

Health and Safety Commission Paper		HSC/07/60	
Meeting Date:	9 October 2007	Open Gov. Status:	Fully Open
Type of Paper:	Above the Line	Paper File Ref:	
Exemptions:	N/A		

HEALTH AND SAFETY COMMISSION

Tackling Health and Safety in the Agriculture (Land Based) Sector: Future Direction

**A Paper by: Dr Elizabeth Gibby, Head of Injuries Reduction Programme, and
Chair of the Agriculture Industry Advisory Committee (AIAC)**

**Name of Board Member lead: Jane Willis
Cleared by Board Member: on 20 September 2007
Cleared by DCE: on 21 September 2007;
Cleared by CE: on 24 September 2007**

Issue

1. Future strategy for tackling health and safety in the agriculture (land based) sector, given the continuing high fatal accident incidence rate, and the levels of self-reported work-related ill-health, in the context of increasing pressure on HSE resources.

Timing

2. Routine

Recommendation

3. That the Commission:
 - notes the considerable efforts HSE and partners have made over many years leading to the current strategy launched in 2004;
 - and notes that notwithstanding these efforts, the continuing high level of fatalities in this sector, especially among the self-employed;
 - considers the moral and ethical drivers to continue work on this sector;
 - advises on the future direction of our work on agriculture, considering the options set out in paragraph 13, and invites HSE to develop more detailed plans for the chosen option.

Background

What is the scale of the Problem?

4. Latest estimates show that about 420,000¹ people in Great Britain (GB) work in agriculture which includes farming, arboriculture, fish farming, and amenity use of the countryside, representing about 1.4% of the GB workforce. The overall fatal injury rate and the rates for the employed and self-employed for the last 10 years are given in Annex 1 (Table 1). Figures for the last 20 years are shown in Annex 1 (Figures 1-3). The 06/07 figures confirm that agriculture remains the sector with the second highest fatality rate, with 8.1 deaths per 100,000 workers (compared to the rates in waste and recycling at 15.1, and construction at 3.7). (International data shows that the GB fatal accident record is not better than the EU average – probably worse, but direct comparisons are difficult – see Annex 2). Over the last 20 years and particularly since the outbreak of Foot and Mouth Disease in GB in 2001, the self-employed population in agriculture has been increasing relative to the employed population, as has the use of contractors and contracted labour. Analysis of the fatal incidence rates for these subsets reveals that the relatively ‘flat-line’ performance for the industry as a whole obscures the fact that whilst the incident rate for employees was on a downwards trend between 1986 and 2001, the rate for the self-employed and family-farm sub-sector was both higher than the employee rate and increased over the same period (Annex 1 – Figure 1 and 2). The major causes of fatalities (1996/7 – 2006/7) are: being struck by moving vehicles (22%) falling from height (17%) and being struck by a moving /falling object (17%). The sector is unique in risk characteristics in that it includes family members working beyond the state retirement age and children living in the workplace. In the last five years an increasing number of migrant workers have been employed among the temporary and casual labour needed to cope with the seasonal demands of the work².
5. Estimates of the non-fatal injury rate are difficult to calculate due to a significant level of under-reporting of accidents³. Annex 3 provides the best estimates available, and suggests that the rate of reportable injury is higher than the average for all industries. Annex 4 illustrates data on ill-health which is of a similar order to that for all industries. Musculoskeletal disorders (MSDs) are the most common ill health conditions in agriculture, and the incidence rates for occupational asthma and zoonotic infections are high.

What has been done?

6. HSE’s response to the serious problem of injury and ill-health in agriculture has changed over time. For many years, the interventions chosen were based on inspection (including that following an investigation of an accident),

¹ Source ONS (used to calculate incidence rates). However, the Defra estimate for June 2005 is 541,000, but is for the UK and includes casual labour.

² Estimates from Defra research in Spring 2004 (<http://www.precisionprospecting.com/pp/mainreport-defra0605.pdf>) are that 200,000-400,000 non-UK resident temporary workers are employed in sectors regulated by the Gangmaster Licensing Authority (GLA).

³ RIDDOR Reporting from agriculture at 31% is below the all industry average of 49%. Reporting from self-employed across all industries is less than 5%

communication and stakeholder engagement. In January 2004, following a review of the sector's accident and ill-health rates, together with employment and demographic data, a risk-based, evidence-led, 10 point strategy was developed with strong themes of partnership, communications, and intervening where evidence suggested a successful outcome (Annex 5). This was launched at a stakeholder conference by Lord Whitty and Bill Callaghan, Chair of HSC, and subsequently discussed by HSC in May 2004. Since 2005, this strategy has been pursued in the context of the delivery of Fit3⁴, with its focus on particular hazard areas, which are priorities to enable HSE to deliver the Revitalising Health and Safety and the PSA targets. The hazard approach has targeted some of the main causes of accident and ill-health within the industry.

7. The fatal accident rate for the self-employed (Annex 1 – Figures 1-3) has influenced the choice of key interventions. Thus the current approach to preventative work in the agriculture sector has focussed on influencing outcomes through communications activity (now dominated by Safety Health and Awareness Days – SHADs) and working with important and influential stakeholders (including the HSC's Agriculture Industry Advisory Committee (AIAC) which was reconstituted in 2005 with a wider, more diverse membership - see Annex 6). Over the last three years, operational resource has been primarily directed to investigation of serious accidents, and following up visits following non-attendance at SHADs; proactive visits are only made when farms are being targeted within a region for a specific hazard project or visits associated with casual and temporary migrant workers. (Enforcement data for the sector for the period 2002/3 – 2006/7 is shown in Annex 7). It has been recognised for some time that proactive inspection does not represent a cost-effective means of intervention to improve and sustain standards of health and safety for the self-employed family farms.
8. The work plan of the AIAC has been targeted at the key areas of transport; forestry and arboriculture; casual, temporary and migrant workers; worker involvement and child safety. Additionally, AIAC have recently agreed to focus particularly on MSDs. (Annex 6).
9. HSE's work in agriculture has been varied and innovative; often targeted at particular industry segments (as described in paragraph 4) of the sector (see Annex 8). For example, initiatives to date include:
 - development of SHADs,
 - award winning advertising campaigns,
 - production of written and web-based guidance,
 - and the creation of an interactive self-assessment risk assessment software tool for farmers.

Current initiatives include:

- the promotion of accredited competence qualifications for workers;
- working in partnership to protect casual, temporary and migrant workers;
- and work with the insurance industry. In partnership with Checkmate International (CMi), HSE's Agriculture and Food Sector team have refined CMi's automated risk-assessed underwriting process (and system for electronic capture of risk, insurance and other data) drawing upon their experience in developing HSE's own interactive risk assessment software

⁴ Fit3: HSE's Fit for Work, Fit for Life, Fit for the Future Strategic Programme created to deliver the PSA targets on reducing work-related injury, ill-health, and days lost.

for farmers and applying HSE's statistical and other data. A revised set of standards, weightings and scores for the health and safety element of the CMi process have thus been generated and the product is ready for application. A major insurance company in the UK has expressed serious interest in utilising the new underwriting system and discussions with CMi/HSE about the design of a pilot study in one or more segments of the industry are now well advanced.

Argument

What comes next?

10. In HSE and among industry stakeholders, there remains much passion and commitment to tackling the problems of the agriculture sector. HSE staff remain deeply concerned about the high rate of fatalities, injuries, and ill-health in this sector. Historically the step change reductions in fatalities in agriculture were achieved through regulation, for example the introduction of the Tractor Cabs Regulations (1974). Today and in the recent past we have had major difficulties in attempting to influence the agriculture sector, given that there is an increasing preponderance of hard to reach micro-businesses and the self-employed⁵; a culture of unwise risk taking; and health and safety is not always regarded as integral to good farm business management. In addition, many farmers are resistant to officialdom and feel the industry is unduly burdened by regulation and red tape. Other industry sectors where HSE strategy has led to demonstrable improvement in health and safety are characterised by larger firms, higher numbers of unionised workers, and ownership of the problem among stakeholders to be able to work in strong partnership with HSE. The domination of micro-business in agriculture means that however strong and willing the partnerships that are created with stakeholders in agriculture, it is always going to be difficult to reach and influence those at risk. There are moral and ethical arguments for HSE and industry bodies and stakeholders to continue to work to try to reduce accidents and ill-health in the agriculture sector. However, to continue this work raises the key question of how much and with which interventions. Given the pressure on resources within HSE, we must be realistic about what HSE can achieve even by continuing to work with strong and enthusiastic partners (as evidenced by the work of the members of the AIAC) and our future strategy for agriculture needs to take account of what impact interventions have had in the past.
11. Clearly the ultimate outcome (but lag) measures of whether interventions are successful and improves health and safety, are the injuries and ill-health statistics (Annexes 1, 3 & 4). From these statistics, no trend can be deduced for fatalities or for major injury rates over the past 10 years. More recently (in the two years since 2003/04) the rates of major injury and reportable injury from the Labour Force Survey have dropped. However, it is too early to deduce a trend in non-fatal injury given the longer term history of such figures in agriculture, and hence it is too early to say if the strategy from 2004 has had any differential impact

⁵ Two thirds of enterprises in agriculture have no employees, and most of the rest have less than 49; over 80% of workers are in enterprises with either no employees or up to 9 employees – Small Business Service.

compared to earlier years. Some work through commissioned research⁶ has produced a “leading” (as opposed to lag) indicator of change using a “survey style” instrument to try to measure subtle changes in health and safety attitudes and behaviours, and ultimately culture in the sector. This “Barometer of culture change” has been applied to a number of interventions including a follow-up study of delegates to an agricultural SHAD. Through the delivery of the current programme of agriculture SHADs it is estimated that 10% of the target population of self-employed farmers will have been reached by the end of March 2008. (However, currently it is taking more HSE resources to achieve good attendance of self-employed farmers at these events, compared with a few years ago.) Findings from the Bomel follow-up study of SHAD participants reinforced findings from earlier independent research and found that a majority of attendees showed some improvement in their risk management behaviours and in their intention to take appropriate action following the event. Further assessment is now needed to measure actual changes participants have made to processes and behaviours at work, as a result of attending SHADs.

12. Other research has provided insight into farmers’ perceptions of risk and preferred learning styles and of the best means of influencing the industry. This information has been incorporated in the current intervention strategy. Impact studies on individual interventions e.g. on the risk assessment software and advertising influence have yielded information which reinforces the current strategy. Further information on past, current and future initiatives is set out at Annex 8.

Options for Future Direction

13. We know that in the next spending period (2008/09- 2010/11), HSE’s resources risk being even more constrained and that all our work will have to be strictly prioritised. We also know that achieving attitude and behaviour change in respect of health and safety is particularly challenging in the agriculture sector. We believe therefore that there are three options which HSC may wish to consider:
 - a) Reduce proactive work on agriculture, given that there has been no statistically significant change or trend produced from the interventions that HSE has tried over many years (although the current strategy has not had time to show an impact), and given the difficulties of influencing the duty holders in the sector. However, reactive work in agriculture will continue, and will always be necessary both in operations and in terms of sector led work. The moral, ethical and political arguments for continuing some proactive work in a sector with large numbers employed and a high fatality rate needs to be considered.
 - b) Substantially increase resource on agriculture, with a return to more proactive inspection, and explicitly make agriculture a major priority for HSE resource. There is no evidence to suggest this would impact on the statistics. This would also contradict the outcomes of the evidence-led review which resulted in implementation of the current strategy in 2004. In agreeing to this, HSC would have to decide in which other sector(s) to withdraw inspection and other

⁶ Contractor: Bomel Consulting

interventions, in light of diminishing resources. There is better evidence of HSE inspired outcomes in some other sectors which might not be able to continue if increased resource for agriculture was agreed. An increase in communications resource for agriculture would enable more targeted advertisements and articles in the farming press (identified as a preferred and trusted learning mechanism for the audience) and continuation of an outreach programme through SHADs (perhaps with an approach to be refined through what has been learnt from evaluation). However, in the past we have spent considerable sums of money on communications including advertising with little if any measurable impact on injury and ill-health figures. In addition, any increase in communications resource for agriculture would have to result in reductions for other areas of communication effort and would need to be considered in light of other pressures and priorities.

- c) Refine and develop the current strategy (Annex 5) maintaining a major focus on communications through SHADs and working in partnership with stakeholders targeting major causes of accidents and ill-health, monitoring impact over time, and refining as evidence dictates. Within whatever resource is available, there could be:
- a sharper focus on segmenting the target groups for our interventions where we are more likely to make a difference e.g. large contractors vs self-employed; forestry vs family farms;
 - a refreshed focus on the use of intermediaries and other stakeholders to help promote key messages, (although attempts to encourage intermediaries and industry stakeholders to be more proactive are worth pursuing, they are not always easy when HSE has not been able and in all likelihood will not be able to maintain resources devoted to this sector in view of the likely contracting total HSE resource in the next spending period.)
 - localised marketing initiatives exploiting information on the impact of major injuries and fatalities. (The latter could be important in the context of devolution – see paragraph 21.)
 - a review of the methodology for the delivery of communication tools like SHADs to improve their impact;
 - a review of models of influence including supermarket supply chains etc and taking into consideration the changing nature of agriculture e.g. diversification of use of land;
 - a continuation of a little proactive inspection (but this runs the risk that the industry perception that inspection is a threat will be lost over time);
 - a continued strong focus on targeting migrant workers in the context of the Government's agenda for vulnerable workers (led by BERR), where intelligence suggests they are at risk. This would mean continuing to work closely on joint working initiatives with enforcers like the GLA where there are useful synergies e.g. "Operation Fuchsia" in the South West has targeted daffodil and broccoli growers. (However, future work on vulnerable migrant workers needs to be delivered in the context that there are other key sectors that also employ high numbers of such workers e.g. in construction and hospitality.)
 - a renewal in attempts to explore the scope for more strategic closer, high-level partnership working with Defra and other agencies/departments. However in doing so, there are questions as to the scope for shared vision,

synergy, reciprocity and problems with statutory remits, which could limit such partnership;

- a continuation of the current work with the insurance industry (see paragraph 9).

Consultation

14. Internally, the Agriculture and Food Sector team, FOD, CoSAS (statisticians, social scientists and economists), PFPD, LAO, other parts of Policy Group and Communications Directorate have all contributed to the development of this paper. The AIAC have also been consulted, and their comments can be found in Annex 9. Their view of the options is divided between some members requesting much more of HSE's resource to be devoted to agriculture, including a return to much greater proactive inspection and others who would be content with the option of refining and further developing the current approach. No member of AIAC has shown support for the option of reducing proactive work targeted at agriculture. There is a divergence of views from AIAC on the merits of pursuing work with the supermarket supply chains and the insurance industry.

Presentation

15. Current and future direction for HSE's work on agriculture including resources will continue to be of interest to key industry stakeholders, and in particular those represented on AIAC. Concerns over the current toll of fatal accidents, injury and ill-health rates in the sector, and the amount of resource devoted to agriculture have been raised with the HSC Chair and Ministers, by organisations represented on AIAC in the past couple of years.
16. Any change in direction for HSE activity towards the agriculture sector will need consideration in light of the Hampton principles of better regulation and with due regard for a sector where business can be severely affected by major outbreaks of animal disease e.g. foot and mouth disease or avian flu. A communications strategy and plan will be developed when decisions about future approaches in this sector have been made by the HSC.

Costs and Benefits

17. A detailed analysis of the costs of a future direction can be made when the HSC have discussed the options at paragraph 13. However, benefits of a future direction may be difficult to quantify due to the lack of evidence of impact of HSE's activities over recent years. In line with Government policy, formal impact assessments are required of policy initiatives, including the options in this paper. The impact assessment for the option preferred by HSC will be calculated following the HSC's decision on this paper. An outline of the considerations of the impact assessment is given in Annex 10.

Financial/Resource Implications for HSE

18. Total resources spent in the current spending period on staffing the agriculture and food sector team, together with budget allocations for communications

activity and research have been £2.2M for 05/06, 1.6M for 06/07, and likely spend in 07/08 is £1.1M. This breaks down as follows:

- in 05/06, resources for staffing were £914K, for communications were £425K, and for research were £825K;
- in 06/07, resources for staffing were £855K, for communications were £267K, and for research were £470K;
- in the current year, 07/08, resources for staffing are £683K, for communications are £200K, and for research are £187K.

19. The decline reflects the contraction of HSE resource for sector specific work over the three year period. This was the response to the need to target the principal causes of injury and ill-health at work, given that there was evidence that this was the best method of achieving delivery of the PSA targets. Therefore communications funding was targeted at the priority hazard areas. Simultaneously, proactive operational resource has been reduced by an order of magnitude. An estimate of the reduction in resources between 2003/04 and 2007/08 is set out at Annex 11. A comparison of resource devoted to other areas where HSC and HSE are concerned about fatality rates (waste and recycling and construction) is very difficult, and would be full of uncertainties given that success is aligned with the impact of specific interventions and the commitment of and ownership by the industry itself.
20. Once HSC has given a steer on future direction, HSE can work with AIAC and other key stakeholders to prepare costed work proposals for the next 3 years to measure impact. This would be done in the context of HSE's overall funding, and other strategic decisions that HSC reaches on the relative proportions and balance of preventative and reactive work.

Other Implications

21. Devolution: As agriculture is proportionately a larger employer, and a more important part of the economy in Wales and Scotland compared with England, HSE's current approach already delivers more interventions in these areas compared to England. For example, a higher proportion of SHADs and proactive inspection on hazard topics is more likely to take place in these regions. The political interest from the new devolved Government in Scotland for agriculture could grow in the coming months, given its interest in the rural economy. An improved segmentation of our target audiences in the agriculture sector for future work might be helpful in delivering local initiatives in line with the wishes of the devolved Governments.
22. Local Authorities: Part of the work developed on agriculture by the sector team involves amenity use of the countryside which often comes within the LA enforced sector.
23. Equal opportunities and diversity issues: N/A
24. Small and Medium-sized enterprises: (see paragraph 10)
25. Racial equality and other implications: (see paragraph 4 on migrant workers)

Action / Next Steps

26. HSC is asked to consider the options for the future direction of agriculture (paragraph 13), and whether they have any other suggestions for new interventions which could produce a step change in health and safety performance in agriculture, having considered what has already been tried (Annex 8).
27. Having given a steer on future direction, HSC may wish to invite HSE, working with AIAC and other key stakeholders to prepare costed work proposals for the next 3 years to measure impact (Annex 10), and to develop proposals for communicating the agreed future direction to those with an interest in this sector.

INDEX FOR ANNEXES TO HSC/07/60

Annex 1 Fatal Injuries in Farming, Forestry, Horticulture & Associated Industries

Annex 2: International Rates for Fatal Injury

Annex 3: Number and Rate of Major Injury in Agriculture

Annex 4: Work-Related Self-Reported Ill-Health in Agriculture

Annex 5: 10 Point Intervention Strategy in Agriculture

Annex 6: Agriculture Industry Advisory Committee (AIAC)

Annex 7: HSE Enforcement Data for Agriculture

Annex 8A - 8C: Past, Current and Future Activities in Agriculture and Associated Industries

Annex 9: Views of AIAC members on the options for the future approach to agriculture, as described in this HSC paper.

Annex 10: Impact Assessment – future Direction for Tackling Health and Safety in the Agriculture Sector

Annex 11: HSE resource allocated to agriculture in 2003/04 and 2007/08.