

Bounty mutiny descendants have low rates of myopia: study

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Descendants of a British mutiny who have lived for generations in the Pacific have among the lowest rates of myopia in the world, according to an Australian study.

The study examined <u>eye problems</u> among the descendants of the Bounty sailors and their Polynesian wives who settled on Pitcairn Island after the mutiny in 1789 and who then moved to Norfolk Island off Australia's east coast.

"One component of the study has found the prevalence of myopia (near-sightedness) on Norfolk Island is lower than on mainland Australia," said University of Western Australia academic David Mackey.

"But there was a two-fold higher prevalence of myopia in people without Pitcairn ancestry.

"We found the rate of Pitcairn group myopia is approximately one-half that of the Australian population and as a result would be ranked among one of the lowest rates in the world."

Pitcairn was settled in 1789 by mutineers from the British naval ship the Bounty, who famously set their captain William Bligh adrift in the South Pacific.

Many of the families of the mutineers moved from Pitcairn, a fivesquare-kilometre island midway between New Zealand and Chile, to the



larger Norfolk Island in 1856.

Mackey, who is managing director of the Lions Eye Institute which carried out the study, said Norfolk Island was unique because almost half the islanders could trace their ancestry back to the original Pitcairn population of just nine British mutineers, 12 Tahitian women and six Tahitian men.

He said nearly 800 of the island's 1,200 inhabitants took part in the study.

The researchers were unable to conclude why the levels of myopia were different but said further research may allow the identification of genes that differ between Bounty descendants and other islanders, given they had similar exposure to sunlight.

A lack of sunlight is thought to be related to <u>myopia</u>, with exposure to the sun's rays believed to stimulate production of the <u>chemical dopamine</u>, which in turn stops the <u>eyeball</u> from growing elongated and distorting the focus of light entering the eye.

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