

KIDS ON QUADS: RESPONDING TO RURAL RISKS

Maxine Campbell¹
Department of Societies and Cultures
University of Waikato
Hamilton

Abstract

The rural sector features prominently in the statistics for All Terrain Vehicle (ATV) injuries and fatalities amongst children in New Zealand. ATVs are the new workhorse of the farm and their increasing popularity suggests the rate of accidents involving children will not abate of its own accord. This paper summarises and updates research on ATV farm accidents involving children undertaken early in 2006. It reiterates the unsuitability of ATVs for use by and around children and examines accident statistics in the wake of a court case resulting from the death of a child on the family's farm. It argues that voluntary compliance with existing guidelines for the operation of ATVs is an insufficient strategy for reducing or eliminating existing risks to rural children. While the specificity of rural circumstances is acknowledged, it is not accepted as an adequate justification for maintaining the *status quo*. Rather, in light of the increasing numbers of ATVs and their growing popularity amongst lifestyle block holders, reducing unacceptable levels of risk to rural children requires the development of legal restrictions on the operation of the vehicles.

INTRODUCTION

In the summer of 2005/06 the Child Accident Prevention Foundation of New Zealand (CAPFNZ) funded a summer scholarship for research on the nature and extent of All Terrain Vehicle (ATV) accidents involving children on New Zealand farms (Basham et al. 2006). Over the same period, a high-profile manslaughter case was brought before the High Court. In September 2005 a four-year-old child was killed on her family's farm when her father allowed her to operate an ATV while he attended to a call on his cell phone (Rennie 2005:4). The Crown alleged that her father was grossly negligent in allowing her to ride his quad bike to round up the cows for milking. The girl lost control of the bike, it rolled on her and she died instantly from massive head injuries (Boyes 2006). This paper draws on and extends the substance of the CAPFNZ report, ultimately seeking to ascertain whether the farm is now a safer place for children since 2005. It begins with an outline of the vehicles, their governance, typical accidents and the environment and culture in which they are used. It canvasses the recommendations provided in the CAPFNZ report, and examines the means by which safer outcomes for farm children might be achieved.

The research for the original project involved an extensive literature review in which the general paucity of ATV studies published in New Zealand and Australia contrasted sharply with the abundance of statistical data from the United States. Because ATV use in the United States is largely recreational, however, the findings were not always directly transferable to the predominantly agricultural use of the vehicles in New Zealand, though they provided

¹ Correspondence

Dr Maxine M Campbell, Department of Societies and Cultures, Faculty of Arts and Social Science, University of Waikato, Private Bag 3105, Hamilton, New Zealand. Email: maxine@waikato.ac.nz

good background data in regard to the vehicles themselves and typical accidents and injuries. Within the somewhat sparse New Zealand literature, a key resource was a workplace accidents report (Lilley et al. 2004) in which the farm as a workplace featured prominently.

Additional data were gleaned from a review of New Zealand media reports, editorials and commentaries on ATV safety between 1999 and 2005. The project also incorporated interview data from two groups of respondents closely associated with key aspects of the topic. The first group consisted of experts in child, farm, ATV and workplace safety and comprised representatives from OSH, ACC, Safekids, Ag ITO, Agribusiness and Federated Farmers. The second group comprised parents who own and use ATVs on their farms.

THE VEHICLES

In 2002, OSH estimated that there were about 70 000² ATVs in use on New Zealand farms (OSH 2002a) and in 2005 approximately 95% of ATV use in New Zealand was for farm work (ACC 2005). They are rapidly replacing tractors as a multi-purpose farm workhorse. Designed for use by a single operator, ATVs are open, motorised, four-wheeled vehicles with low-pressure tyres and with handlebars for steering control. They have a high centre of gravity and tend to be unstable (American Academy of Pediatrics 2000' Phrampus et al. 2005). They can be difficult to turn and have an ineffective, or no suspension system (American Academy of Pediatrics 2000), though newer models now offer improved handling through, for example, limited-slip differentials. Engine capacities can vary enormously (from 50cc to more than 800cc), but mid-range engine capacities are the most popular in New Zealand (OSH 1998:15). As engine size has increased, ATVs have become heavier and larger and the increase in average engine size is attributable in part to the increase in non-recreational use of ATVs (Rodgers 1999:418).

Dry weight of the vehicles ranges from about 180kgs to more than 400kgs, with the lighter models being used primarily for recreation and sport and the heavier models more commonly used as work vehicles. The design and weight of the vehicles is such that operation of ATVs requires that drivers manoeuvre their body weight in a practice referred to as *active riding*, which in turn requires a combination of adequate height, weight, cognitive capacity and dexterity. ATVs are not designed to be modified or to carry passengers (Phrampus et al. 2005:58). In New Zealand however, many bikes are used for carrying farm equipment or supplies, further increasing the high centre of gravity, and 92.5% of farmers in a 1998 survey admitted to carrying passengers (OSH 1998). Infants' car seats are also often affixed to ATVs, which again alters the balance of the vehicles.

THE LAW

Land Transport legislation prohibits children under 15 riding ATVs "on roads and beaches" (OSH 2002b), though there are no laws to prevent younger children from driving ATVs off road, including on farms (OSH 2002b).³ The vehicles are subject to two forms of regulation

² Because ATVs need not be registered for off-road use, actual numbers currently in use are impossible to determine. Of those relatively few vehicles which are registered, most are in urban areas and used by city councils or parks and reserves operations (personal communication 2006)

³ In 1996, OSH issued *Guidelines for the Provision of Safety, Health and Accommodation in Agriculture*, a best practice document which allows children aged 12 to 15 years to operate tractors on farms under specific conditions (Section 2.22) and this informed the development of ATV user guidelines in New Zealand.

in terms of farm use, however. Work-related on-farm use of ATVs is covered by OSH, whereas non-work-related on-farm use of ATVs comes under the 1961 Crimes Act, which is enforced by the Police (OSH 2002b).

Regulations developed under the Health and Safety in Employment Act 1992 require employers to ensure that children under 15 do not operate tractors and other “self-propelled mechanical plant” (Langley 1997:10), but this applies only to employees and even then, because ATVs weigh less than 700kg, no age or employment restrictions actually come into effect (Langley 1997:10). Under Land Transport regulations, ATVs must be registered (and therefore warranted) only if used on public roads. Helmets are compulsory only when riding ATVs on the road, though farmers are not legally bound to wear them when riding ATVs on roads that border or intersect their own farm, subject to a 30kph speed restriction (Land Transport New Zealand 2005’ OSH 2002b).

In the absence of specific legislation, the agricultural sector is guided by a set of operational guidelines, the *Safe Use of ATVs on New Zealand Farms Agricultural Guidelines* (2002).⁴ Published by OSH, the *Guidelines* were composed in consultation with a number of stakeholders under the auspices of the Agricultural Health and Safety Council.⁵ They provide standardised operational rules and practical safety advice to ATV users. Among these rules is a stipulation that children less than 12 years of age shall not ride the vehicles and youth aged between 12 and 15 years should do so only under certain conditions, such as meeting safety criteria in regard to training, physical strength, helmet use, absence of passengers and loads, speed limits and supervision of the rider.⁶ In this respect, the *Guidelines* implicitly condone ATV use amongst 12--15-year-olds. The *Guidelines* also advise that ATVs are not designed for carrying passengers. While the *Guidelines* cannot be legally enforced, its authors note that they represent -- and may be interpreted by the Courts as -- an industry agreed position and best practice (OSH 2002b). There are also various manufacturers’ guidelines also in existence, though they provide inconsistent operational advice, particularly in regard to minimum rider ages.

While the literature is unanimous in its insistence that ATVs are not designed to be ridden by children, and that children lack the physical strength and cognitive capacity to operate them safely, ATVs are commonly ridden by children on farms in New Zealand. Existing research shows that children begin to drive ATVs at well below the ages recommended by manufacturers and the *Guidelines*. Despite the increasing number of accidents involving children, our key informants were averse to further legislation. This sentiment was echoed by our expert informants, who emphasised the impracticality of initiating further ATV legislation, noting in particular the difficulties inherent in monitoring and enforcing legislation specific to remote geographical regions. The key informants viewed any further formal governance as restricting prevailing workplace practices and as unwelcome intrusions into the operation of private businesses. Both groups viewed legislation as a “last resort” strategy, appropriate only if educational campaigns failed to achieve an improvement in rural safety practices.

⁴ Hereafter referred to as the *Guidelines*.

⁵ Federated Farmers, NZ Young Farmers’ Clubs, Rural Women NZ, NZ Deer Farmers’ Association, NZ Farm Forestry Association, the Agricultural Industry Training Organisation, the Council of Trade Unions, MAF Policy, OSH and ACC.

⁶ The guidelines define ‘shall’ as a ‘mandatory recommendation’ for compliance with the guidelines, whereas ‘should’ is defined as ‘a preferred practice or recommendation’ (OSH 2002:4).

THE ACCIDENTS

ATVs are the vehicle most commonly involved in child workplace fatalities (Lilley et al. 2004). The agricultural sector accounts for one-third of all workplace fatalities involving children (Lilley et al. 2004) and one-third of farm fatalities involve ATVs (Owens 2005). Between 1990 and 1999 ATV accidents were responsible for more than 900 hospitalisations of children under 15 years of age (Safekids 2001). In 2001 there were 12 ATV-related deaths involving children under the age of 15 (Safekids News, June 2005).

Recent New Zealand research shows that work-related child fatalities primarily involved children who were bystanders (86%) and just over half of work-related fatalities for children up to five years of age occurred on farms (Lilley et al. 2004). This research also indicates that a high proportion of fatalities occurring in the under-five-year-old age group is associated with children playing or helping out in an area where work was being carried out by a parent. For older children, the most common working activity associated with a fatal work-related accident was riding a motorbike or ATV to shift stock on a farm (Lilley et al. 2004). The two most common non-working activities at the time of a fatal accident were being a vehicle passenger and playing in or near the workplace (Lilley et al. 2004). Males are more at risk than females, with just 18% of fatalities occurring to females. As with most types of accidents, fatalities are simply the tip of an iceberg.

Phrampus et al. (2005) report that most adult injuries occur when the driver loses control of the vehicle, causing it to roll over and then throw the driver (p. 59). Rollovers are a leading cause of injury to adult ATV riders in New Zealand and entrapment is a feature of just under a third of rollovers. For children, the pattern is significantly different. For them, falls from the ATV are the most common source of injury, with 40% occurring this way (Brown et al. 2002:377). Typically, ATV injuries to under-15-year-olds in New Zealand occur on dairy farms, mainly to boys. Three distinct groups of children can be delineated in the injury statistics: passengers, bystanders, and child drivers. Contrary to widespread warnings against the carriage of passengers by official organisations and manufacturers, it is common for farmers to take children as passengers while they attend to work on the farm. Young children therefore feature prominently in statistics reporting injuries to passengers. Bystanders killed on farms in New Zealand are also more likely to be younger children. Lilley et al. (2004) found that in workplace fatalities to children under five years old, all the children were bystanders, and in 68% of workplace fatalities involving 10--14-year-olds, they too were to bystanders.

THE ENVIRONMENT

Farming families face a set of domestic and working circumstances which differ significantly from most of their urban counterparts in that the farm is both home and workplace⁷ and the boundaries between the two are inherently blurred. Even when not directly involved in farming operations, rural children are routinely part of the farming workplace, often because of the lack of viable childcare options. Our key informants stressed that the geographical isolation of many farms, coupled with the 24-hour commitment required on working farms, leaves farming parents with few, if any childcare options. Childcare facilities are likely to be distant and unlikely to provide services at times of most need -- early morning milking or

⁷ The growing trend towards working from home is acknowledged, though this is usually associated with IT, textile or clerical types of work, which pose minimal risks to children.

calving, for example. Affixing extra seats to ATVs and taking the children into the farm workplace is frequently regarded as the only practical alternative.⁸

Risks do not arise solely from practical considerations such as these, however. The literature also indicates a tendency to let children accompany adult workers using machinery and to allow children to perform work-related activities which are inappropriate for their age and physical size (Lilley et al. 2004). Whether children are themselves engaged in farming activities, or are simply accompanying their parents whilst the parents work, their very presence in the farm workplace necessarily increases their exposure to the risks associated with a demonstrably dangerous workplace.

THE CULTURE

Farming culture has historically encompassed a rugged, independent tradition, along with a strong family ethos which is expressed in the farming community's commitment to working, living and playing together. This tradition of self-sufficiency, individual initiative, physical strength and established practice informs the rural community's perspective of safety issues in general and ATV safety in particular. It also fosters a different level of safety consciousness amongst the rural community, who routinely engage in behaviours that are inconsistent with acknowledged dangers in farm workplace (Lilley et al. 2004). That is, knowledge of the risks and awareness of existing safety recommendations do not translate into safety compliant behaviour. In part, this is connected with the practical realities of a working farm. Rules and regulations are ignored or bent for want of viable childcare options, for example. A second dimension is more closely aligned with farming culture, however.

In keeping with the general ethos of a culture that values strength, initiative and self-reliance, many farmers ignore rules, regulations and recommendations almost as a matter of course, and in the case of ATV safety, a lack of stringent regulation allows them to do so. Paraplegic farmer Kevin Richards (himself the survivor of an ATV accident) argues that "It's not instilled into the farming culture to be safe" (Sweetnam 2000:5), a sentiment echoed by co-author of the Otago workplace accident study, Rebecca Lilley, who argues that "a safety culture has been lacking within this community for a long time" and that "the culture of farming ... needs to change" (The Press 2005:3).

The involvement of children in the day-to-day operation of farms emerged in the research as one of the most fundamental determinants of child ATV safety. While it was generally perceived as a positive practice for both parents and children, one effect of this inclusive, family approach to farming was the perception that older children were similar, if not equivalent to adult farm workers. There was again evidence of a disjunction between knowledge and behaviours. Zentner et al. (2005) report that "... the majority of farm parents perceived farming to be more dangerous than other occupations, yet substantially fewer thought it was more dangerous for children to work on the farm than to work in other settings, and even fewer perceived their children to be at risk for a farm injury" (p. 865). Indeed, the Zentner study noted that there is a "belief held by a noteworthy proportion ... of individual farmers, that farming is dangerous, but 'not for my children'" (Zentner 2005:865).

⁸ For example, Brosnahan (2000) presents the experiences of one farming mother as being relatively typical. Formal childcare for her children would require a round trip of 56 kilometres -- and many women, she believes, are in a worse situation.

Within the New Zealand farming community however, there was evidence of a growing disparity of opinions between the sexes. Two of the expert informants noted that rural mothers were becoming increasingly opposed to children having access to ATVs. Within the group of key informants, fathers were more accepting of the presence and involvement of children on the farm and stressed the importance of education, personal responsibility, awareness and vehicle maintenance when considering ATV child safety. By contrast, the mothers, sought to minimise children's involvement in farm operations and perceived a stronger demarcation between the home and work environment on the farm. Both groups preferred to retain personal choice, as opposed to further regulation, but the mothers adopted a more complex approach to the multiple factors that increased their children's exposure to ATVs and other farm risks.

MEDIA

The rural gender divide was not the sole difference of opinion to emerge during the research. Significant differences between rural and urban attitudes were evident in news media accounts of the 2005 tragedy and its aftermath. The prosecution of the child's father attracted significant media coverage, with editorial commentaries and rural readers' responses exposing a sharp divergence of opinion. The rural community perceived its urban counterpart as having little appreciation or understanding of the exigencies of farming life, while metropolitan editorial commentaries lamented the rural community's pride in pragmatism for its fatal repercussions when it involved "bending the rules" (*Farmers Weekly* 2005:12).

Many farmers argued that pragmatism was "the only workable option" (Smith 2005:10), insisting that the unique circumstances of rural family and working life required a different set of standards. Somewhat contrarily, the case was viewed by many rural residents as an unfair punishment for a momentary lapse in judgement and as tragic reminder of the need for vigilance, while at the same time there was acknowledgement that allowing young children to ride ATVs was a common practice.⁹ Indeed, ATV use by and around children was regarded as "normal practice" on the farm and this formed a cornerstone of the defence case.

FINDINGS

The overall picture presented by the CAPFNZ research was one of a sector typically displaying low compliance rates with officially endorsed safety messages and an unacceptable level of injuries amongst the paediatric population. There was evidence of a complex web of inter-related contributory factors. These included rural parents' lack of access to appropriate childcare options, the widespread practice of children undertaking farm duties, and inconsistent guidelines for the safe operation of ATVs. The data also confirmed the unsuitability of ATVs as vehicles of choice when transporting children on the farm, or as vehicles to be driven by children when undertaking farm duties. Legislative responses in regard to implementing minimum driver ages or transporting children on the vehicles were viewed as "last resort" options. The preferred option was to amend existing rural culture through educational programmes and awareness campaigns.

The report provided recommendations under nine distinct categories, which often overlapped and were inter-related. The strategies for practical solutions included ensuring better

⁹ An expert involved with the CAPFNZ research had undertaken an informal survey of 12 rural schools which he visited. Each had a roll of about 50 pupils. Of the 600 or so students in the schools, only five or six had never ridden an ATV.

availability of, and access to childcare, with provisions for in-home care where necessary. The report recommended continuing support for existing formal training programmes and reductions in ACC and insurance levies for farmers who meet various safety training and vehicle maintenance requirements. It also encouraged further research efforts in regard to the design and technical aspects of the vehicles. Recommendations with regard to the vehicles themselves included continuing the development of a device to limit the speed of the bikes when cornering and refinements which enhance the stability of the bikes. In addition to further discouraging the attachment child car seats and the carriage of passengers in general, the report also supported renewed and continuing promotion of the NZS 8600:2002 specialised farm ATV safety helmet.

While these types of measures may remove practical barriers to safer practices, that in itself does not equate to changes in behaviour. The CAPFNZ report therefore made further recommendations designed to address farm culture directly. The issue of further regulating ATV use on private property was perhaps the most contentious for our informants. In light of this resistance and because any further legislation would present significant monitoring difficulties due to the geographical isolation of most farms, it recommended that in lieu of further legislation, the *Safe Use of ATVs on New Zealand Farms Agricultural Guidelines* (2002) be adopted as the benchmark in ATV safety in New Zealand and supported a minimum driver age of 15.

The strong resistance of the farming community to any further regulation of their practices suggested that safer practices were contingent on changes occurring within farming culture and it was thought that this was more likely to be precipitated by measures designed for and by those directly involved. Accordingly, the initiation of a process reminiscent of that from which the *Guidelines* eventuated was advocated. Essentially envisaged as a social dialogue¹⁰ amongst farmers, work and safety organisations, child welfare agencies and vehicle safety experts, the process would be charged with delineating safer norms for New Zealand's rural children. Such a multi-stakeholder process could address the historic absence of children in both the existing legislation and previous dialogues around farm safety.

RECENT TRENDS

The shock that reverberated through both rural and urban communities was compounded when the child's father was charged with manslaughter. Publicity surrounding the case ensured that the broad parameters of prevailing farm practices received sustained scrutiny and discussion over an extended period. On the one hand, the tragedy and ensuing discussion provided some cause for optimism that behaviours on the farm might move towards better safety practices on the farm. On the other hand, the utilization of "normal practice" as a key part of the defence case and the ultimate acquittal of the father suggested that the status quo might be maintained. That is, farmers may have viewed the acquittal as vindication of the farming community's practices and safety culture.

Furthermore, there is a sense in which there is now a perverse incentive not to change farming practices, since to do so will remove a proven legal defence should a further tragedy occur. It is therefore in farmers' interests to continue to allow ATV use by and around children. It was also made clear in court that the *Guidelines* were not considered to be an

¹⁰ The *Guidelines* process has been used as an exemplar of social dialogue in government papers (see, for example, Dyson 2004).

industry standard or best practice, with farmers testifying either that they were unfamiliar with the *Guidelines* or that they chose to ignore them (Boyes 2006).

If the court case had effected any change in farming behaviours, it was likely to be reflected in ACC caseloads over the period since 2005. Data supplied by ACC (Table 1) show a steady increase in the number of claims for children involved in ATV accidents each year since 2001, with the trend continuing in the year to June 2006 -- the period following the child's death. Claims for accidents involving children below the age recommended by the *Guidelines* have increased 10-fold over the five years covered by the table (subtotals). During the 12 months from September 2005 court case, claims increased by more than 27% for all children under 15 years of age. While all age groups recorded increases in claims, the increase for children aged 10--14 years rose at a lower rate (14.5%) than that for younger children. Alarming, the greatest percentage increase occurred in the 5--9-year-old age group at 49%.

Table 1 New ATV Claims (Medical Fee Claims) for Claimants 19 Years and Younger, by Year

Age	July 2001 -- June 2002	July 2002 -- June 2003	July 2003 -- June 2004	July 2004 -- June 2005	July 2005 -- June 2006
0--4	5	7	24	26	33
5--9	4	16	46	49	73
10--14	10	11	58	83	95
Subtotal	19	34	104	158	201
15--19	52	39	66	110	150
Total	71	73	194	268	351

The increasing numbers doubtless reflect the increasing popularity of ATVs but, because reliable data on total numbers of ATVs currently in use are not available, it is not possible to ascertain *rates* of accidents. Nonetheless, the increased numbers bear out the predictions of experts, wherein the numbers of accidents involving children were expected to rise as total vehicle numbers increased (Kelleher et al. 2005). They are also testament to the continuing use of ATVs by and around children, suggesting that it is still "normal practice".

DISCUSSION

It was evident in the earlier research that there was a mix of practical and cultural factors which contributed to the levels of risk to rural children. While farming families clearly face practical problems in terms of the availability of childcare, this is less relevant to older children since they require supervision rather than care, presenting a different set of problems. Compliance with regulations and guidelines in regard to older children is less connected to the availability of childcare and more readily reflects decisions premised on personal choice rather than a lack of choice. The childcare argument in regard to younger children is also tenuous however, given that throughout New Zealand thousands of families must make decisions about how best to arrange for the care of their children if both parents work (whether for wages or self-employed) and it is not the case that all urban workers have the luxury of working hours which coincide with the common hours of operation of childcare facilities. Similarly, the problems associated with accessing childcare facilities are frequently paralleled in urban environments, with parents in our larger cities often spending at least as much time (if not distance) in travelling to and from childcare centres. The details and dynamics of urban and rural situations may differ in significant ways, but this indicates a need for innovative solutions, rather than acquiescence to continuing risks.

ATVs themselves are clearly not designed for use by children. In addition to their size, weight and power, their high centre of gravity and the required mode of riding present a challenge to adult riders. For small bodies, the challenges are even greater.¹¹ The CAPFNZ project provided evidence of small shifts in attitudes to farm safety, particularly amongst rural women. Farm and workplace safety experts also continue to promote training programmes, increased risk awareness and widespread adoption of the *Guidelines*. While the issues raised in the public domain by the 2005 case appear to have dissipated somewhat in the aftermath of the trial, Federated Farmers' president Charlie Pedersen is confident that more farmers are adhering to the *Guidelines* and "fewer were allowing their children to ride ATVs" (Watt 2007). Together, these shifts suggest that voluntary compliance with the *Guidelines* may yet eventuate. In the light of continued increases in ACC claims however, such changes as do exist are clearly insufficient to reverse the upward trend in ATV accidents involving children. While individual farmers may indeed be reconsidering or changing practices on the farm, the data indicate that safer practices are far from universal. They also indicate that it is not merely a matter of preventing children from driving ATVs, since the majority are injured as bystanders.

Complicating matters further still is the increasing popularity of lifestyle blocks, where ATVs are used for both work and recreation. Anecdotal evidence indicates that ATV use by children is considered to be amongst the benefits of the family's chosen lifestyle, though gender differences are again evident.¹² Current data present problems here since they do not distinguish between farms and lifestyle blocks. Nor is it clear whether the accidents involve drivers, passengers or bystanders. The updated ACC statistics might suggest that any changes in farming practices are happening too slowly to provide appreciable improvements in the safety of farming (as opposed to lifestyle block) children. Alternatively, they may indicate that the rate of increase of lifestyle blocks is such that accidents within that domain obfuscate any improvements in the data relating to the farming community. The distinction is immaterial, however, since in either case it is clear that rural children continue to face unnecessary risks and the risks apply to both environments in almost equal measure. Irrespective of specific location, ATVs are inappropriate vehicles for operation by or near children.

In the original research the researchers deferred to the views of both groups of informants with regard to further legislating ATV use. This decision reflected consideration of both cultural and practical factors: the strong resistance from the rural community and the difficulties inherent in monitoring compliance in geographically isolated environments. Both aspects are open to challenge. The practicalities of enforcing the legislation are not insurmountable, nor can they be reduced simply to the difficulties of monitoring compliance. In the event of an accident, non-compliance will be readily apparent. Enacting legislation in the face of resistance from within the community is also not without precedent. The introduction of laws requiring the use of child car restraints provides a cogent example of the forces at play here. It also demonstrates that the cultural dimension is perhaps less significant than the research indicates in as much as it illuminates the ways in which technological

¹¹ In recognition of the risks associated with disparities in weight ratios, some US states have introduced legislation calling for the development of a "rider fit" requirement to prevent children riding adult-sized bikes (Manning 2007)

¹² For example, amongst the enquiries canvassed following the release of the CAPFNZ report, was a request from a lifestyle block mother seeking information which would strengthen her position in opposing her husband's encouragement of ATV use by their children.

developments frequently present safety concerns which remain unconsidered for long periods.

For successive generations, many thousands of children routinely travelled unrestrained in cars, with many good parents even allowing unrestrained front seat travel for children. Over time, data attesting to the risks associated with the practice prompted the promotion of child car restraints. That is, there was a time lag between the development of new technologies and the development of appropriate safety practices, simply because the risks remained unconsidered until sufficient data were accumulated to indicate the need for changing behaviours. Similarly, the development of ATVs and their deployment in farm workplaces or on lifestyle blocks presents a new set of safety considerations which were initially unconsidered. For many people, the decision to allow small children to operate a 400kg machines defies comprehension. Thirty years ago, those same people may well have allowed their toddlers to travel standing on the front passenger seat of the family car. Child car restraints were not universally welcomed initially and, ultimately, behavioural change did not occur simply through educational campaigns. It was not until legislation was introduced in conjunction with the education campaigns that parents eventually accepted that prevailing practices posed unnecessary risks to their children.

Reducing the risks to rural children requires urgent attention and, contrary to the recommendations in the CAPFNZ report, history suggests that the optimal method for instigating extensive shifts in behaviour is legislative change. While social dialogue may yet be useful for deriving improved rural child safety norms in general, it will be a lengthy process. Current ATV accident statistics communicate the urgency of the situation, such that the statutory regulation of ATV use is imperative and overdue. In terms of operating the vehicles, a minimum driver age, consistent with both the *Guidelines* and our Land Transport legislation, should be set at 15 years, subject to completion of a standardised competency test. This is entirely consistent with legislation governing the operation of any vehicle on public roads, but removes ATVs from among the vehicles currently exempted for off-road use.

Given that ATVs are replacing tractors as the workhorses of the farm, the vehicles themselves should be subject to the same restrictions as currently pertain to tractors with respect to their operation and the carriage of passengers. Such measures will remove the incentive to persist with unsafe behaviours in the interests of sustaining a “normal practice” legal defence. They will also allow charges more commensurate with the (in)actions involved, rather than the present constraints associated with the Crimes Act, wherein manslaughter charges eventuate, though they will not preclude such charges when warranted. Furthermore, any developing propensity towards recreational use¹³ of the vehicles by children on lifestyle blocks may be forestalled before the practice becomes entrenched. As noted by ACC Injury Prevention Programme Manager, Peter Jones, “ATVs are not toys” (Watt 2007).

Clearly, such legislation may initially be unpalatable to many in the rural community, including rural children, and the transition will no doubt be fraught for some of the current generation. Conversely, if farming practices are already changing through voluntary compliance with the *Guidelines*, legally codifying those new behaviours should not present significant problems. As happened with car restraints -- or motorcycle and bicycle helmets --

¹³ The author notes the advent of “mini” ATVs, which are sold as children’s toys. These have not been considered in this research and it is not intended here that they be governed by the legislation suggested. Their safety -- or otherwise -- is a matter more properly in the domain of product safety regulators.

the practices fostered by the regulations will eventually be adopted as new behavioural norms which recognise the risks associated with technological developments. In the interim, legal changes may well present practical problems for farming families without access to suitable childcare options. There is therefore an obligation to give serious consideration to the relevant recommendations in the original CAPFNZ report, particularly those connected with access to childcare and the initiation of social dialogue in regard to developing appropriate safety norms and practices for rural children.

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