW, Klug TE, Antibiotics for recurrent acute pharyngo-tonsillitis: systematic review, European Journal of Clinical Microbiology and Infectious Disease (2018), 37: 1221-1230.

2. Shulman ST et al. Clinical practice guideline for the diagnosis and management of group A streptococcal pharyngitis: 2012 Update by the Infectious Diseases Society of America. Clin Infect Dis. 2012; 55: 1279-1282