

## Antibiotic guidelines for managing sore throat

Dear Editor

*The current "policy" of seeking strep wherever it might lie and giving antibiotics in the idea that this overall gives benefit will surely at some stage be seen to be misguided.*

*We have registrars and medical students reciting and following this advice, that even if the illness in no sense suggests streptococcal pharyngitis we should swab then treat regardless of any rational idea that the bug is relevant to the presentation.*

*Surely this simply promotes misguided prescribing of unnecessary antibiotics and hence enhances rates of resistance. The single focus on one organism seems to conflict with what first year medical students are taught. Is there to be a similar campaign for Neisseria meningitidis when found in the nasopharynx? How many deaths due to multi-resistance will be due to this policy?*

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General Practitioner  
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**We invited Associate Professor Mark Thomas, Infectious Diseases Physician, to comment on this correspondence:**

Dr Deacon expresses concern about current approaches to the treatment of sore throat for the prevention of rheumatic fever, and in particular may be concerned about the clinical practice of colleagues influenced by the recently updated New Zealand Heart Foundation guidelines for management of sore throat, available at:

**[www.heartfoundation.org.nz/uploads/sore\\_throat\\_guideline\\_14\\_10\\_06FINAL-revised.pdf](http://www.heartfoundation.org.nz/uploads/sore_throat_guideline_14_10_06FINAL-revised.pdf)**

These guidelines do include some surprising recommendations that are likely to significantly increase antimicrobial prescribing for patients with a sore throat, and for asymptomatic carriers of *Streptococcus pyogenes*. Increased antimicrobial prescribing arising from these guidelines will inevitably contribute to increased antimicrobial resistance, and thus have unintended negative effects on the health of our community. In my opinion, there are a number of very contentious recommendations in the guidelines.

The guidelines recommend that people at high risk of rheumatic fever (Māori and Pacific peoples aged 3–35 years) who present with a sore throat, should not be clinically assessed to attempt to determine whether they are presenting either with an illness suggestive of streptococcal pharyngitis or with an illness suggestive of a viral upper respiratory infection. The effect is that a person who presents with a sore throat, plus rhinorrhoea, a hoarse voice, cough, no tonsillar erythema, no cervical lymphadenopathy, and no fever, will be treated in the same way as a person who presents with a sore throat, tonsillar erythema, cervical lymphadenopathy and fever. This will inevitably result in antimicrobial treatment of some people who, regardless of their throat swab results, are at very low risk of having streptococcal pharyngitis. This recommendation is not supported by high-level evidence and is not consistent with other international guidelines.

The New Zealand Heart Foundation guidelines recommend that "it might not be appropriate to collect a throat swab" in patients with a sore throat who "are not contactable by telephone, are not likely or able to return for a prescription if *S.pyogenes* is isolated, or who present at emergency departments or clinics where processes do not support




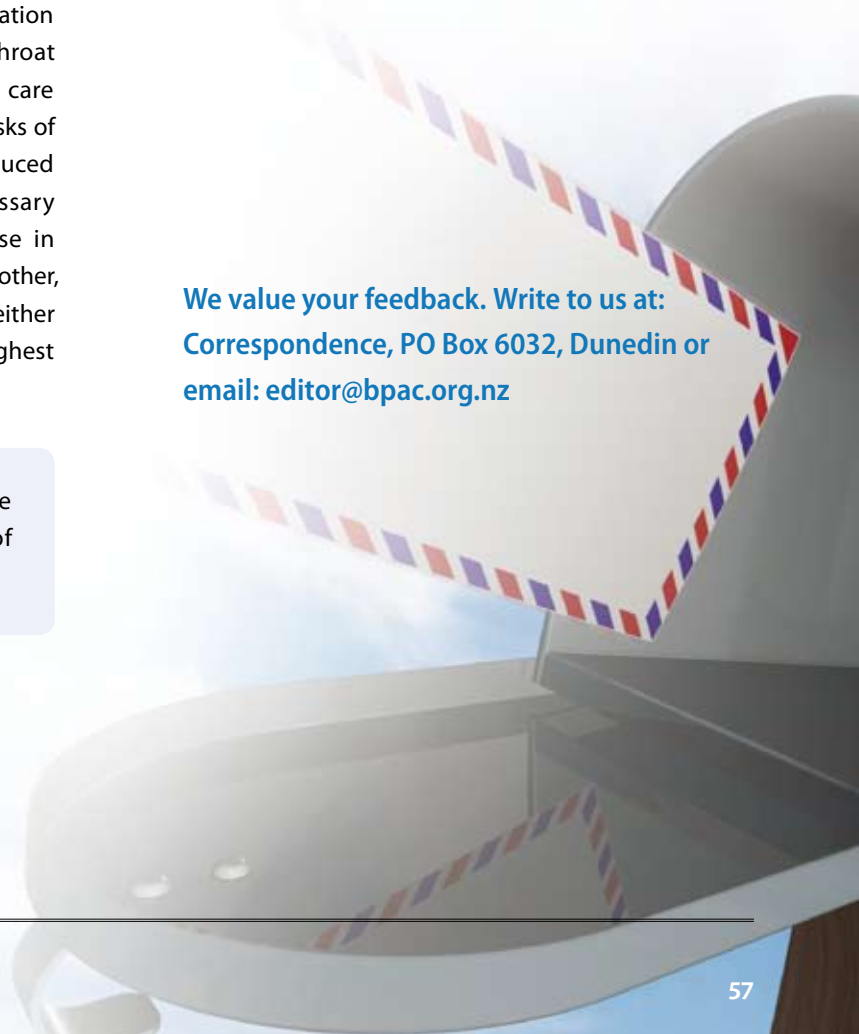
follow-up". This recommendation is not supported by high-level evidence and is not consistent with other international guidelines, and is completely inconsistent with the stated aim of the guideline: "to maximise diagnosis and management of pharyngitis in those who are at greatest risk of developing rheumatic fever". When combined with the recommendation not to clinically assess patients at high risk of rheumatic fever for features suggestive of streptococcal pharyngitis, it will increase the proportion of people with a sore throat, who are treated with an antibiotic without having either clinical or microbiological evidence of streptococcal pharyngitis.

The guidelines recommend that a number of asymptomatic population groups should be swabbed and treated if found to be carriers of *S. pyogenes*. These groups include: household contacts of patients who have had "recurrent *S. pyogenes* pharyngitis", those "at increased risk of spreading *S. pyogenes*" such as "healthcare and residential care workers, food handlers, teachers and childcare workers". This recommendation also is not supported by high level evidence and is not consistent with other international guidelines.

In my opinion, the updated New Zealand Heart Foundation guidelines for diagnosis and management of sore throat encourage health care workers to provide low quality care for many patients at high risk of rheumatic fever. The risks of the low quality care that is recommended include reduced diagnostic certainty, a marked increase in unnecessary antimicrobial prescribing, and a consequent increase in antimicrobial resistance. I am concerned that these, and other, adverse effects have not been adequately considered, either by health professionals, or by those communities at highest risk of rheumatic fever.

**CONTRIBUTED BY:** Dr Mark Thomas, Associate Professor in Infectious Diseases, University of Auckland.

 The Ministry of Health's Rheumatic Fever Prevention Programme aims to support primary care efforts to prevent and treat Group A streptococci throat infections in individuals at high risk of developing rheumatic fever. The Ministry is currently conducting work to clarify best practice sore throat management in primary care, and investigate how this is best embedded in primary care practice. bpac<sup>nz</sup> is assisting the Ministry with part of this project.



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