

**IN THE DISTRICT COURT
AT WELLINGTON**

**I TE KŌTI-Ā-ROHE
KI TE WHANGANUI-A-TARA**

[2022] NZACC 129 ACR 132/20

UNDER	THE ACCIDENT COMPENSATION ACT 2001
IN THE MATTER OF	AN APPEAL UNDER SECTION 149 OF THE ACT
BETWEEN	IAN MCINNES Appellant
AND	ACCIDENT COMPENSATION CORPORATION Respondent

Hearing: 27 May 2022

Heard at: Auckland/Tāmaki Makaurau

Appearances: The Appellant in person.
Ms F Becroft for the Respondent

Judgment: 4 July 2022

**RESERVED JUDGMENT OF JUDGE C J McGUIRE
[Personal Injury/Causation-exposure to spray
ss 25-26, Accident Compensation Act 2001]**

[1] At issue in this case is a decision by the Accident Compensation Corporation dated 9 February 2018 declining to help with the cost of treatment and other support for cardiovascular conditions.

[2] The appellant submits that his need for treatment arises out of an injury he suffered in a 1984 accident.

[3] The Corporation submits that the weight of evidence does not support a causal link between the appellant's ongoing cardiac related symptoms and the 1984 accident.

Background

[4] In May 1985, the appellant lodged a claim for cover for a respiratory problem and ear infections suffered over a four-month period in 1984 while he was working at a timber yard and was exposed to dust and certain chemicals (including velpar). The claim was declined by the Corporation on 5 July 1985. That decision was challenged and went on appeal.

[5] The appeal was heard before the Appeal Authority in March 1987 and was determined in the appellant's favour, with the authority determining that the appellant was entitled to cover for chronic fatigue syndrome.

[6] Subsequently, the Corporation considered entitlements on the claim. In September 1988, the Corporation issued a decision awarding earnings related compensation from 1984 to March 1987 (on the basis that after that date the appellant was no longer incapacitated). A review of that decision followed by an appeal. The Appeal Authority overturned the Corporation's decision in October 1992. The Corporation then reinstated earnings-related compensation from 1987 onwards.

[7] From 2004 onwards, the focus shifted to case management in the provision of rehabilitation. The appellant was assessed by Dr Dryson, Occupational Medicines Physician. At that stage, he was working part time as a Pastor. Prior to that, he had been working part time, undertaking clerical work for a Christian life centre, but he reportedly struggled with regular employment, due to the volatility of his condition.

[8] Dr Dryson recorded variable fatigue with intermittent diarrhoea and constipation, occasional skin rashes, exercise induced asthma and some reaction to chemical smells. He diagnosed chronic fatigue syndrome and multiple chemical sensitivities. He thought that the appellant was probably doing the best that he could at that stage, by pacing himself in avoiding exposure to chemicals. Dr Dryson also

noted that there was no real treatment or rehabilitation that could be offered for the appellant's condition.

[9] Dr Mayhue, Sports Physician, completed a medical assessment for the Corporation on 13 November 2006. He noted that the appellant continued to undertake some intermittent part time work but had ongoing problems with constant fatigue. In addition, the appellant also had high blood pressure and was boarder line diabetic.

[10] An Emergency Department note from February 2007 indicates that the appellant presented with a six-month history of chest tightness. Further investigations were arranged. In the period that followed, the appellant underwent a number of cardiac related tests.

[11] From around 2008, it appeared that the appellant began suggesting his hypertensions/cardiac problems were related to his ACC claim.

[12] A discharge summary from North Shore Hospital dated 10 July 2009 noted that the appellant had been referred and admitted to the short stay unit after an episode of increased blood pressure and transient tachycardia. Various tests were undertaken but no cause for the condition was identified. The summary, however, advised that the appellant thought the condition was likely secondary to industrial chemical poisoning.

[13] In July 2009, the appellant sought funding to see Dr Kay, Cardiologist, Dr Burling, Rheumatologist, and Professor Murdoch. A letter to the Corporation from Dr Smeeton advised:

Ian has been diagnosed by Professor Campbell Murchoch with highly abnormal changed blood cell shape. For the past ten years, particularly the last three, controlling Ian's blood pressure/heart rate has been nigh on impossible resulting in an array of tests at the North Shore Hospital and two recent admissions where Patrick Kay, Cardiologist, attempted to alter his regime.

[14] On 24 September 2009, the Corporation declined to assist with the Cardiac related treatment sought, on the basis that there was no evidence that the appellant's

blood pressure or other heart problems were caused by the condition for which he had cover.

[15] On 30 September 2009, the Corporation wrote to the appellant again advising that he had cover for chronic fatigue syndrome, and that no other medical conditions were covered.

[16] In October 2009, the Corporation gave Dr Burling the opportunity to comment on the link between chronic fatigue syndrome in high blood pressure.

[17] Dr Burling responded on 27 October 2009, noting that hypertension had been associated with herbicide exposure. He also indicated that there had been an association with abnormal red cells and hypertension and said that it was possible that the dysmorphic red cells might be causing hypertension. He added:

Finally, you asked about tachycardia with the link to dysmorphic red cells. For the first reason that dysmorphic red cells cause blood pressure by blocking capillaries, so they can also cause tachycardia by making the blood more sluggish to flow back to the heart so that the heart tries to be faster in order to compensate. Again, this data is available for sickle cell anaemia and spherocytosis.

[18] The toxicology panel convened by Dr Monigatti, Occupational Therapist, considered the issue reported on 7 December 2009. The panel were not aware of any recognised association between exposure to hexazinone (contained in velpar) and the development of hypertension, nor could they think of a plausible biological mechanism.

[19] Dr Turner, Occupational Medicines Specialist, completed an initial assessment in December 2011. He indicated that the appellant advised that his condition got worse as he got older. Headaches were noted to be a significant factor. The appellant was not working at that point in time and had not worked since 2008. He had suffered other non-injury issues including carcinoma of the kidney diagnosed in October 2007, a border line glucose intolerance dyslipidaemia, atypical chest pain and hypertension. Notwithstanding, Dr Turner thought that the appellant was fit for sedentary physical demand work.

[20] A branch medical advisor note from Dr Scott, on 9 January 2012, noted that the nearest code for the appellant's claim was – accidental poisoning by agricultural chemicals. This coding perhaps underscores the inexact nature of the covered injury in this case.

[21] In February 2012, Dr McCormick, Psychiatrist, undertook a mental injury assessment in order to ascertain whether the appellant was entitled to cover for a mental injury. Dr McCormick did not diagnose any psychiatric disorder.

[22] In April 2012, an impairment assessment was undertaken by Dr Fenwicke. Dr Fenwicke rated the appellant's impairment at 5% and an independence allowance was declined thereafter.

[23] The appellants subsequently indicated dissatisfaction with Dr Fenwicke's assessment, noting that she (and indeed others including Dr Turner) did not adequately capture the nature of chronic fatigue syndrome. Around this time, the appellant asked the Corporation to add the diagnosis of multiple chemical sensitivities to his claim.

[24] Dr Monigatti commented again on 9 July 2012. He did not think that the appellant had suffered any physical injury relating to multiple chemical sensitivities, that could be added as a physical injury on the claim.

[25] On 24 July 2012, the Corporation issued a decision declining to extend the cover to multiple chemical sensitivities.

[26] In January 2013, Dr Erwin, GP, wrote to the Corporation. She noted the appellant's continuing need for treatment for hypertension and asked the Corporation to investigate whether there was any funding for the appellant. It is unclear whether any response was provided.

[27] On 18 June 2014, Dr Antoniadis completed an occupational medical assessment. The report contains a comprehensive background of the reporting available. He advised that fatigue was the appellant's primary problem along with

the unpredictability of it. He also noted the appellant's hypertension and other comorbidities. He could not exclude hypertension as a contributing factor to the appellant's fatigue. He described subjective limitation and was not optimistic in regard to the appellant regaining meaningful employment. He also was not sure that any further rehabilitation would improve the appellant's chances. The appellant subsequently indicated that he was not happy with Dr Antoniadis' report.

[28] In October 2014, a request for funding was made for various treatments, including enhanced external counterpulsation procedure treatments and chelation therapy.

[29] Subsequently, the Corporation received a report from Dr Bahtta Charyya, Cardiologist dated 1 October 2014. She noted a long-standing history of severe hypertension, possibly due to subendocardial ischemia with some symptoms that might be due to subendocardial ischemia from spikes of hypertension, dating back to 2005. The letter noted that the consensus view was that enhanced external counterpulsation procedure was unlikely to benefit the appellant.

[30] On 24 October 2014, Dr Irwin wrote to the Corporation supporting the appellant's request for funding for treatment for ischemic heart disease.

[31] The file was reviewed by Dr Scott, Branch Medical Advisor, on 17 November 2014. He could not support treatment funding. He recommended seeking further opinion from the Corporation's corporate medical advisor.

[32] Dr Griffiths, Senior Medical Advisor, reported on 26 November 2014 noting that the appellant did not have cover for hypertension or ischemic heart disease, and therefore was not entitled to treatment for those conditions.

[33] On 28 November 2022, the Corporation issued a decision declining treatment funding.

[34] Through 2015, the appellant persisted with his pursuit of funding for enhanced external counterpulsation procedure. The Corporation funded a report from

Dr Lewis, Cardiologist, who reported in June 2015 and gave some support for the benefits of enhanced external counterpulsation, however, Dr Scott reviewed the file again in July 2015 and emphasised that the appellant did not have cover for either hypertension or any heart condition.

[35] On 18 August 2015, the Corporation issued a further decision declining treatment funding for enhanced external counterpulsation procedure.

[36] On 15 April 2016, the Corporation wrote to the appellant summarising its position, confirming that there was no change to the appellant's cover, and that the Corporation was not able to help with cost of treatment or other support for any condition other than chronic fatigues syndrome.

[37] On 14 February 2017, at a meeting between the parties, a number of issues were discussed including:

- An independent allowance reassessment.
- Funding of enhanced external counterpulsation procedure treatment.
- Funding for Viagra because the appellant's cardiologist had prescribed a generic brand to treat his high blood pressure.

[38] The Corporation subsequently asked Dr Christiansen, Cardiologist, to carry out a medical case review.

[39] Dr Christiansen completed a report on 6 November 2017. He diagnosed cardiovascular disease "breaking it down into subparts", atherosclerotic coronary artery disease (progressive) hypertension, and a transient ischemic attack/cerebrovascular disease. He described hypertension as resulting from a complex interplay of environmental and genetic factors. He did not think it was possible to define any single specific cause of hypertension in the appellant's case. He did not think that chronic fatigue syndrome caused the cardiovascular pathology diagnosed, nor did he think that exposure to velpar caused the cardiovascular pathology diagnosed.

[40] On 9 February 2018, the Corporation issued a decision advising the appellant that it was not able to help with the cost of treatment or other support relating to cardiovascular pathologies.

[41] The appellant applied for a review of the Corporation's decision. In an additional report dated 19 April 2018, Dr Christiansen confirmed that the appellant had been prescribed Viagra to manage his blood pressure, and that it had been an effective treatment.

[42] The parties subsequently agreed to conciliate the matter. The conciliation was held in November 2018 and an agreement was made for a further face to face meeting with the appellant to discuss his claim and concerns, and a further referral back to Dr Christiansen to get his further comment on the matters raised by the appellant. The lodgement of additional claims (treatment injury, consequential injury, and further application for independence allowance) were also discussed.

[43] Dr Christiansen provided a further report on 20 February 2019. He confirmed that the appellant had been using enhanced external counterpulsation procedure and that it was beneficial to him, and similarly had been using Viagra effectively to manage blood pressure. He had undergone renal denervation in 2013 to treat hypertension which was the recommended treatment in 2013, but evidence since then questioned the benefits of this approach.

[44] In May 2019, there was a further meeting between the parties to discuss various issues including treatment funding for external counterpulsation procedure. It was agreed that the appellant would file another application for an independence allowance.

[45] There was a further meeting on 13 August 2019 to update the various issues. Enhanced external counterpulsation procedure was discussed again. The Corporation confirmed its position in regard to cover for hypertension and cardiovascular conditions (i.e. there were none). The Corporation, however, agreed to fund a further appointment with Dr Christiansen and a further impairment assessment was also discussed.

[46] Dr Christiansen commented again on 20 August 2019 and confirmed that the covered injuries were consistent with those that he was made aware of in the documentation he received from the Corporation in 2017. He confirmed that the content of his reports remained unchanged.

[47] In October 2019, Mr Jamison, Pharmacological Advisor, reviewed the file and commented on Viagra funding. Given that the appellant did not have cover for any cardiac condition, he recommended declining the funding.

[48] On 16 October 2019, the Corporation issued a decision declining Viagra funding. The appellant did not apply for a review of that decision.

[49] Prior to the review hearing, the appellant filed a further clinic letter from Dr Christiansen dated 18 March 2020 in which again confirmed that the Viagra was beneficial in managing the blood pressure issue.

Appellant's submissions

[50] The appellant referred to some of the history of his case. With the Appeal Authority determining in 1987 that he was entitled to cover for chronic fatigue syndrome as a result of his working at timber yard where he was exposed to certain chemicals including velpar. He said at the time there was no test in New Zealand for chemical poisoning and that back then ACC decided that he was a "malingerer". One of the results of his chemical poisoning was a raised heartbeat which at its lowest was 120 beats per minute.

[51] He said that, prior to his chemical exposure and poisoning, he was very fit, and was a highly regarded lifeguard.

[52] He told the Court that in 2007, he was put on a diuretic and within ten months had a malignant tumour.

[53] He had immuno therapy in United States, and that between 2009 and 2011 he had no prior blood pressure problems.

[54] He said that the result of his pesticide exposure included immune system disease and connective tissue disorders.

[55] In 2014, he had a heart attack, but the medical specialists were unable to remediate this by using stents because of the particular challenges that his health status presented.

[56] He told the Court that Viagra was the only drug that had been helpful to him. The herbicide poisoning had changed the shape of his blood cells and had induced chronic fatigue syndrome. Viagra assisted with his heart rate and blood pressure.

[57] He told the Court of having to go overseas to an environmental health centre in Dallas.

[58] He told the Court that his sensitivity to pesticide was such that there was a time when he lived “on top of a mountain” at Tairua to get away from pesticide contact.

[59] He referred to the fact that Professor Murdoch was the only person in New Zealand who could diagnose the effects of herbicide poisoning and that in a report of 9 June 1992, Professor Murdoch reported:

In my opinion, the results obtained from McInnes’ blood is highly abnormal and such result would suggest that the erythrocytes in capillary blood would have impaired flow leading to a lack of tissue oxygenation particularly when exercising...thus there is evidence that a physical part of the applicant, i.e. his erythrocytes are impaired in a structural pathological sense.

[60] He referred to Occupation Medical Specialist Professor Glass who in a report of 19 July 1995 said:

...

However, Mr McInnes’ health consequences are, in my experience, not at all uncommon. I have seen chronic fatigue as a consequence of legionella, leprospiral and brucella infections (the latter was vehemently denied in the 1970s by New Zealand medical specialists advising the ACC –yet is now part of the current standard textbook on brucellosis.

...

Of course chronic fatigue cannot be measured, there is no meter, no blood test. Yet fatigue like headache is a symptom most of us have experienced. Just

because there is not, as yet a known mechanism which links infection or solvent or chemical exposure to fatigue does not mean it cannot be related, in time, the level of anecdotal evidence begins to constitute believable causation.

[61] The appellant said that he came from a very fit family and prior to the exposure he had been nominated for lifeguard of the year.

[62] The appellant told the Court that he had to wait four years for a bypass operation during which time he became completely deconditioned and became a type two diabetic.

Respondent's submissions

[63] Ms Becroft acknowledges that this claim has quite a history and there has been a “battle” by the appellant to have his claims properly assessed and that this is in part due to his condition being hard to define. She says the borders of what constitutes chronic fatigue syndrome are unclear.

[64] She says it is not necessarily the case that all the appellant's health issues relate to the 1985 chemical exposure.

[65] The focus of this appeal is on ACC's decision of 9 February 2018 which is based on the specialist medical review of Mr Christiansen on 6 November 2017. His opinion was that the appellant's cover for chronic fatigue syndrome did not cause the cardiovascular pathology diagnosed and that therefore ACC was not able to help with the cost of treatment and other support.

[66] She says that today's question is:

Should ACC be funding treatment for the appellant's cardiovascular problem.

[67] She refers to the report of the toxicology panel of 7 December 2009. The panel said:

The panel is unaware of any recognised association between exposure to hexazinone and the development of hypertension. Nor could they think of a plausible biological mechanism by which the inhalation or absorption of that agent might cause that disease. In the panel's view, the evidence presented by Dr Burling is not strong or consistent enough to permit a reasonable inference

of cause. The consensus was that Mr McInnes' hypertension was less likely than not to be the result of past chemical exposure...

[68] Ms Becroft noted that the evidence of Mr Christiansen, in reports of 6 November 2017 and 20 February 2019 is its basis for excluding cover. Ms Becroft submits that in this case there are too many evidential gaps in the medical knowledge relating to the appellant's presentation for the Court to apply an *Ambros*¹ approach to causation.

[69] She says that therefore ACC was correct to decline cover on the evidence that it has. She nevertheless acknowledges that there remains a possibility that Mr McInnes may be right in attributing his accident with chemicals in 1985 to his present cardiovascular disease.

Decision

[70] For several months in 1984, the appellant worked for a timber centre at Matakana where he was exposed to dust and the chemical velpar, an herbicide. As a result, he experienced breathing and respiratory hindrances and ear infections. He first saw his doctor regarding these problems on 1 October 1984.

[71] In the notification of accident and claim form, Mr McInnes says:

Dust from the mill affected my breathing and balance – balance was caused by ear infection... but my breathing has been affected substantially.

[72] The first ACC medical certificate dated 14 January 1985 notes:

Sudden onset fatigue dizziness, sleep disturbances... exposure to "round up" spray.

[73] The diagnosis by the GP at the time was "round up" toxicity. The chemical involved was in fact velpar.

[74] The initial presentation to a medical professional more often than not contains information that is later highly important, and the timing of the initial doctor's

¹ *Accident Compensation Corporation v Ambros* [2007] NZCA 304, [2008] 1 NZLR 340.

appointment likewise informs how the claimant has responded to the event or events that have caused the presentation.

[75] In the initial claim form, the accident is recorded as having occurred over approximately four months with the appellant's first visit to a doctor on 1 October 1984. The medical records of the time strongly suggest that the appellant tried to "soldier on" for some weeks before he sought medical assistance. Such an attitude is congruent with a young man who otherwise was a highly regarded surf lifesaver and who had been until this stage very fit and healthy.

[76] Eventually after taking his claim to the Appeal Authority, the appellant was in 1987 granted cover for chronic fatigue syndrome.

[77] The appellant's health challenges continued and worsened. By 2006, the appellant was undertaking some intermittent part time work but was having ongoing problems with constant fatigue. In addition, he had high blood pressure and was border line diabetic.

[78] In February 2007, he presented with a six-month history of chest tightness and was diagnosed with hypertension/cardiac problems.

[79] Investigations were carried out at North Shore Hospital in July 2009 and various tests were undertaken but no cause of the transient tachycardia and increased blood pressure was identified. The appellant's view was that his condition was likely secondary to the industrial chemical poisoning.

[80] This followed on from testing that Professor Murdoch carried out on the appellant in 1992 which found that he had high resting pulse rate and failure to recover after exercise and that electron micrographs of his blood showed a highly abnormal pattern of erythrocyte morphology.

[81] Professor Murdoch said:

In my opinion, the results obtained from McInnes' blood is highly abnormal and such a result would suggest that the erythrocytes in the capillary blood would have impaired flow, leading to a lack of tissue oxygenation particularly when

exercising. This would account for the high pulse rate and slow recovery after exercise demonstrated at the human performance centre.

[82] It was unsurprisingly therefore that the appellant suggested that his hypertension/cardiac problem were related to his 1984-1985 claim.

[83] The appellant presents as a person who has done his utmost to get beyond all the things that have afflicted him since 1984. On the evidence before me, it appears that he has done his best to maintain some level of employment over the years. He has also sought therapy in the United States. He has even lived high up a mountain at Tairua so that he is above the “spray line”.

[84] These proactive efforts contrast with those of claimants who frequently present demanding an array of entitlements from ACC, whether merited or not.

[85] I note too that he underwent a comprehensive psychiatrist assessment in 2012 which concluded:

In my opinion, Ian does not suffer from a clear DSM IV axis I or axis II disorder, either independently attributable to injury.

[86] On 7 December 2009, a Toxicology Panel met to determine whether Mr McInnes was likely to have developed hypertension from his work-related exposure to chemicals, in particular hexazinone. The panel said:

The panel were unaware of any recognised association between exposure to hexazinone and the development of hypertension. Nor could they think of a plausible biological mechanism by which the inhalation or absorption of that agent might cause that disease. In the panel’s view, the evidence presented by Dr Burling was not strong or consistent enough to permit a reasonable inference of cause.

[87] Prior to this, Dr Burling, Physician, had noted that in the 1975 Journal of Occupational Medicine, there was a finding of increased hypertension amongst herbicide workers compared with a general population. Dr Burling had also noted that in the archives of Toxicology, 79(9) in 2005, it was shown that paraquat, a herbicide, caused hypertension. Dr Burling also noted that there had been an association with abnormal red cell and hypertension, and he suggested that it was

possible that the dysmorphic red cells that the appellant has might cause hypertension.

[88] In the circumstances therefore I conclude that the findings of the toxicology panel in December 2009 were essentially that it was unsure, and the consensus was that Mr McInnes' hypertension was less likely than not to be the result of past chemical exposure.

[89] In its decision of 9 February 2018, ACC appears to have based its decision on Dr Christiansen's specialist medical review of 6 November 2017.

[90] It is not surprising however that Mr Christiansen's report is less than categorical. Mr Christiansen does note that the appellant had elevated blood pressure readings in 1985 and that this was confirmed when he was admitted to North Shore Hospital for assessment for atypical chest pain in February 2007. Mr Christiansen notes that hypertension has been an ongoing clinical problem since that time.

[91] Mr Christiansen refers to age-related statistics noting that for New Zealand males between 60 and 69 the prevalence is between 49.2 and 70.6%. He then says:

The aetiology of hypertension is best described as resulting from a "complex interplay of environmental and genetic factors leading to activation or suppression of one or more of a host of physiological systems involved in blood pressure regulation. Only a minority of patients have a specific identifiable cause of hypertension (approximately 15% in published data). In Mr McInnes' case, these so-called "secondary causes" of hypertension have been conclusively excluded. Therefore, it is not possible to define any single specific cause of hypertension in Mr McInnes' case. As is the case for the substantial majority of patients with the condition.

[92] Mr Christiansen had earlier in this report said:

Mr McInnes has a number of traditional "risk factors" associated with the development of coronary atherosclerosis, including his hypertension, the type II diabetes diagnosed in 2013, increased central adiposity and elements of the metabolic syndrome. His lipid profiles reflect that with consistently elevated triglycerides and an adverse total cholesterol/hdl ratio, documented in the records available online since 2006.

However, there is no record of him smoking at any time, and no documented family history of atherosclerotic disease (pre-mature or otherwise).

[93] Elsewhere in his report, Mr Christiansen commenting on chronic fatigue syndrome says:

In this context, it is challenging to make any definite statements on whether CFS has a causative role in cardiovascular disease. A scattering of small studies has suggested that CFS has an association with measurable abnormalities of cardiac function.

...

In my opinion, on the balance of probabilities, chronic fatigue syndrome did not cause the cardiovascular pathologies diagnosed.

[94] Later in his report, Mr Christiansen did note:

A hypothesis – generated large population based study in Taiwan concluded that there was “a possible correlation between acute organophosphate poisoning and ischaemic heart diseases.

[95] Mr Christiansen went on to say:

Therefore, it can be speculated that patients who have genetic pre-determinants that result in reduced activity of PON 1 are potentially both at higher risk of atherosclerosis and at great risk of suffering ill effects from organophosphate poisoning. However, such a hypothesis remains entirely speculative and as such does not form part of my opinion given above.

[96] I conclude that in essence Mr Christiansen is saying that as at 6 November 2017, the date of his report, there is some evidence of atherosclerosis from organophosphate poisoning for those who have genetic determinants but because of the state of research at that point, such a hypothesis remains speculative and therefore, on the balance of probabilities, Mr Christiansen finds that the exposure to velpar did not cause the diagnosed cardiovascular pathology.

[97] Since his exposure to velpar in 1984, Mr Mcinnes’ case has presented great challenges both to ACC and to the clinicians who have examined and treated him. Given his earlier background of being extremely fit and healthy, his positive proactive efforts to regain his best possible health and his failure to achieve better health, I conclude that his case falls in the category of an “outlier”.

[98] Mr Christiansen acknowledges in his report of 6 November 2017 that in overseas research a link has been made between organophosphate poisoning and

ischemic heart diseases albeit that the authors concluded that “future studies are needed”.

[99] Given the dicta in *Ambros* that judges should ground their assessment of causation on their view of what constitutes the normal cause of events, which should also be based on the whole of the lay, medical and statistical evidence, and not be limited to expert witness evidence, I conclude that when the admittedly thin research evidence relating to heart disease and organophosphate poisoning is put next to the appellants pristine family history of good health including his own exceptional health and fitness prior to his accident, together with the finding of abnormal blood cells,- Ambros causation is proven on the balance of probabilities.

[100] Accordingly, the appeal is allowed and the decision of the Corporation of 9 February 2018 declining to help with the costs of treatment and other supports for cardiovascular conditions is reversed.

[101] Should there be any issue as to costs, the parties may file memoranda in respect thereof within one month.



Judge C J McGuire
District Court Judge

Solicitors: Medico Law Limited, Grey Lynn for the respondent.