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Overview of approaches to farm safety – Northern Ireland, Great Britain and Republic of Ireland

1 Background

The topic of farm safety has featured regularly in the news over the last few years and a number of high profile and tragic incidents have ensured that this issue has provoked both community discussion and initiatives by policy makers in an effort to reduce the number of incidents.

This paper provides an overview of issues relating to farm safety in Northern Ireland, Great Britain and the Republic of Ireland, under the following 3 areas:

- Agriculture related accident statistics;
- Farm safety risk factors; and
- Existing farm safety mechanisms and initiatives.

2 Agriculture related accident statistics

When looking at accident related accident statistics it is important to remember that the accuracy of non-fatal accident in particular can be questionable. All of the Health and Safety statistics and associated literature, that the researcher has looked at, point towards the under reporting of non-fatal injuries as being a major issue.

Fatal accident statistics are more robust as a fatal accident will have a higher profile and often lead to an investigation of the causes.

2.1 Fatal injuries

Figures 1,2 and 3 below highlight the number of fatal agricultural injuries recorded within Northern Ireland, GB and the Republic of Ireland over the last 8 years (2005-2012). Collating the data for each jurisdiction reveals that the total number of fatalities as a result of agricultural accidents (2005-12) was as follows:

- Northern Ireland – 47
- GB – 243
- Republic of Ireland – 142

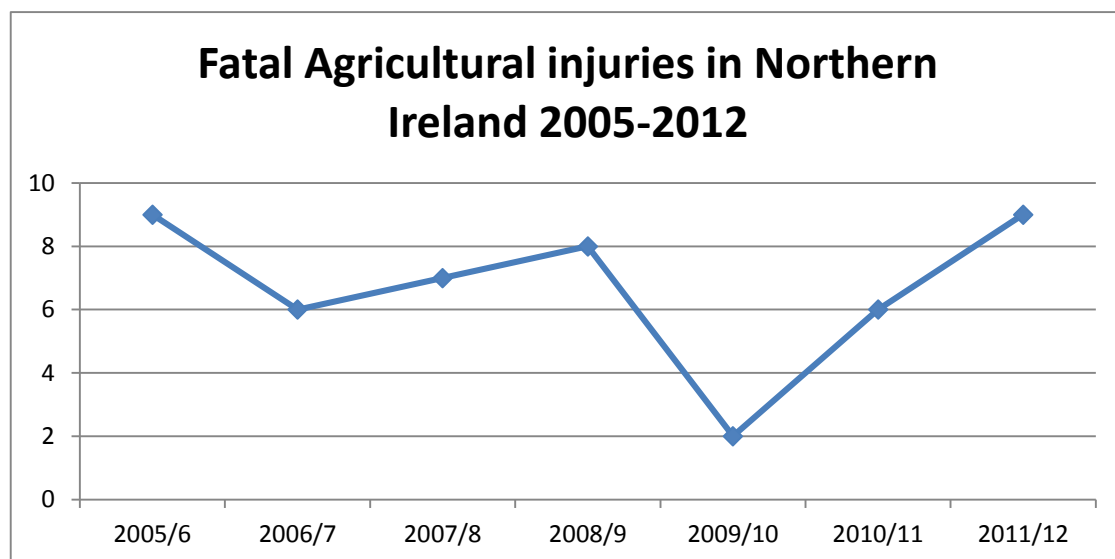
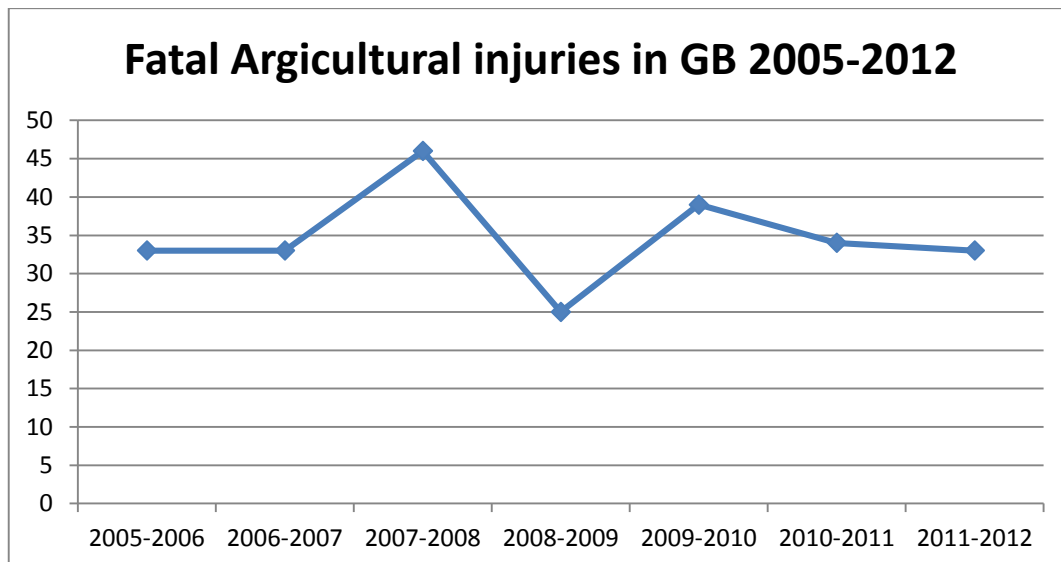
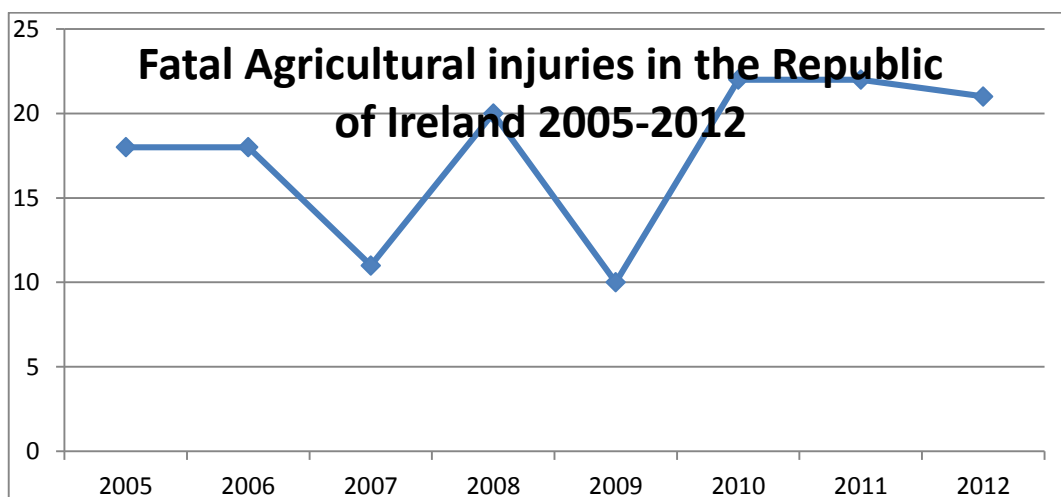


Figure 1: Fatal agriculture injuries in Northern Ireland 2005-2012¹

¹ [HSENI website - adopted from General Statistics 2005-2010 and Statistics Booklet 2011-12](#)

Figure 2: Fatal Agricultural Injuries in GB 2005-2012²Figure 3: Fatal Agriculture injuries in the Republic of Ireland 2005-2012³

Whilst the data shows a tendency for annual variation, in terms of trends it would appear that whilst the number of fatalities within GB and the Republic of Ireland has either fallen or stabilised over recent years, the trend within Northern Ireland is upwards.

Turning to the specific causes of fatal agricultural accidents, table 1 below highlights the available Northern Ireland, GB and Republic of Ireland data. The data in table 1 reveals a number of commonalities in terms of the causes of fatal agricultural accidents across Northern Ireland, GB and the Republic of Ireland with notable examples being falls, machinery and animal related incidents.

² [Agriculture, Work related injuries and ill health statistics, Health and Safety Executive, page 6](#)

³ [Summary of Workplace Injury, Illness and Fatality statistics 2011-2012, Health and Safety Authority](#)

Northern Ireland (April 2007-September 2012) ⁴	GB (2007-2008 to 2011-2012p) ⁵	Republic of Ireland (2012 agriculture, forestry and fishing) ⁶
Animals (27%)	Moving vehicles (21%)	Loss of control of means of transport or handling equipment (46%)
Falls (27%)	Struck by falling/moving object (19%)	Loss of control of item being worked on (18%)
Machinery (27%)	Contact with moving machinery (11%)	Loss of control of animal (14%)
Slurry (15%)	Falls (10%)	Fall (from height + same level) (11%)
Other (4%)	Injured by an animal (8%)	Loss of control of machine (1%)
-	Drowning or asphyxiation (5%)	-

Table 1: Main causes of fatal agricultural accidents, Northern Ireland, GB and Republic of Ireland

2.2 Non-fatal injuries

Whilst fatal injuries tend to be those which the media focus on, it is notable that data is also collected for non-fatal, but nonetheless serious injuries within Northern Ireland, GB and the Republic of Ireland.

Within Northern Ireland and GB, non-fatal accidents are recorded as either 'major' or 'over 3 days' (absence from work) injuries, whilst the Republic of Ireland captures this data on the basis of injuries that cause '0-3 days' or 'four or more days' absence (4+ days) from work.

Given the widely accepted issue of underreporting of non-fatal accidents, there are undoubtedly issues with the accuracy of this data, for example, in 2011 only 93 non-fatal agriculture related accidents were reported to the Health and Safety Authority in the Republic of Ireland despite over 80,000 people being employed in the sector. It should however be stated that non-fatal injuries, whilst not headline grabbing, may well have as devastating an impact upon both lives and the viability of farm businesses as fatal accidents, and as such may require further investigation.

3 Farm Safety risk factors

Table 2 below considers some of the issues which could be broadly termed as thematic farm safety risk factors.

Issue	Impacts
Age	In statistical terms it appears that farm accidents are more likely for older farmers. HSA data for 2012 reveals that within the Republic of Ireland, the highest number of fatal accidents within the Agriculture, forestry and fishing sector were aged 65+ (32%) ⁷ .

⁴ [Farm Safety Action Plan for Northern Ireland, November 2012-March 2014, Farm Safety Partnership, page 5.](#)

⁵ [Agriculture, Work related injuries and ill health statistics, Health and Safety Executive, page 6](#)

⁶ [Summary of Workplace Injury, Illness and Fatality statistics 2011-2012, Health and Safety Authority, figure 3.13 page 30](#)

⁷ [Summary of Workplace Injury, Illness and Fatality statistics 2011-2012, Health and Safety Authority, figure 3.8 page 28](#)

	At the other end of the age spectrum, children are also at risk from injury on farms but these incidents, whilst distressing, do not appear to be as common as those which affect older farmers on the basis of the statistics accessed by the researcher. Nonetheless, as evidenced by the range of programmes/initiatives there appears to be an ongoing need to educate children/young people on the dangers posed by the farming environment.
Sector	Different agricultural sectors may present unique issues in terms of the risks that farmers/farm workers are exposed to. By way of example, beef or dairy farmers may face greater risk of injury from animals whilst poultry farmers may face greater risks from issues such as poultry dust. This emphasises the fact that risk assessment is a process that needs to be tailored to individual sectors and farm businesses.
Economic conditions	Recently published Canadian research ⁸ has identified economic conditions as playing a role in the physical safety of farm work environments. The research established that higher levels of economic worry were associated with the absence of key safety features on farm machinery that were known to decrease the risk of serious injury when properly installed.
Time of year	The time of year appears to have a bearing on farm safety risks. HSENI data ⁹ indicates that the highest incidence of fatal accidents is over the spring and summer months, which are those months when farming activity is more extensive and working days are longer due to better light conditions.
Working practice/remoteness	The nature of farming is that it can often be a solitary pursuit and as a result accidents can take time to be discovered. This potential delay in terms of discovery can also be compounded by the remoteness of many farms which makes emergency service response times longer, and can subsequently have a bearing upon injury survivability.
Culture	How health and safety is viewed may have a bearing upon the actual level of risk that farmers/farm workers are exposed to. Viewing Health and Safety requirements as unnecessary 'red tape' when combined with a tendency to do 'get things done'/take risks can be a potentially dangerous combination
Size/viability of farm business	The size and viability of a farm business can have a bearing on the level of risk that a farmer/farm worker will be exposed to. Economically marginal farms may be less able to access investment funding which could be utilised to improve farm safety. In contrast a highly viable farm, which may be larger/more intensive, may expose farmers/farm workers to greater safety risks as there may be more animals to move, machinery to operate etc.

Table 2: Farm safety risk factors

3 Existing Mechanisms and initiatives

Table 3 below provides an overview of the organisations with responsibility for farm safety within Northern Ireland, GB and the Republic of Ireland, as well as highlighting some of the farm safety initiatives that have been developed within each jurisdiction.

Area	Responsibility for Health and Safety	Key Policy/legislation drivers	Farm Safety Initiatives
Northern Ireland	Health and Safety Executive for Northern Ireland (HSENI)	Primary legislation – Health and Safety at Work (NI) Order 1978.	<ul style="list-style-type: none"> Establishment of the Farm Safety Partnership May 2012 – UFU, DARD, NIAPA, YFCU, NFU mutual and HSENI all involved;

⁸ **Economic worry and the presence of safety hazards on farms.** [Hagel L, Pahwa P, Dosman JA, Pickett W.](#) Source Canadian Centre for Health and Safety in Agriculture, University of Saskatchewan, 2013

⁹ [Farm Safety Action Plan for Northern Ireland, November 2012-March 2014, Farm Safety Partnership, page 5.](#)

Area	Responsibility for Health and Safety	Key Policy/legislation drivers	Farm Safety Initiatives
	<p>Mission statement: <i>'To significantly reduce the number of work related fatalities injuries and cases of ill health in Northern Ireland.'</i></p>	<p>Establishment of Farm Safety Partnership in 2012 with associated Farm Safety Action Plan (Nov 2012)</p>	<ul style="list-style-type: none"> • Farm Safety Partnership publishes 1st Farm Safety Action Plan in 2012 – covers period of 2012 – 2014 and has 9 objectives and 44 action points under 4 key areas: <ul style="list-style-type: none"> ➤ 1 – Provision of Information and Promotion of Safe Working; ➤ 2 - Health and Safety Training; ➤ 3 –Motivating Good Practice and Discouraging Poor Practice; ➤ 4 – Collection and Analysis of Information <p>Key actions/initiatives building on Action Plan and underway at present include:</p> <ul style="list-style-type: none"> • Think SAFE Campaign – raising awareness of main causes of work related deaths on farms – Slurry, Animals, Falls and Equipment – has included a media campaign; • Farm Safe website – providing information and advice to farmers, farm families and those who may be visiting farms; • Stay farm safe information sheets/posters – availability and distribution on a range of issues including working with animals, working with slurry, and preventing falls; • Farm Safety advisory visits to farms – 600+ in 2012-13 by HSENI and District Council staff • Explore the potential for financial assistance to farmers to promote improved health and safety on farms - DARD • Power Take Off (PTO) Safety week; • Be aware kids – Child safety on Farms campaign – key safety messages delivered to 11,500+ pupils in 100 rural primary schools – associated materials comics, worksheets etc. • Promoting farm safety message through attendance at events e.g. Balmoral Show • Child safety on farms poster competition and calendar. • Farm safety workshops and training. • Health and Safety Works NI telephone helpline
<p>Republic of Ireland</p>	<p>Health and Safety Authority (HAS)</p> <p>Mission statement: <i>'To protect people from death, injury and ill health arising from all work activities and chemicals.'</i></p>	<p>Safety, Health and Welfare at Work Act 2005 – requires all farmers to prepare and implement a Safety statement (exemption for farms with 3 or less employees which can adhere to a code of practice to meet safety statement obligation)</p>	<ul style="list-style-type: none"> • Requirement for safety statement or code of practice for every farm • Farm Safety Action Plan for 2013-15 time period - 41actions under 5 goals: <ul style="list-style-type: none"> ➤ To establish and implement appropriate Safety and Health Training and Educational programmes for farmers and persons who are employed in the Agricultural sector. ➤ To develop programmes to prevent accidents and injuries to vulnerable persons (Children and older persons) in Agriculture. ➤ To achieve cultural and behavioural changes related to risk taking in Agriculture.

Area	Responsibility for Health and Safety	Key Policy/legislation drivers	Farm Safety Initiatives
		Establishment of Farm Safety Partnership Advisory Committee and publication of associated action plan	<ul style="list-style-type: none"> ➤ To influence farmers to manage high risk work activities and to improve standards in the use and maintenance of Tractors, Machinery and Farm Vehicles. ➤ To implement programmes to assist in protecting the occupational health of persons working in Agriculture. <ul style="list-style-type: none"> • Staying fit for farming booklet – deals with issues including injury stress, substance abuse etc.; • Play safe stay safe on farm with Jessy – children’s book • On the Farm – safety competition for primary school children • Safety guidance information on areas including cattle handling, tractor safety – written material and videos; • Online risk assessment tool • Safety inspections of farms undertaken by HSA staff (3000 in 2011 – to assess compliance) • Training – on a range of areas for farm and forestry workers • Specific Farm Safety survey – to better quantify risk factors – July 2013
GB	<p>Health and Safety Executive (HSE)</p> <p>Mission statement: <i>‘The prevention of death, injury and ill health to those at work and those affected by work activities’</i></p>	<p>Health and Safety at Work etc. Act 1974</p> <p>Agriculture Industry Advisory Committee (AIAC)</p>	<ul style="list-style-type: none"> • ‘Making the promise’ initiative to encourage farmers to stay safe and healthy – Jan 2009 • Farm safety self-assessment software • Farmwise report provides a step by step guide to what farmers are required to do under law as well as setting out safe practice for a range of on farm activities • Agriculture Industry Advisory Committee (AIAC) – has existed for more than 30 years – key mechanism for stakeholder involvement in health and safety and shaping H&S policy • Attendance at agri shows to showcase and promote farm safety issues • Farm Safety and Health Awareness Days (SHAD) – practical demonstration days that have a specific focus e.g. dairy and which highlight hazards and best practice. • Health and Safety Inspection Visits to farms • Operation ‘Safe Haven’ – focus on Health and Safety and wellbeing of migrant workers within agriculture • Production of case studies to highlight farm safety issues

Area	Responsibility for Health and Safety	Key Policy/legislation drivers	Farm Safety Initiatives
			<ul style="list-style-type: none"> • Production and promotion of best practice farm safety videos and leaflets on issues including PTOs, tractors, machinery handling, dust risks, sheep dipping. • Approved Code of Practice entitled “Prevention of accidents to children in agriculture”.

Table 3: Farm safety responsibility and initiatives within Northern Ireland, GB and the Republic of Ireland

Looking at the data in table 3, there are clearly many similar farm safety initiatives across the 3 jurisdictions, with mechanisms such as training, inspection visits, information events/videos/sheets being notable examples.

Measures designed to educate and reduce the farm safety risks for children were also common to all 3 jurisdictions as were means to enable farmers to conduct their own risk assessments.

Turning to more unique mechanisms, the following initiatives stand out across the 3 jurisdictions:

- Explore the potential for financial assistance to farmers to promote improved health and safety on farms within Northern Ireland - DARD
- Legal requirement for a safety statement or code of practice for every farm within the Republic of Ireland;
- 'Staying fit for farming' initiative within the Republic of Ireland which is highlighting the impact of issues including mental health and substance abuse on farm safety;
- The ongoing development and delivery of a specific farm safety survey within the Republic of Ireland to better understand and quantify risk factors;
- Farm Safety and Health Awareness Days (SHAD) within GB – practical demonstration days that have a specific focus e.g. dairy and which highlight hazards and best practice;
- 'Making the promise' initiative in GB – encouraging farmers to stay safe and health – associated ribbon.

4 Observations and general comments

- Farming is clearly a dangerous profession, as can be visiting or living on a farm, as evidenced by the continuing incidence of fatal and non-fatal accidents within Northern Ireland, GB and the Republic of Ireland.
- There are clearly significant efforts being made in the 3 jurisdictions looked at in this paper to reduce the incidence of farm accidents;
- There is a real need to both accurately quantify and better understand the impacts of non-fatal farm accidents;
- There are many variables which can impact on the risk posed to farmers/farm workers and others who find themselves within the farming environment. A better understanding and quantification of these risk factors may be an effective means of better targeting resources to further reduce the incidence of farm accidents.