

Chapter 14

Sectors

June 1999

Taking to the field

In agriculture there is a broad division between family farms and larger scale 'agri-business'. There are some 7,800 salaried managers but there are also many family farms and holdings, particularly in upland areas. The sector now involves directly some 603,200 people (including some 280,900 farmers and 74,600 working spouses, about 101,600 full time workers and 56,700 part time). Children too are involved from an early age particularly in horticulture and in intensive areas of crop production. There are also many casual employees and seasonal workers (an estimated 81,700).

The undoubted progress achieved in increasing output and quality of agricultural produce has not been matched when it comes to health and safety performance. There are nearly 50 fatal injuries a year in agriculture, (just over 17 per cent of all work related fatalities in the UK), despite the fact that the industry now only employs about 2 per cent of the working population. Needless to say, there is massive under-reporting of injury under RIDDOR and, every year, there is a sadly predictable number of fatal and serious, injuries to children.

One of the most obvious reasons for agriculture's poor OS&H performance is that it presents an almost uniquely varied 'hazard menu', with a vast array of sources of harm. Examples include: increasingly powerful and complex vehicles and field machinery of all kinds; agrochemicals of all kinds; pesticides; numerous fire hazards; manually handled loads; animal handling; veterinary medicines; hand tools of all kinds; open water; confined spaces; working at height; noise; dust; etc.

Types of accident which give rise to particular concern include: tractors overturning; accidents with unguarded power take off shafts; accidents with field machinery (particularly clearing blockages); accidents in silos and slurry pits; chain saw accidents; and accidents with overhead electricity lines.

When it comes to health, statistical indicators are sparse but the sector appears to perform badly in the major categories of work related health damage such as musculoskeletal disorders; skin problems; respiratory sensitisation; cancer; and deafness and vibration injury. And on top of this, there are sector specific problems such as: farmer's lung; certain kinds of poisonings (e.g. contamination at organophosphorous 'dips'); zoonotic infections etc.

The industry also has, in some ways, unique occupational psychological problems with many sources of stress, including not only financial uncertainty and operational pressures but social isolation. The rate of suicide among farmers and agricultural workers is particularly high.

Many of the problems involved in managing health and safety in agriculture are the same as those affecting small firms generally. Not only is there widespread ignorance about hazards, levels of risk and control measures but managers are stretched with limited time and financial resources. There are invariably long intervals between accidents which have serious consequences but when they do occur on farms, as in other small businesses, they are disproportionately affected. There is a general lack of access to outside help and expertise - including no involvement of safety representatives and a general lack of health and safety training - despite the fact that the industry's training infrastructure has managed to survive the upheavals in industrial and vocational training over the last 25 years.

These problems are often compounded by a generally negative view of health and safety as a bureaucratic burden and a failure to see it as an opportunity for improving operational efficiency.

Despite advances in technology, the pace of work in the industry is still largely governed by the constraints imposed by the seasons, by the weather and by available light. In consequence the agricultural workforce, from salaried manager to part time worker, is essentially multi-skilled, often moving from one hazardous task to another with great speed and under rapidly changing conditions. They are very much a lone workers, often taking complex decisions with plant and equipment worth hundreds of thousands of pounds without reference to supervisors or line managers or being under the control of formalised systems of work.

The development of competence therefore is absolutely essential and must start by focusing on attitude and general understanding before putting underpinning knowledge and practical skills in place.

Even though agriculture/horticulture has been within the scope of the HSW Act for over twenty five years and subject to the *Management of Health and Safety at Work Regulations* since 1992, the development of goal setting OS&H legislation informed by risk assessment has proved too complex for many farmers and managers, especially those who would still prefer to see health and safety as a set of purely prescriptive prohibitions.

In recent years HSE have continued to develop a proactive approach to farm inspection, targeting their inspection activity and maximising its impact with local 'blitzes' and other special awareness raising initiatives, for example, exhibiting at agricultural shows. Their aim is to seek compliance primarily through the giving of advice. But they also inspect reactively following accidents or complaints and use their enforcement powers wherever appropriate to secure improvements or to initiate prosecutions. Where prosecutions are successful, however, penalties are far less than those imposed for health and safety offences in urban magistrates' courts.

HSE have also sought to influence farm safety through the supply chain, for example via machinery and agrochemicals suppliers, as well as through the agricultural colleges.

They also know that agriculture and horticulture need to be brought fully within the HSC's 'Small Firms Strategy', which is based on the idea of making much greater use

of key 'intermediaries' - including 'Good Neighbour' outreach to small firms by large ones.

RoSPA is keen to help in this by promoting new initiatives by local, RoSPA affiliated Health and Safety Groups with significant rural catchments. There is considerable potential for them to develop activities focusing on agriculture - either on their own or in partnership with other 'players' such as MAFF; the National Farmers Union; the Transport and General Workers Union; NFU Mutual; LANTRA; the National Proficiency Test Council; and FASTCO. Other 'players' include the Young Farmers Clubs and the Women's Farmers' Union - both of which offer a means of getting health and safety information directly onto farms.

December 1999**Paddington aftermath**

The Paddington train crash is a salutary reminder that the disaster experiences of the eighties are not a thing of the past. The potential for large scale, high consequence accidental events is always with us.

The fact that 31 people died (plus the idea that, for several days after the accident, no-one actually knew how many had perished) shocked the nation. For that reason it may seem somewhat callous to make comparisons with other transport modes. Nevertheless, it should not be forgotten that the overall number killed is less than half the number of fatalities which occurred on Britain's roads in the previous month but which, because they did not occur simultaneously, received much less media attention.

However, the public have a right to expect very low levels of risk indeed when placing their safety in the hands of others. Railways are complex systems, both technically and operationally and thus are a potentially 'error rich' environment. The continuing problem of 'signals passed at danger' is only one example of this. But error is endemic in all walks of life and thus the safety of those involved in rail or air travel or exposed to major or nuclear hazards, cannot rely on vigilance and discipline alone. Systems to control 'high consequence' risks must always be designed to be sufficiently 'error tolerant' and, wherever possible, to 'fail to a safe condition'.

Inevitably some level of human error will be identified in the inquiry processes which are now under way. Yet this must not obscure the need to re-evaluate current approaches to railway safety generally. Given the enquiries' terms of reference, it seems likely that this will happen. In particular, the opportunity will be taken to examine whether unacceptable reliance is still being placed on consistent safety decision making by key individuals in the system (many of whom are under pressure) and whether additional technological safeguards are required to create greater overall levels of safety and reliability.

Beyond the technical failures, the more fundamental questions to be asked are those relating to current weaknesses in the whole railway safety regime, including some of the consequences for safety of restrictions on investment by both Railtrack and the train operating companies. It is alleged that these have expressed themselves in recent times both as failure to prevent serious 'unsafe conditions' and possibly several very significant 'near hits'.

Rail industry leaders insist that safety is their priority but many other commentators insist that the evidence does not support this view. In their eyes, privatisation of the industry was carried out in haste and introduced a new set of commercial priorities. The marketing men and accountants moved in. Manpower economies were made in the interests of short term profitability and 150 years of operating experience took second fiddle. Such commentators also allege that the training of a new class of railways professionals, albeit with experience in other sectors, has not matched the safety needs of the new regime.

Against this background, the appointment of Lord Cullen to head the enquiry into the disaster is very much to be welcomed, as is his determination to avoid the tangled web of delay that followed disasters such as the sinking of the *Marchioness*. Lord Cullen is an excellent choice. His groundbreaking inquiry into the Piper Alpha disaster left no stone unturned. Supported by a strong team of technical assessors, it went to the roots of that terrible tragedy by laying bare the weaknesses that were its fundamental causes. His recommendations completely transformed safety offshore, although of course more work is needed to improve safety performance in this sector.

This Cullen inquiry must be similarly searching. It needs to focus on fundamental questions and not simply revisit immediate technical and operational issues that are being examined anyway as a matter of urgency by the HSE and Railtrack in their investigations. It will need to be open, transparent and prompt but without the integrity of its methods and recommendations being compromised by the need to reach early conclusions or to find scapegoats. It should also be seen in the wider context of the Government's aim of achieving a more uniform approach to transport safety generally and the continuing debate about the case for developing a unified transport safety regime, co-ordinated if not administered directly by the HSC/E.

The following areas need specific attention:

Firstly, the reliability of systems for preventing train accidents generally. This should cover not only collisions of the kind that happened at Paddington, including in this case the involvement of fire, but all other kinds of accident, 'near miss' and 'unsafe condition'. It needs to look at the systems in place for preventing collisions, to see, for example, whether they include enough 'defence in depth' to make collisions acceptably remote so that a failure in one part of the system does not initiate a cascade of events leading to disaster.

Secondly, the inquiry must look in fundamental terms at the way in which rail safety is managed, considering not only formal reporting structures and systems of communication but looking in depth at the way in which health and safety management and culture are led 'from the top'. What safety experience and qualifications, for example, do board level directors in Railtrack and the train operating and contractor companies have to discharge their strategic responsibilities for safety? What about the safety training and accountability of senior and line managers? What about the ability of the railway workforce to provide an effective 'reality check' on safety?

Thirdly, the inquiry must look at the whole 'architecture' for safety regulation that has been developed post privatisation. The 'safety case' regime that has been put in place to address the safety arrangements and relationships between HSE, HMRI, Railtrack and the train operators has many strengths, including the greater use of risk assessment to determine the need for control measures and more systematic use of auditing techniques.

But the inquiry also needs to look at arrangements for resourcing safety regulation and whether or not HSC needs to go beyond simply charging for work such as planned inspections and work on 'safety cases' and level crossings and 'approvals' and be able to access major funding through a general safety levy on the whole sector.

Unless the inquiry is used as an opportunity to diagnose fundamental weaknesses or 'safety pathogens' in the railway safety regime as a whole and unless these are (and are seen to be) probed with vigour, the public can have no real confidence that lessons learned from the inquiry progress will reduce the chances of similarly dreadful events occurring in future.

January 2001

Manual handling in the caring sector

Around a third of all accidents reported to the HSE involve manual handling – and in the health care sector, half of all injuries are related to handling loads in the workplace. Indeed, every year some 5,000 employees in the health and social care sectors need time off work and around 4,000 nurses are forced into retirement because of back problems. The majority of such injuries occur when staff lift, carry and move patients.

Against this background – and, as its contribution to the European Week of Health and Safety 2000 – RoSPA convened a ‘People Handling Summit’ on 20th October 2000 at the Society’s Birmingham headquarters (see *Health matters*, page 14 for full report). It was chaired by Sir Frank Davies CBE OStJ, Chairman of BackCare and a past Chairman of the Health and Safety Commission. The aim was to assess current policy and practice, identify best practice, stimulate new initiatives, draw together those points where there was clear consensus and publicise the results in a report to be circulated to ‘key players’, including the Secretary of State for Health, Alan Milburn.

In discussion it emerged that, despite the scale of the problem in the NHS, much good practice was going on. Training staff in good manual handling practice is generally perceived to be the best way of preventing back injury although there are doubts as to how successful this has been on its own. It has become increasingly clear that, while training remains important, taking an holistic view of the problem and managing the risk effectively is absolutely essential. Ways of minimising risk are to ensure that: patients are never lifted manually; patients are encouraged to assist in their own transfers; and equipment and furniture is thoroughly evaluated for the tasks it is expected to perform before purchase.

However, even when good and appropriate equipment is available there are huge difficulties with pre-existing space restrictions; poor design of buildings generally; inaccessible bathrooms and lavatories; lack of adequate training facilities. There are general difficulties with released enough staff time to allow training to take place and in any event, the workforce is often demoralised, making it difficult to motivate them.

Moreover, there is no ‘right’ model to follow: best practice handling techniques seem to change constantly and there are differences between those used by hospital workers and social service/ambulance staff and other care workers. Solutions are many and varied – but a good place to start is with sound ergonomics.

The ‘Summit’ also discussed people handling problems in Ambulance Services and in the 6000 or so Registered Nursing Homes in the voluntary sector in the UK which provide private, 24 hour nursing care. Many ambulance staff provide round the clock response to emergency calls (mainly road traffic accidents) plus a routine service in which patients are taken by appointment to and from hospitals and other health care facilities, between wards etc. They are seven times more likely to be back injured than in any other occupational group – and they usually have to retire before their time. While other health care workers have adopted ‘no lift’ policies, ambulance workers have no option but to lift their patients.

Similarly, in nursing homes, most of the patients are extremely dependent on staff moving them and it is essential to provide them with as homely an environment as possible and to treat them with respect. Because there can be a tension between protecting staff and preserving the independence and dignity of patients, provision of appropriate training and handling aids must be go hand in hand with meeting patients' needs.

The 'Summit' concluded that the current level of injury and economic loss due to people handling injuries in the health and care sectors is totally unacceptable and that the true significance and impact of such injury is still insufficiently understood. More work is needed at ground level to highlight: the prevalence of such injuries; what they mean for individual sufferers; their economic consequences and their preventability.

There are clear legal requirements for employers to take action. Clear standards and guidance have been set and numerous training and technologically based solutions have been established. The poor progress in applying established solutions may be a reflection of continuing difficulties in establishing a sufficiently rigorous approach to health and safety management in the health and care sectors.

The National Health Service is under a clear obligation to respond to the recommendation in 'Revitalising Health and Safety at Work', that all Government Departments and public sector employers should seek to move beyond legal compliance and reach 'best practice' in their management of work related risks. Progress in reducing people handling injuries will be a key indicator of the extent to which the health and care sectors have been able to reach this goal.

Although initiatives such as the Government's 'Back in Work' initiative and 'Health at Work in the NHS' programme (led by the Health Development Agency) have been useful, they do not appear to represent a sufficiently high level, co-ordinated approach to making prevention of manual handling injuries in the health and care sectors an over-riding priority. The Department of Health (DoH) and the NHS Executive have lead roles to play in formulating such a strategic approach based on a clear Cost Benefit Analysis. A key element of any such national strategy must be the establishment of evidenced based people handling injury reduction targets in line with the overall headline targets for injury and ill-health reduction set in 'Revitalising'. And senior executives in the health service must be held accountable for achieving them.

Above all, a special board, involving a wide variety of 'key players' as well as individuals chosen because of their ground level experience, should be established by the DoH, under a senior independent chair, to develop and promote the strategy and to monitor and report on progress.