

<http://www.ncbi.nlm.nih.gov/pubmed/10467894>

Med Confl Surviv. 1999 Jul-Sep;15 Suppl 1:i-ix, 1-51.

Mortality and morbidity of members of the British Nuclear Tests Veterans Association and the New Zealand Nuclear Tests Veterans Association and their families.

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Source

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Abstract

More than 20,000 British servicemen--many of them on their National Service, few of them volunteering for the tests, and most in their early twenties, some still boy soldiers in their teens--were required to 'participate' in the United Kingdom nuclear tests in Australia and Christmas Island in the 1950s and 1960s. 528 members of the New Zealand Navy were also present for one series of tests. There was also a Fijian Army contingent, which has been variously numbered between 100 and 500 men. An estimated 16,000 Australian servicemen and civilians were also involved in the tests at Maralinga and other sites. The men performed a wide range of duties, from highly technical preparations for the detonations to catering and clerical jobs. But whatever their role, they were all required to witness the detonations as part of their 'indoctrination' for the possibility of nuclear war. Most of them were required to line up on the beach, with their backs to the detonations and their hands over their eyes for the first minute or so. They were then allowed to turn around and look at the awesome sight as the mushroom cloud plumed thousands of feet into the air. Very few wore more than shorts and sandals during their time at the tests; only those who were thought to be at risk from radiation injury were issued with protective clothing and radiation dose badges. The UK government was sure that the troops, most of whom were standing within 20 km of the detonations and some of whom were present for 25 nuclear bomb blasts in as many weeks on Christmas Island, were not irradiated. The Ministry of Defence still routinely issues a document to nuclear veterans who feel that their illnesses were caused by the radiation they encountered when they were young men which states: The background [radiation] dose received by civilians and members of HM Forces serving at or off Christmas Island in the years 1956 to 1964 was only about 35% of that which they would have received on average had they remained, for that period of their lives, in the United Kingdom--that is, some 100 microsieverts per calendar month less at Christmas Island than in the United Kingdom. This sanguine view of the health burden borne by nuclear veterans and their families is not borne out by the data reported in this study of the health outcomes of the 2,500 men (2,200 UK, 238 New Zealand and 62 Fijian) on whom data are available to the present researcher. Thirty per cent of the men in this sample have already died, mostly in their fifties. Two-thirds of them died from cancers that are pensionable in the United States as presumptively radiogenic among nuclear veterans. About one in seven of the men in the sample of 1,014 who responded to the questionnaire circulated in late 1997 did not father any children after they returned from the weapons tests. Among the nearly 5,000 children and grandchildren of this group of more than a thousand veterans, there are 26 cases of spina bifida alone--more than five times the usual rate for live births in the UK. Nearly half the health problems among the offspring of the nuclear weapons tests veterans reported in this study consist of the same dermatological, musculoskeletal and gastrointestinal conditions from which many of the men have also suffered. Among the 2,261 children of 1,041 veterans, more than 200 skeletal abnormalities were reported, including more than 30 cases of short stature and 18 spinal problems, mostly curvature and scoliosis. More than 100 skin conditions were reported, mostly eczema and dermatitis, in many cases described as congenital. Over 50 of the children are already suffering from arthritis and similar conditions, although they are only now entering their thirties. Hip deformities were reported for 19 children and kneecap deformities for 14. More than 100 of the veterans' children

reported reproductive difficulties; 24 women reported problems with their ovaries. This pattern of morbidity was repeated in the grandchildren, tho