RURAL AND REGIONAL SERVICES AND DEVELOPMENT COMMITTEE

Inquiry into cause of fatality and injury on Victorian farms

Ballarat–27 April 2004

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Mr S. Cowley, University of Ballarat (sworn).
Mr COWLEY — My name is Stephen Peter Cowley and I am presenting on behalf of myself and Professor Dennis Else and representing the University of Ballarat, University Drive, Mt Helen, Ballarat.

The CHAIR — Thank you. If you could provide us with your presentation and we will ask you questions afterwards.

Mr COWLEY — I am currently a postgraduate student at the University of Ballarat. I am a health and safety consultant and occupational hygienist in private practice. I was formerly the director of the Victorian Institute of Occupational Safety and Health at the university where I still have strong affiliations and undertake project work and a range of other activities as well as being a student with the organisation.

As background, the Victorian Institute of Occupational Safety and Health at the university is a centre for teaching and research in occupational health and safety. We undertake postgraduate and short course programs in occupational health and safety and a range of research programs as well as occupational health and safety consultancy and advice to all sectors of industry. Our being in a regional centre has obviously led us to becoming involved in various agricultural sector-related activities over the years, as well as the very strong message in the university’s mission that we should focus on rural and regional matters. That has led us to be involved in a whole range of these sorts of activities.

My personal involvement in the agricultural sector has come through a range of projects. One of the major projects, which I think you have heard about in the past, was the shearing shed redesign project coordinated through our group at the university. I have been involved with the Victorian Farm Safety Training Centre at the university. Over the years I have had involvement in a range of health and safety solutions database projects, which I will refer to a little bit later on. I have recently been involved in the production of the WorkSafe Victoria farm safety video, where we used Neil Simpson from Northern Victoria as an older opinion leader. I am currently involved in a WorkSafe Victoria project evaluating the use of personal flotation devices amongst fishers across the state.

I do not feel qualified to comment on the full range of terms of reference that this committee is addressing, but I would like to refer to the issues I do feel qualified to address, as well as the particular issue of social marketing which the committee referred to in its invitation to me to attend today. I have provided you with a couple of dot points which I hope will keep us on the same track, and a couple of figures that I would like to refer to as well.

In terms of the size and nature of the problem in this sector, clearly it is a big problem and I commend the committee for tackling the issue in the depths that it currently is. However, I would like to flag one particular issue and that is to do with the apparent — and I am not sure if it is real — focus on traumatic injury. As an occupational hygienist I probably have to show my colours and identify that I would like to see in health and safety in general, more recognition of the occupational disease side of the problem. Having reviewed evidence that has been presented before, I notice that noise induced hearing loss, musculoskeletal disorders and psycho-social stress have been referred to a number of times.

I also flag the unrecognised and underplayed, to some extent, issue of the hazardous substances exposures that result in what we believe to be a high toll, but our record keeping is very poor, and we do not really know the true extent of the problem.

Overseas evidence suggests that we have a major problem across our community in terms of hazardous substance exposure, and there is no reason to suggest that that would be different in the agricultural sector, and the best evidence we have comes from the Kerr report, which was commissioned by the National Occupational Health and Safety Commission some years ago, where across Australia we have at least 2000 deaths a year due to cancer arising from hazardous substance exposures. I would just like to flag that while I have the opportunity.

In terms of the opportunities for intervention in the agricultural sector, we are seriously lacking an evidence base. One of the difficulties with have with interventions in a range of different sectors is that everyone believes their sector is unique, and I find that whatever industry sector I work in, and in fact whatever workplace I go to, one of the first things I am told is that I am entering a unique workplace or a unique sector.

I am not sure that that is so much true as somebody’s desire to be different. Perhaps the key is in the different ways we work. Fundamentally it is energies which hurt and kill people in our workplaces, and those energies — be they chemical, mechanical or biomechanical — are what cause the damage, and there is only a limited number of
energies on our planet. So the issue lies in the way we are exposed to the energies and the way we tackle the control of those energies rather than each industry sector being unique.

In that vein we looked at other parallel industry sectors, and it is interesting to compare the agricultural sector with the mining sector where we have a high toll in terms of fatality and injury. Both tend to be rural–regional type occupations in both sectors. Often the work is remote, and a major difference is perhaps the major advances we have made in the mining sector in recent years in terms of reducing that toll and the rate of injuries.

I have tabled a couple of charts as part of our submission. The first one comes from the Minerals Council of Australia, and it compares the reduction in fatal injury rates for mining, agricultural, forestry and fishing, construction, transport and storage, and gives a flavour. We should not treat this as definitive evidence because there is a whole range of variables which impact on our improvement in the mining industry — not the least of which is the increasing automation and technological advancement — but clearly something is happening which is leading to a trend of improvement in fatalities and in terms of workers compensation claims. I would not like to treat those numbers as definitive so much as indicative of trends in the industry.

A number of things we could attribute to that improvement is perhaps a national focus, for a start, on the problems in that sector. We have, in the mining industry, established ownership of the problem by the major players in the industry sector. We have now pooled fatality data which gives us a strong evidence base on which to explore the causes and influencing factors in terms of fatalities and injuries. It gives us pooled data which we can investigate for lessons in terms of prevention.

The ownership by the industry, the mining sector, has resulted in funding of a centre — the Minerals Industry Health and Safety Centre, based out of the University of Queensland. The major mining players that have mining operations in Australia have each committed about $60 000 a year to this centre for five years to start with, and that centre has focused very much on capacity building within the industry sector and capacity building with regard to occupational health and safety and risk management techniques, and I would treat those two issues separately.

The capacity building at an individual organisation level is occurring through the delivery of somewhat standardised, somewhat common education programs which are available across the sector. That education impacts from CEO level down to ‘underground worker’ level, where we have a common approach which is starting to build an understanding of risk management, and I suppose we could talk about up skilling across the industry.

There are obviously differences between the two sectors but there is quite a lot we could learn from the mining industry, and in terms of having a similar resource for capacity building in the agricultural sector we could at least build individual capacity at enterprise level to manage risk.

Something that interests me is building the decision-making — the ability of individuals in terms of their decision-making and particularly in terms of sustainability in the farm environment, sustainable decision-making regarding risk control.

We also need to grow the evidence base. An opportunity exists through development of the national coronial database which Graeme Johnstone has been leading over recent years. From that database we can increasingly assess evidence in terms of what has been leading to the high toll in this sector.

It also helps us assess evidence in terms of what does work in reducing risk. A more coordinated approach could help us more clearly define the priorities for intervention. At the moment I do not believe we have a clear picture of where those priorities are. We also need to shape some common frameworks for intervention. You alluded to that just now in terms of your question about the various kid’s programs, Dr Naphthine, and the fact that perhaps the individual players do not know what the others are doing.

I do not think we will advance until we at least have a common understanding of what we are all doing in the area. What the minerals industry health and safety centre does is not so much coordinate or control events so much as monitor what is happening to identify where the evidence can be sucked out of programs and put together so that we can then report back to the industry on what does and does not work.
One of the things we can increasingly do with the coordinated approach is build on the creativeness which exists in the agricultural sector particularly. By definition farmers are creative people in terms of innovative problem solving. Building on that is a great opportunity we have, and to some extent if we can capture that innovativeness and share it we can build an increasing solutions database available to all.

In terms of our experience over building solutions databases over the years, we initially established what was called the shared solutions database, out of what was the Department of Labour in the old days, around 1985-86 in Victoria, and subsequently that has grown into a database which has been uploaded into the national solutions database on the National Health and Safety Commission web site in the public domain. It contains many farm and agricultural sector solutions.

What led to us establishing those databases and continues to drive us in terms of pushing those databases is that in many cases solutions to what are killing and hurting people exist, but they are not widely known and/or adopted. What we need to do is more coordinate the development of those solutions databases and make the solutions available.

In terms of that link between mining and agriculture, that is where we probably need to diverge because clearly there is a difference between the mining sector where we have large organisations with fairly powerful CEOs in terms of their spend capacity, and their influence in the community, and farms of course are small businesses with relatively small resources, and the sector is much less coordinated. However, I still refer to the fact that there are lessons to learn in terms of coordination and achieving change.

My personal research in terms of increasing the uptake of solutions is particularly focusing on small business, and of course farms are small businesses, by and large. The large volume of research which relates to small business suggests we have a number of problems to overcome in terms of the perception of risk among farmers and how they deal with risk.

It is clear from the literature that there is a lack of recognition of the occupational health and safety problems across small business in general. Most small business operators — and I believe it applies to farmers — perceive their workplaces to be of low risk: everyone else has the high-risk problems. We often only become aware of risks in our small businesses when someone is injured in close proximity to our business, if not within the business. Obviously, we have limited access to external health and safety resources and relatively rare exposure to inspection authorities.

Most small business people work in what has been called by David Caple an ‘information vacuum’ in terms of health and safety information. Most small businesses are preoccupied with economic survival, and occupational health and safety becomes a lower priority unless we can identify the economic returns associated with good occupational health and safety.

We generally have low occupational health and safety management skills in small business, if not low management skills in general. The burden of compliance is quite severe not just in terms of occupational health and safety but with GST and a whole range of other legislative obligations that small business people have to meet. We tend to have less formal employment practices and it is fairly well-documented that small business people do not like exerting authority and control over their employees; they tend to enjoy the freedom of self-employment themselves and therefore wish their employees to experience the same enjoyment. This is compounded further in the family business, of which farmers are a major group.

The research suggests that most small business operators tend to operate a safe person approach to risk control as opposed to a safe place. They tend to focus on behavioural control measures rather than engineering risk control. In terms of risk control they tend to act on the basis of personal experience rather than a good, solid evidence base for what does and does not work. In terms of that personal experience and personal contacts — referring back to my concern about hazardous substances — there was a lovely study that came out of the United States of America where they reviewed dry cleaning shop operators as a group of small businesses. Most of the dry cleaning shop operators reported that the chemicals they used were safe because the chemical suppliers would not sell them a chemical that was dangerous, despite the fact that they are using perchlorethylene, which is a known carcinogen. It is this faith in the supply chain which perhaps tends to be misleading.

So in terms of bringing interventions to bear on the sector, we have tended to use one of three techniques — although they are not mutually exclusive. We use legislation as an intervention technique to bring change in the sector. We have used direct intervention, which is sometimes inspectors in a non-enforcement role. We have used
inspectors in the past in an advisory role, and I know we are moving away from that at the moment. We have tended to use change agents for face-to-face contact with members of the farming community, and we have used marketing; which is perhaps what brings me here today through your invitation, in terms of my interest in the marketing side of occupational health and safety.

In my opinion, marketing has been more awareness raising than it has been true marketing. We have had a whole range of farm safety projects, which I believe have focused very much on marketing. We have had farm and home safety parties projects — and this is just from my limited recent research in terms of farm safety in preparation for today. There has been the child safety on farms pilot project, the RIPPER project, safe shearing shed demonstration projects, small business safety audit projects, the ATV awareness projects, the Roll Over Protection Scheme and relatively recently, the safe tractor access platform scheme, most of which have tended to rely on printed information which has been broadcast by direct mail, supported by the electronic media such as radio, television and billboard advertisements.

This approach is not just limited to farming small businesses; it is common across all the small business interventions that we have attempted in health and safety, if not in Victoria but nationally — and my research suggests internationally. We have limited ourselves to what David Walters, out of the University of Cardiff, calls ‘arms length tools for reaching people’. I was interested to read Prof Rothschild’s work out of the University of Wisconsin. He is a public health specialist and he has attempted to define how we intervene, based on the market terms of motivation, opportunity and ability (MOA), which is what the marketing people tend to refer to.

In your notes I have reproduced a matrix which Rothschild put together to try to capture that MOA model in public health. The model works along the lines of the fact that if you have a motivated employer — and I have to refer to the occupational health and safety arena because that is how I am extrapolating it — in terms of doing something about occupational health and safety, an employer who has the opportunity and ability to do something, then it is very easy to make them do it. Conversely, if you have someone who is not motivated in terms of occupational health and safety change, they do not have the opportunity to adopt the behaviour and they do not have the ability either and then they are very resistant to change, and therefore we need to employ education, marketing and law to bring about change.

My interest is particularly in the middle of that continuum where, as I see it in the farming community, we often have motivated people particularly because of the family nature of the business — the business being the home environment and the impact of the environment on children. I believe most farmers are motivated once they become aware of the problem. And because they are a creative and fairly innovative group of people, they tend to have the ability but it is often the opportunity to bring about change which is limited, particularly if they do not know what was solutions are. They want to change, they can change but how do they change? What is the opportunity?

So I am particularly interested in the middle of that matrix where someone is unable to behave and we have tended to use the marketing intervention. What I believe we have done in the past is tend to use the commercial marketing model which relies on the fact that the marketer has something to sell which the target — the purchaser — wants. I love another quote from Rothschild out of Wisconsin who talks about the marketing of a public health behaviour. They tend to be things that people do not want; there is a negative demand for much of what we are trying to sell.

In occupational health and safety there is a negative demand because lots of things about health and safety are negative when you first present it to someone. The language is negative — risk, injury, deaths and accident. We tend to present health and safety as something you must do, and it tends to be something that people perceive to be a cost rather than a benefit. That is because of the way that we sell it. Rothschild talks about an analogy with selling soap to the community. He says that if you are selling soap as a commercial marketer, you sell the benefits of the odour, the cleanliness, the freshness and the various things that we as purchasers of soap want. But in terms of health and safety we often do not have those positive attributes. He talks about managers of public health behaviour, rather than having something positive to sell, they tend to tell the target to stop being dirty or threaten to fine those who remain dirty, and I think that is a great analogy to the way in which we have dealt with health and safety.

That has led me to explore the areas of social marketing, which is a relatively new approach to selling behaviour in public health. I am testing the application in occupational health and safety at the moment. Social marketing is very similar to commercial marketing; it uses commercial marketing ideas, except we take a different approach and we
have a different agenda. The approach we take is much more to listen to the target in terms of what it is that they think they need or do not need. What are the barriers and what are the enablers to adopting the behaviour we want? I would like to make it clear in my research that the behaviour I am interested in is the behaviour of someone in terms of adopting practical risk control.

I am not so much interested in behaviour in the face of danger as a farmer’s decision to adopt a remote opening device for a silo rather than behaving safely when he climbs it. So that is the behaviour I am interested in. The social marketer approach takes a much more laid-back approach where we listen to the farmer and say, ‘What are your problems? What are the barriers and what are the enablers?’ Then we build on those in terms of tailoring messages, and put a positive spin on what we are trying to sell. We tend to use an action research cycle where we listen to the target, start to plan a campaign, test the messages on a group of people and then implement and monitor it and revise our approaches.

One of the areas I am really interested in is the way social marketing assesses the target’s readiness for change. There is a very nice model which comes out of the public health area in terms of what is called the ‘stages of change’ model or the ‘trans-theoretical model’ for changes where we assess where someone is. The best analogy is with quitting smoking where someone remains blissfully ignorant of the fact that smoking is harmful, and then they move to the next step where they start to realise that it is harmful and are contemplating giving up at that point.

We then move them into the action phase of giving up smoking and then into the maintenance phase of being an ex-smoker, and I believe there are a lot of parallels in terms of how people adopt risk controls and how blissfully unaware they are of the fact that there is a risk on the farm, to becoming aware that there is a risk on the farm and contemplating doing something about it.

We then want to move them through our marketing process into the action phase of, say, actually purchasing a remote opening device for a silo before keeping them in the maintenance phase of making sure that device is operational and continues in its ongoing use. That is exactly what Dennis Else and I are currently doing at the University of Ballarat.

Through our research we are starting to test those ideas. We have a project that we are just literally commencing this week where, in northern Victoria, through the Landcare groups in that area we will run three social marketing campaigns. We are using the Landcare groups as a defined group of people we can access relatively quickly, so we are piggybacking on the Landcare movement in the sense of a group of farmers already being interested in getting together and doing stuff, and we will listen to them and find out what problems they have and try to sell, using social marketing techniques, the increased adoption of certain risk controls.

One of the areas of social marketing I am really interested in is the impact of opinion leaders on increasing the rate of adoption. I have just slipped in at the end of my notes a definition of opinion leaders that comes from fairly well written American author who says, ‘Opinion leaders are people whose conversations make innovations contagious’, which I think is a lovely way of capturing what I believe happens in the rural community through the networks which exist, and people who have ideas telling others about it.

The international research suggests that in public health opinion leaders are so important in terms of spreading the word and increasing the rate of adoption of controls, and we are hoping that, through the hypothesis that we are about to test in northern Victoria, social marketing gives us a model which enables us to create frameworks and messages which suit the particular targets.

Secondly we hope that, in terms of increasing the uptake as a result of those messages, opinion leaders can play a central role, and that is really where we are at, at the moment and we are hoping that that will lead to something useful to add to the evidence base which we believe currently is fairly weak.

The CHAIR — Thank you very much for sharing with us all the work you have been doing in the area and we would like to know the outcomes of your work before we do our report in terms of recommendations, because obviously you have some really good ideas here.

Dr NAPTHINE — Do you have any views on the current campaign that has just been launched about tractor safety by WorkSafe?
Mr COWLEY — Yes. I have not heard from WorkSafe as to what the full campaign is; only as a consumer have I seen the campaign. I am not aware of what is being done in the background in terms of direct marketing or other techniques, but as a consumer — and I must admit I do not tend to watch commercial television and have not seen advertisements and bill boards — I believe it will probably been an awareness-raising activity.

I have seen the press adverts which relate to tractor safety, and from a personal observation point of view, many of the pieces of equipment on farms are changing in terms of getting away from the older tractors and moving towards the newer, more sophisticated machinery. It is probably timely to move on from the Roll Over Protection Campaign (ROPS) where the number of older tractors and the frequency of use of older tractors is reducing the risk of over turning, and it is probably timely to move on in terms of addressing other issues to do with mechanical equipment dangers, so it is probably good in that respect.

The CHAIR — Thank you very much for your time today Steve. You will receive a copy of the transcript shortly. Thank you very much to all witnesses for participating and listening this afternoon. We will close the hearing now.

Committee adjourned.