

# Acute rheumatic fever rates worsening in Māori and Pacific children

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Acute rheumatic fever (ARF) rates of Māori and Pacific people have increased in New Zealand over the past decade, and are some of the highest seen in a developed country, according to public health researchers at the [University of Otago Wellington](#).

Most recent figures (2003-05) show that 91 per cent of ARF cases are of either Māori or Pacific ethnicity.

Dr Richard Jaine and Associate Professor Michael Baker have revealed significant and worsening ethnic disparities in this serious disease, particularly prevalent in the Māori and Pacific 5-14 year age group. Rates for Māori and Pacific children are very high at 34 and 67 cases per 100,000 respectively, compared to 3 cases per 100,000 for New Zealand European and Others (NZEO).

"When we looked at 1249 new hospital admissions between 1996 and 2005, we found that Māori and Pacific peoples had ARF admission rates 10 and 20 times higher than New Zealand European and Others," says Dr Jaine. "These rates of disease are equivalent to many developing countries, such as India and Mexico."

The concern is that ARF, which follows streptococcal throat infections, may lead to serious complications later in life – notably rheumatic heart disease (RHD). Damage to heart valves is one feature of RHD which can cause early death, making rheumatic fever probably New Zealand's most important infectious disease in terms of years of life lost through premature death. In New Zealand, 140 people die every year from RHD.

"Of particular concern is the widening gap in rates between Māori and Pacific people and the European population. During the decade studied, ARF rates in Europeans fell significantly, whereas rates in Māori and Pacific children actually rose," Associate Professor Michael Baker says.

It is still not clear why Māori and Pacific populations have such persistently high rates of ARF, when NZEO rates have dropped over the past decade.

However, the researchers say that these very high rates suggest prevention is inadequate and there should be more targeted funding in this area. They argue that it should be a public health priority to improve service delivery to these populations, through earlier diagnosis and treatment of strep throats in children, plus adequate follow-up to prevent the recurrence of ARF.

ARF, and consequently RHD, is preventable through antibiotic treatment of streptococcal sore throats. Recent National Heart Foundation guidelines recommend that all Māori and Pacific people aged 3-45 years presenting to their GP with a sore throat should have a throat swab and appropriate antibiotic therapy.

"In one Northland community, a school-based throat swabbing programme - in conjunction with a 'Sore Throats Matter' education campaign - has entirely eradicated ARF," says Dr Jaine. "Similar programmes should be seriously considered in communities with high rates of ARF. ARF is a disease that no-one should get."

This study of ARF rates has just been published in the Journal of Paediatrics and Child Health. It was carried out within He Kainga Oranga/Housing and Health Research Programme, which is supported by the [Health Research Council of New Zealand](#).

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