

Northern Ireland Farm Safety Partnership Survey 2015



Final Report

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Farm Surveys Branch, DARD

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Northern Ireland Farm Safety Partnership Survey 2015

1.0 Background and Approach

1.1 Survey Objectives

The aim for this survey was to enhance the statistical evidence base available to the Farm Safety Partnership, its constituent members and other stakeholders with an interest in reducing farm accidents in Northern Ireland. The focus for the survey has been the collection of farm level data on:

- the number and nature of non-fatal farm accidents;
- the prevalence of higher risk behaviours;
- the identification of farm safety hazards;
- recent safety enhancements and areas identified for improvement;
- barriers to safer working.

A further objective for this survey was to allow comparison (when possible) with other investigations and research on farm safety, including an earlier survey of Northern Ireland farm households conducted in 2001/02.

1.2 Methodology

Data was gathered for the survey by postal questionnaire. The structure and content of the questionnaire was devised through consultation with the Health and Safety Executive Northern Ireland (HSENI) and with reference to other research in this area. The main source materials were the Department of Agriculture and Rural Development (DARD) publication, 'Farmers and Farm Families in Northern Ireland' (2002); Health & Safety Executive publication, 'Risk perception leading to risk taking behavior amongst farmers in England and Wales' (2002); and a PhD thesis by Anne Finnegan of University College Dublin, 'An Examination of the Status of Health and Safety on Irish Farms' (2007).

Stratified random sampling was used to select farms for participation in the survey. The sample was stratified by farm size and type, with over-sampling of less common and under-sampling of the most common farm types. A pilot postal exercise was carried out using a sample of 1,000 farm businesses. This achieved 486 responses (**48.6% response rate**). An important objective for the pilot survey was to test for the influence of anonymity on response rate. The pilot consisted of 500 questionnaires with pre-printed farm business contact and identification details and 500 without contact and business identification details. Questionnaires from the latter group were returned anonymously. Identifying the respondents simplified classification of farm businesses by size and type and extended the scope of the analysis by allowing matching of survey responses with other statistical information held by DARD. The

response rate was marginally higher for forms with pre-printed identification and the reported accident rate was similar. Based on the results of the pilot survey the decision was made to roll out the main postal survey using the questionnaires with pre-printed name, address and farm business identifier details. The pilot exercise also proved useful in highlighting weaknesses in some question formats and some lack of clarity with instructions. Changes were made which reduced completion errors in the main survey.

The main postal survey was released with media promotion in early February 2015. A sample of 8,065 farms was selected and 4,133 responses returned over a 10 week period. The overall response rate was 51 per cent – very similar to that for the pilot exercise. Returns to the pilot exercise were not included in data for analysis. The questionnaire used in the postal survey contained seven sections as follows:

- Section 1 – General Background
- Section 2 – Accidents
- Section 3 – Minor Injuries & Near Misses
- Section 4 – Work Practices
- Section 5 – Hazards on Farms
- Section 6 – Barriers to Working Safely
- Section 7 – Improvements

For the most part, the questionnaire required respondents to tick those options that applied to their farm business. However, for a limited number of questions respondents could select 'other' and enter details.

2.0 Survey Results

Data collation and analysis was undertaken using a combination of MS Excel and the SPSS statistical package. Unless otherwise stated, all results contained in this report are Northern Ireland estimates produced by applying the appropriate farm type and farm size weights to survey data to give population values. The farm population is disaggregated into 10 farm types as follows: Cereals, General Cropping, Horticulture, Pigs, Poultry, Dairy, Cattle and Sheep LFA, Cattle and Sheep Lowland, Mixed and Other. All farms in Northern Ireland can be classified into one of these types, using the standard EU methodology. This selects the main economic activity present (whenever a dominate activity exists). In addition, Cattle and Sheep type farms are subdivided by location into Lowland and Less Favoured Area categories. A more detailed explanation on typology can be found in the Terms and Definitions section of the 'The Agricultural Census in Northern Ireland' published annually by DARD. As a result of the weighting process the results presented can be understood to stand for the 24,228 farms active in Northern Ireland at the time of the June 2014 Agricultural Census and not just the 4,133 respondents that completed the questionnaire.

2.1 Respondent Characteristics

Background information was collected on the status of the respondent within the farm business and the respondent's age. Responses to these questions are shown in Charts 1 and 2.

Chart 1 – Status of Survey Respondents

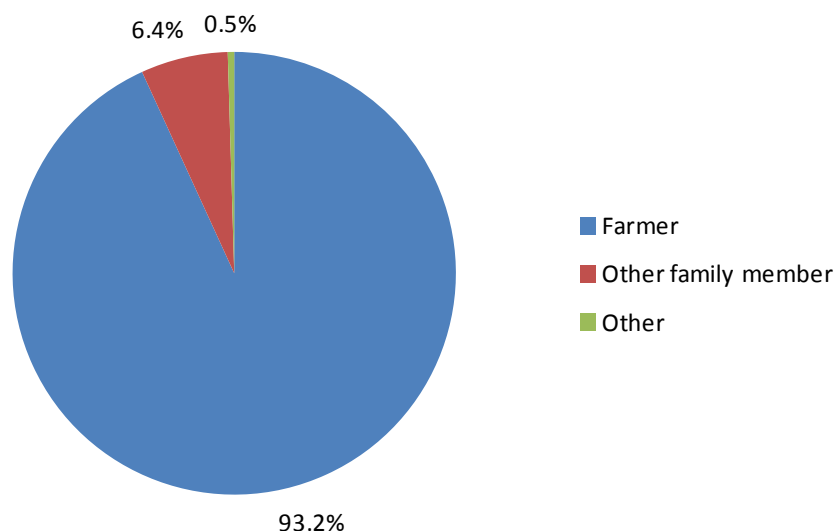
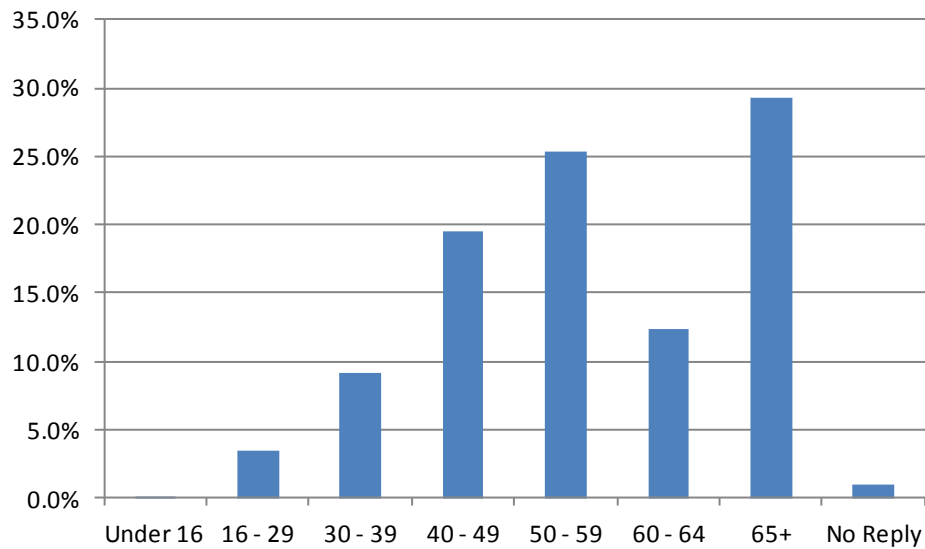


Chart 2 – Age of Survey Respondents



The age profile of respondents (predominately farmers) is broadly in-line with the age distribution of farmers in Northern Ireland. Only 12.6% under 40 years while 29.3% over 65 years old. A small number of respondents (**1.0%**) did not indicate their age band.

2.2 Farm Safety Awareness

Before answering questions about safety on their own farm, respondents were asked if they were aware of the Farm Safety Partnership ‘SAFE’ and the HSENI ‘Be Aware Kids’ campaigns. In addition, the final survey question asked respondents how concerned they were about safety on their farm. These questions were asked to help gauge the penetration of campaigns aimed at improving farm safety and to provide an indication of the overall level of concern regarding farm safety issues. The responses to these questions are shown in Charts 3 – 5.

Chart 3 – Awareness of Farm Safety Partnership ‘SAFE’

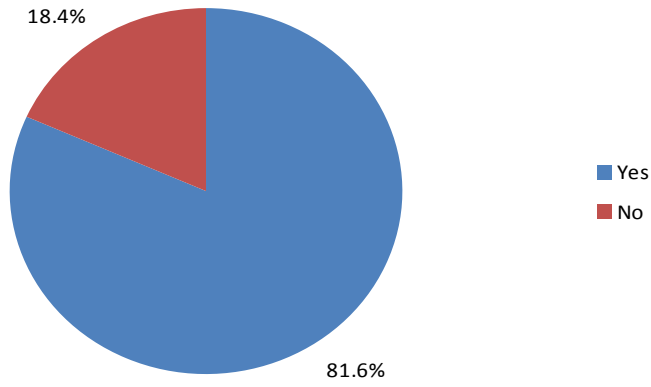


Chart 4 – Awareness of HSENI ‘Be Aware Kids’

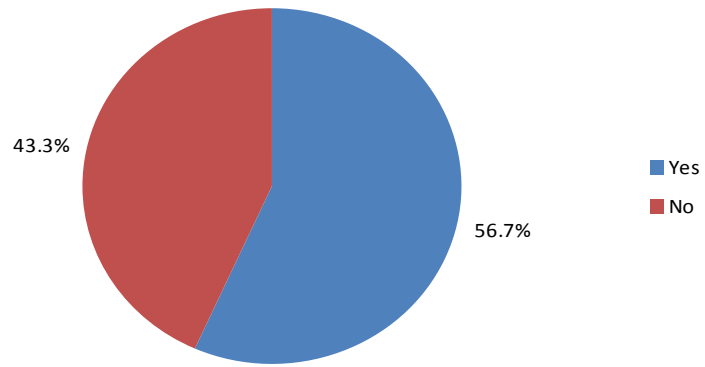
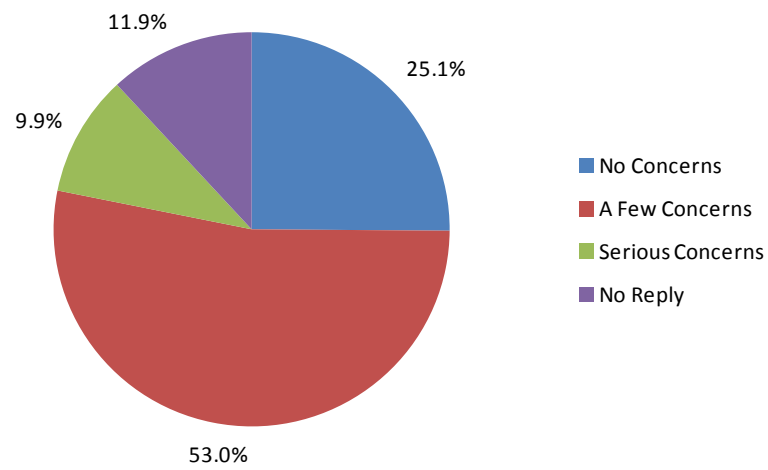


Chart 5 – Concern about own Farm Safety



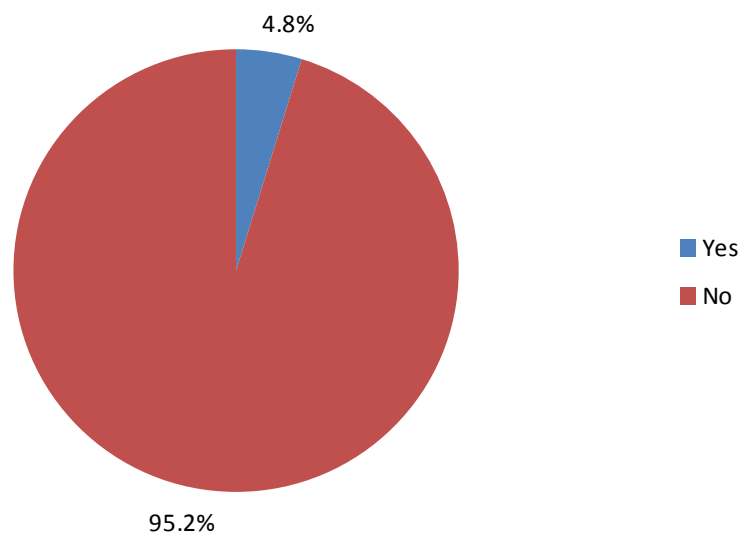
As shown in Chart 5, **63%** of respondents indicated some level of concern about farm safety in their own business while only **25%** indicated no concern.

2.3 Number and Nature of Non-Fatal Farm Accidents

2.3.1 Number of Farms with Accidents Requiring Medical Attention

Respondents were asked about accidents requiring medical attention that occurred on farms during the previous 12 months. Medical attention was defined as any accident that resulted in a visit to a hospital or a doctor's surgery for treatment.

Chart 6 – Proportion (%) of Farms with One or More Accidents Requiring Medical Attention



The overall accident rate (for all farm types and sizes in Northern Ireland) was **4.8%**.

2.3.2 The Number of Accidents Requiring Medical Attention

Of the **4.8%** of farms where an accident had occurred, **90%** reported only one accident and **10%** reported two accidents. No farm reported three or more accidents that required medical attention.

Chart 7 – Distribution (%) of Accidents per Farm Requiring Medical Attention

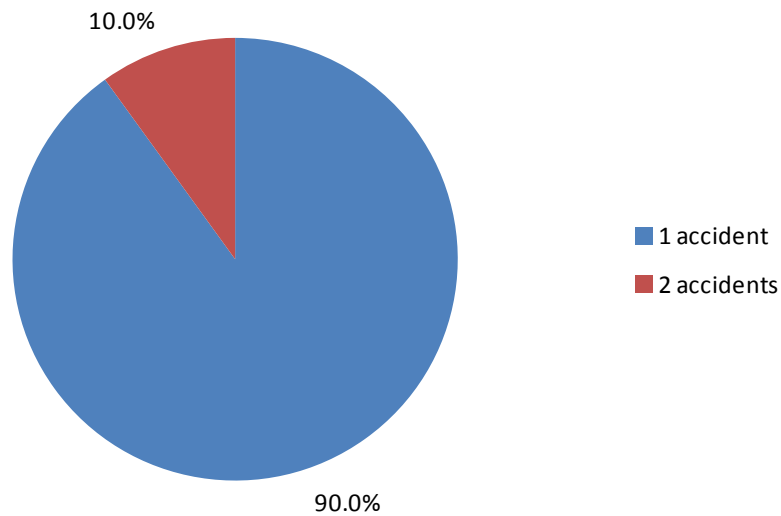
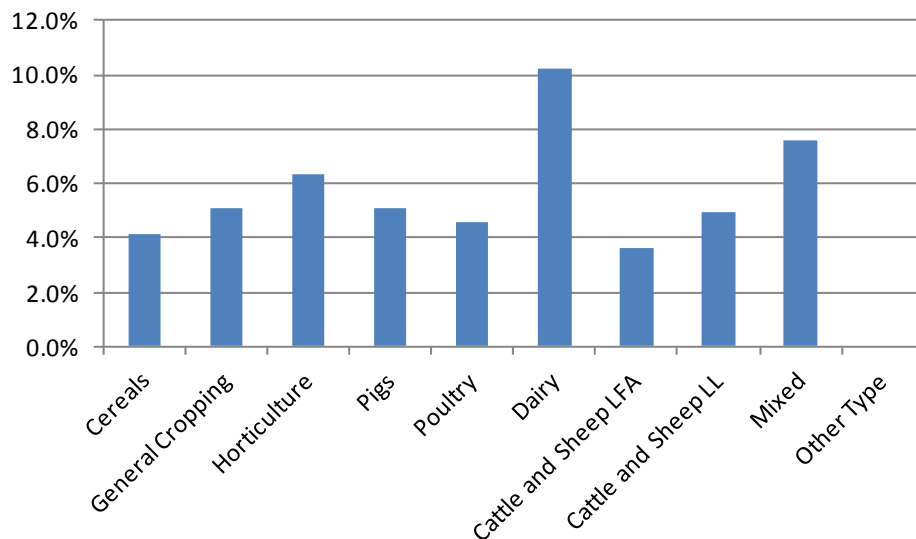


Chart 8 – Proportion (%) of Farms with One or More Accidents Requiring Medical Attention by Farm Type



When broken down by farm type variation can be seen in the accident rate. There are a significantly higher number of accidents requiring medical attention on Dairy farms (**10.2%**) and Mixed farms (**7.6%**) when compared with LFA Cattle and Sheep (**3.7%**) and the overall average (**4.8%**). The Other farm type category is unusual, as it contains farms that cannot be classified into any of the other type categories. There were only 199 in Northern Ireland in 2014 and most have minimal agricultural activity levels.

Table 1 explores the relationship between farm size and the risk of an accident requiring medical attention in the previous 12 months.

Table 1- Proportion (%) of Farms (by size and type) with One or More Accidents Requiring Medical Attention

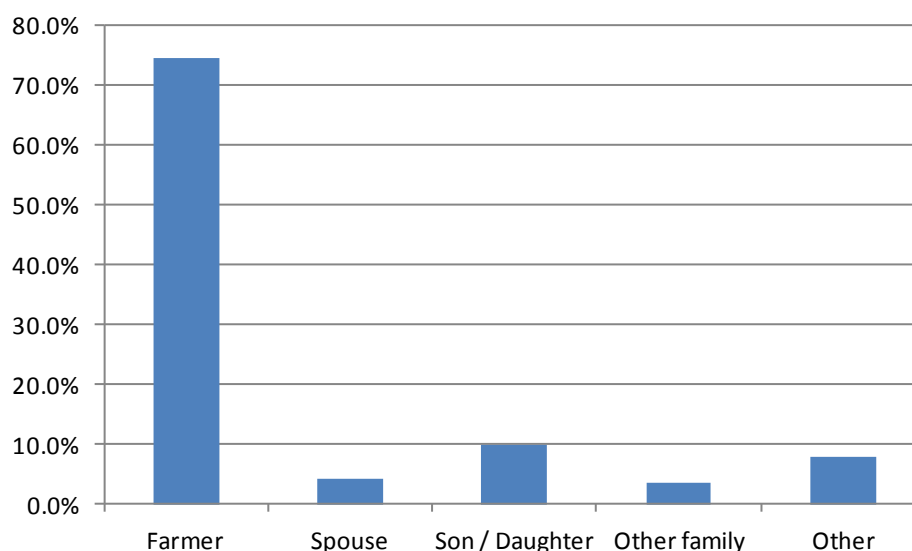
	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type
Very Small	5.2	4.1	6.3	0.0	3.4	7.6	3.5	4.6	6.3	0.0
Small	0.0	0.0	4.3	11.1	2.2	6.0	3.6	7.8	11.5	0.0
Medium	0.0	0.0	20.0	16.7	12.5	12.7	8.3	0.0	0.0	0.0
Large / Very Large	0.0	20.0	2.9	0.0	5.3	12.8	11.1	11.1	14.3	0.0
All Sizes	4.1	5.1	6.3	5.1	4.6	10.2	3.7	5.0	7.6	0.0

Although not observed for all type categories, there is evidence of a general association between increasing farm size and increasing likelihood of an accident. As noted earlier, the average accident rate for farms of all types and sizes was **4.8%**.

2.3.3 The Nature of Accidents Requiring Medical Attention

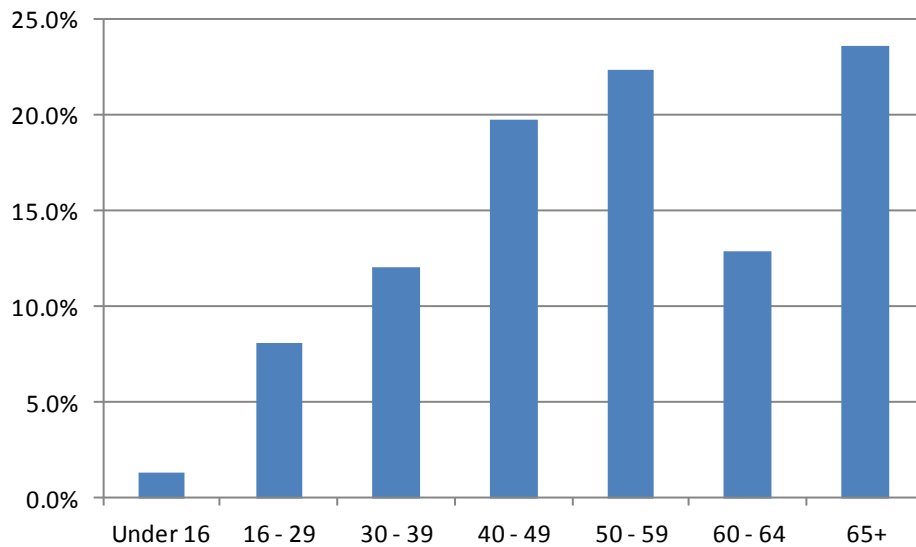
More information was collected on the subset of farms where one or more accidents requiring medical attention had occurred in the previous 12 months. This included information on the role within the farm business of the injured party, the age of the person concerned, the number of days off work caused by injury, the medical attention required, the cause of accident and the type of injury sustained. The results of these questions are shown below for all farms in Northern Ireland.

Chart 9 – Distribution (%) by Status of Injured Persons



In most instances the injured party was a farmer (**74.5%**) with the next highest category being a son / daughter (**9.7%**).

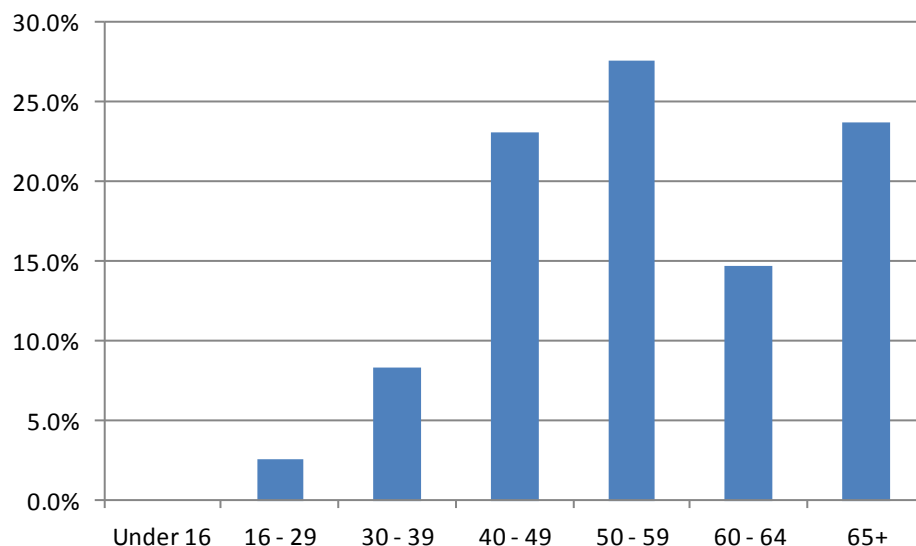
Chart 10 – Distribution (%) by Age of Injured Person



In summary, the ages of people injured (all categories of farm) were **1.3%** under 16 years, **75.1%** 16-64 years and **23.6%** 65+ years.

As the majority of injuries (**74.5%**) occurred to the main farmer in the business (Chart 9) and population data on the age distribution of farmers in Northern Ireland is known, an analysis of the age profile of injured farmers was undertaken and is presented in Chart 11.

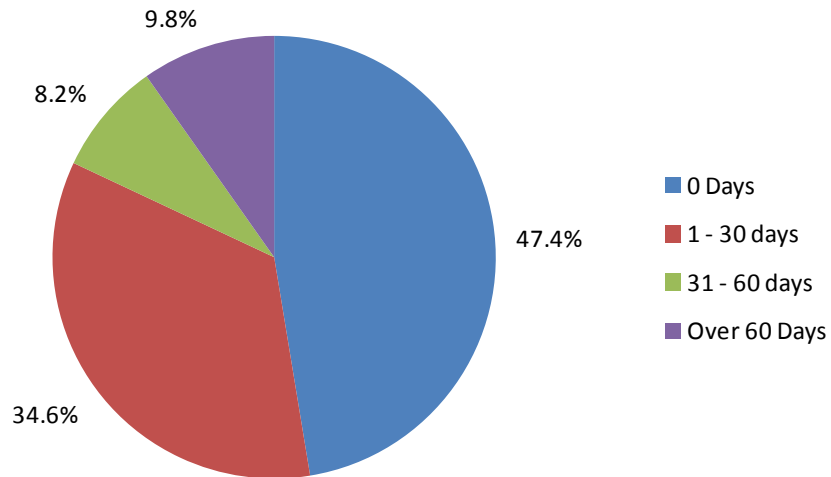
Chart 11 – Distribution (%) by Age of Injured Farmers (unweighted data)



Of the total of injured farmers, **3%** were under 30 years, **74%** were between 30-64 years and **24%** were 65+ years. The survey results can be contrasted with the age of farmers as recorded for the EU Farm Structure Survey 2010 which found **1%** of farmers were under 25 years, **72%** were between 25-64 years and **27%** were 65+

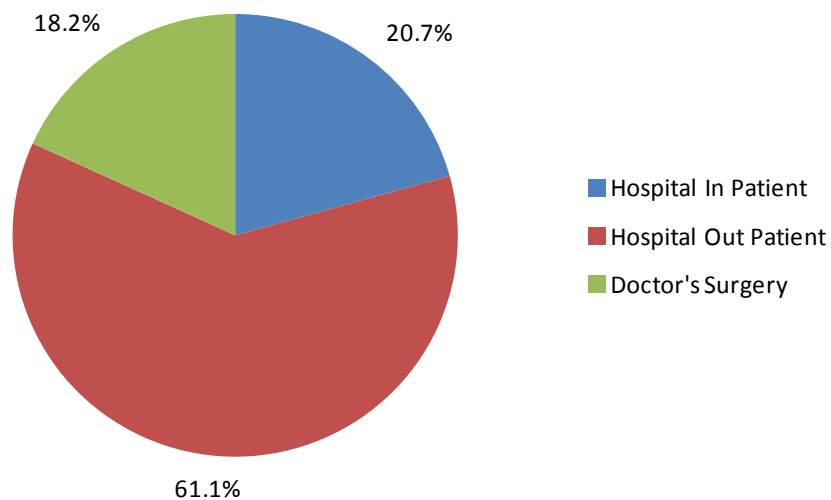
years. Although not conclusive, the survey results would indicate that for farmers at least, there is no link between age and the likelihood of injury.

Chart 12 – Distribution (%) by the Number of Days the Injured Person was Unable to Work



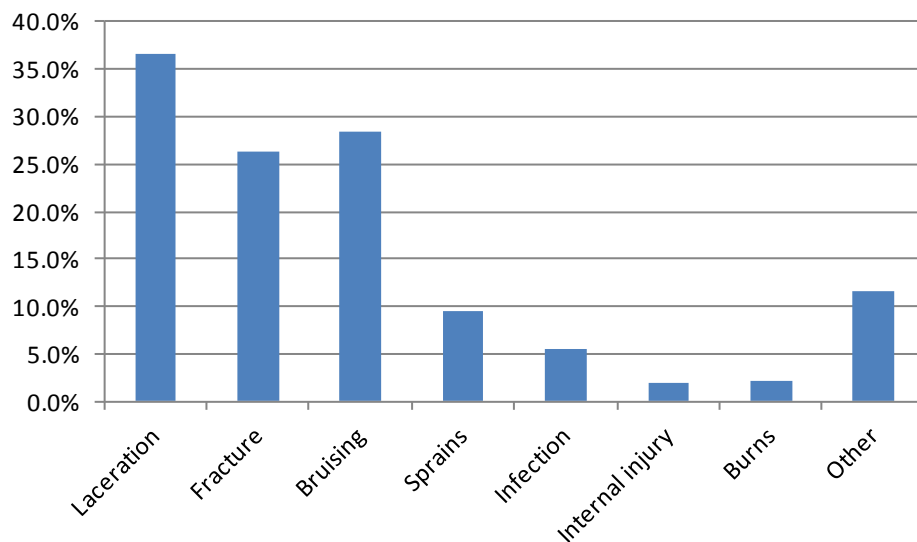
Almost half of injured people (**47.4%**) did not take any time off work as a result of the accident, while a minority (**9.8%**) were unable to work for 60 days or more.

Chart 13 – Distribution (%) by Medical Attention Required



Most accidents that required medical attention led to the injured party being treated as a hospital out-patient (**61.1%**). Hospital in-patients and doctor's surgeries accounted for a roughly equal share of the remaining injuries.

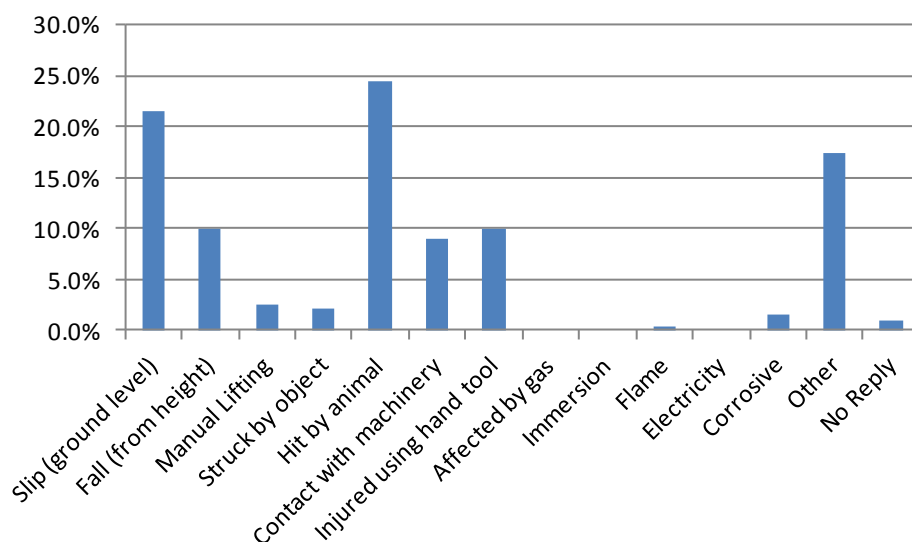
Chart 14 – Frequency (%) of Injuries (more than one injury possible per accident)



The main injury types were laceration (**36.6%**), bruising (**28.4%**) and fracture (**26.2%**). The total for injuries exceeds 100%, as it was possible for a person to receive more than one type of injury in a single accident.

The most discernible difference in the nature of injuries across farm types is the (not surprising finding) that bruising is more common on livestock farms.

Chart 15 – Frequency (%) of Primary Accident Causes



As illustrated in Chart 15, the three main causes of accidents requiring medical attention in order of frequency were being hit or trampled by an animal (**24.4%**), a slip or trip at ground level (**21.5%**) and being injured while using a hand tool (**10.0%**). Other significant causes of accidents were a fall from height (**10.0%**), and contact with machinery (**9.0 %**).

To better understand the nature and primary cause of more severe accidents, data for accidents resulting in the injured person being unable to work for 31 days or more were analysed. The results are shown in Charts 16 and 17.

Chart 16 - Frequency (%) of Injuries (more than one injury possible per accident) for accidents resulting in the injured person being unable to work for 31 days+

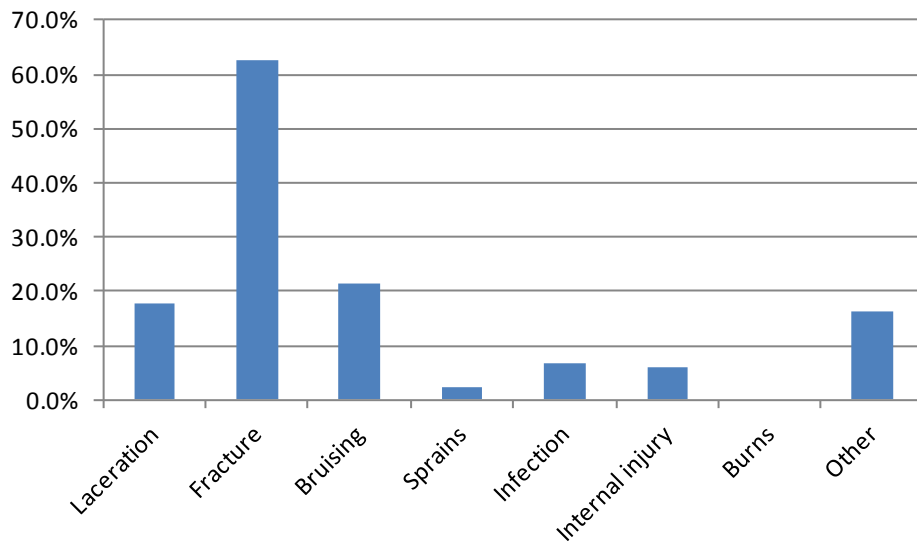
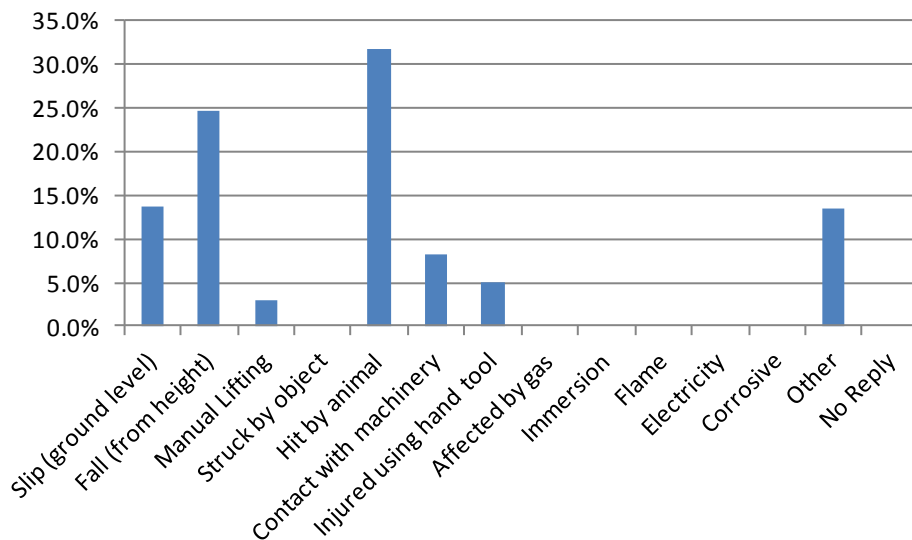


Chart 17 - Frequency (%) of Primary Accident Causes for accidents resulting in the injured person being unable to work for 31 days+



Fractures (**62.4%**) were the main injury sustained when accidents resulted in the injured party being unable to work for 31 or more days. The three main causes of these accidents were being hit or trampled by an animal (**31.8%**), a fall from height (**24.6%**) and a slip or trip at ground level (**13.7%**).

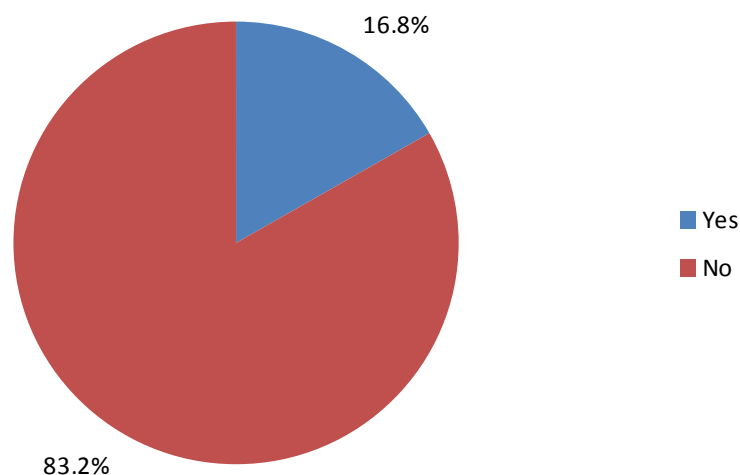
2.4 Number and Nature of Minor Injuries and Near Misses

The survey collected information on minor injuries and near misses that had occurred on farms during the previous 12 months. Minor injuries were defined as those accidents which did not require medical treatment at a hospital or doctor's surgery. Near misses were defined as incidents when injury was possible but has been narrowly avoided. Charts 18 – 20 explore the results of this section. Data was collected for farms that had reported accidents requiring medical attention and those with no accidents requiring professional medical treatment.

As minor injuries are less severe than injuries requiring professional medical attention, and near misses result in no injury at all, the quality of the data on the incidence of both minor injuries and near misses may be lower than that for more severe injuries. Reasons for this include the greater likelihood of lapses in memory regarding incidents, lack of knowledge on the behalf of respondents regarding injuries and near misses for other farm workers, and differences in understanding of what constitutes a near miss. Despite these caveats the results provide useful insights into the nature of minor accidents and potential accidents.

2.4.1 Incidence of Minor Injuries and Near Misses

Chart 18 – Proportion (%) of Farms with One or More Minor Injuries or Near Misses



The survey found that on **16.8%** of farms a minor injury which did not require medical attention at a hospital or doctor's surgery and / or a near miss had occurred in the previous 12 months. Analysis of this data by farm type found that a significantly higher percentage of Dairy farms (**26.7%**) and Mixed farms (**23.1%**) had either a minor injury or near miss compared with the overall average for farms of all types and sizes (**16.8%**). In contrast the incidence was significantly lower for General Cropping farms (**7.0%**) and on Horticulture units (**11.0%**).

2.4.2 Nature of Minor Injuries and Near Misses

Chart 19 – Frequency (%) Primary Cause of Minor Injuries

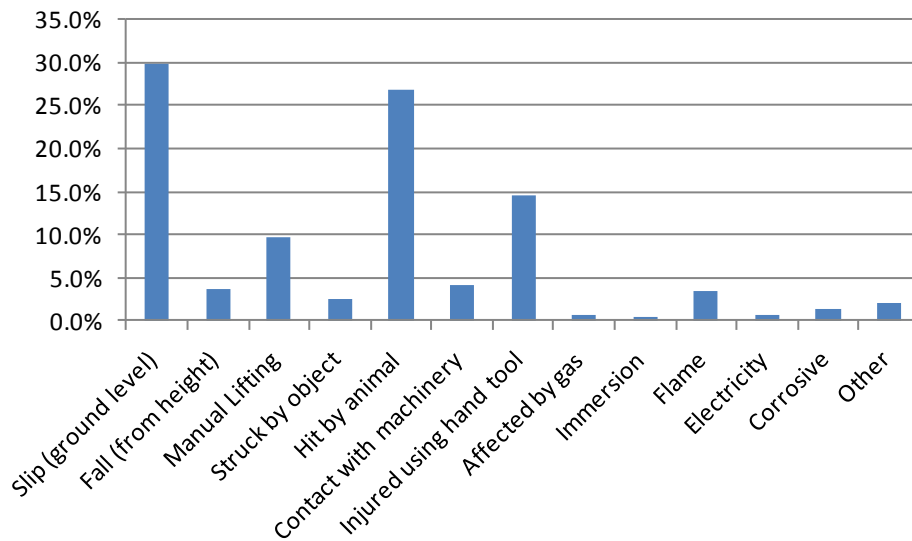
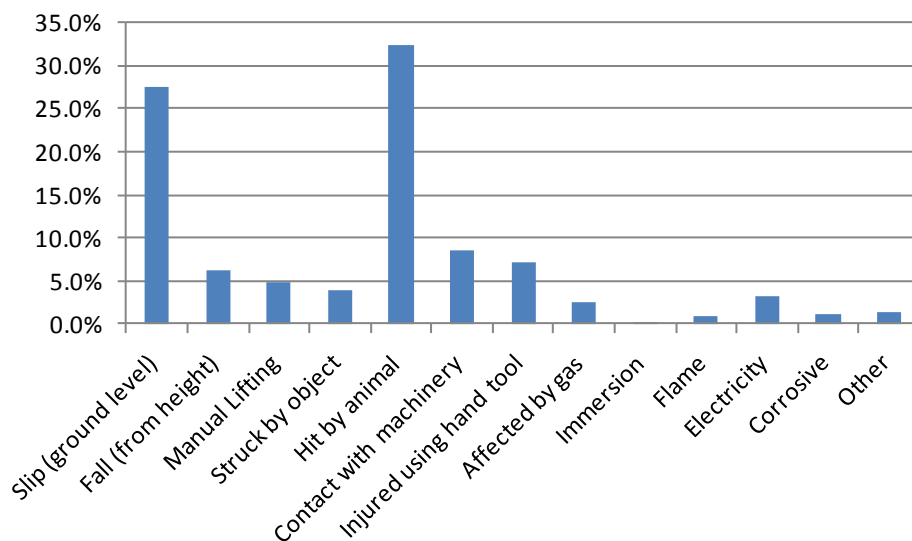


Chart 20 – Frequency (%) Primary Cause of Near Misses



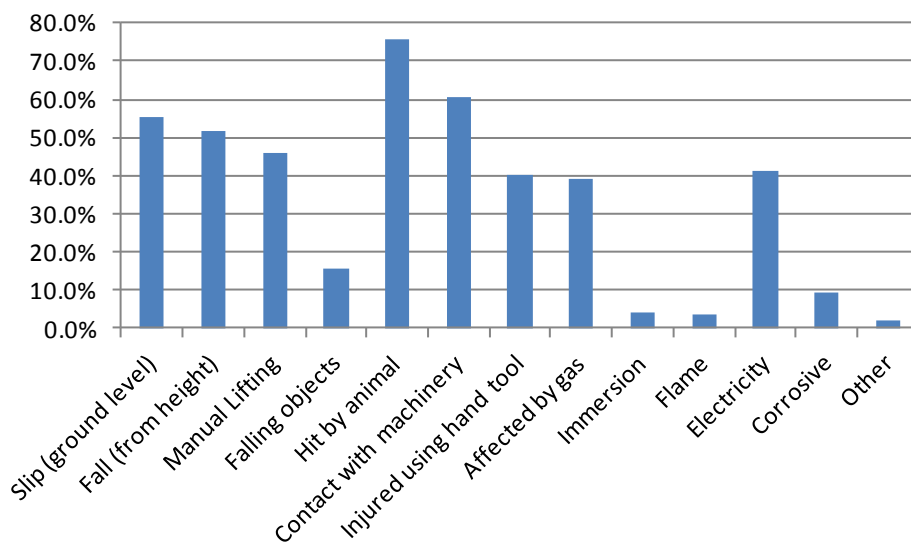
The distribution of causes of minor injuries and near misses was broadly consistent with that for accidents requiring professional medical attention. The most frequent causes were slips at ground level and being hit by an animal. The most noticeable difference between the two categories was the higher incidence of hand tool injuries as a cause of minor injuries compared with near misses.

2.5 Farm Safety in Practice

2.5.1 Hazards Identification

Having reported any accidents or near misses respondents were asked to identify hazards (five from a list of options) of most concern on their farm. Although not all respondents followed this instruction, with some identifying either more or less than five hazards, all responses were included in the analysis summarized in Chart 21.

Chart 21 – Frequency (%) of Main Farm Safety Hazards



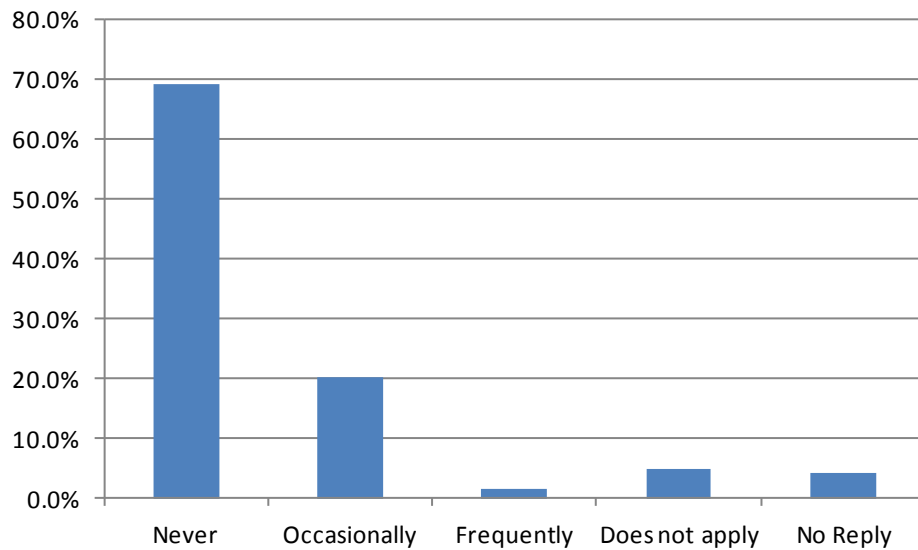
The hazards identified consist of a mix of common causes of both minor and more serious injuries (hit by animal and slip at ground level) and less frequent causes of more serious injuries (contact with machinery, fall from height and contact with electricity). A number of hazards (falling objects, immersion in liquid or grain, contact with flames and corrosive materials) appeared relatively rarely as one of the top five concerns.

2.5.2 Tolerance to Risk

Respondents were asked about risky behaviour associated with common work practices on Northern Ireland farms. This entailed asking how frequently they (or other farm workers) undertook common tasks in a manner that increased the risk of accident and injury. The results are shown in Charts 22a – 22l.

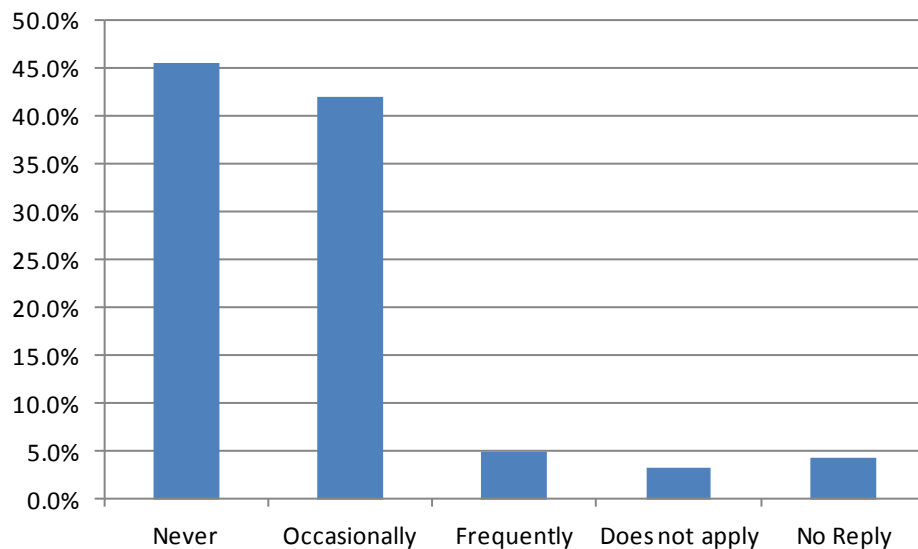
In the context of this question 'Never' means that an identified risk is relevant but never occurs, whereas 'Does not apply' means that the activity is not undertaken on the farm. For example in the case of driving a quad bike without a helmet, 'Does not apply' is understood to mean that farm does not operate a quad.

Chart 22a – Frequency (%) of Farms Using a Machine without PTO Being Fully Guarded



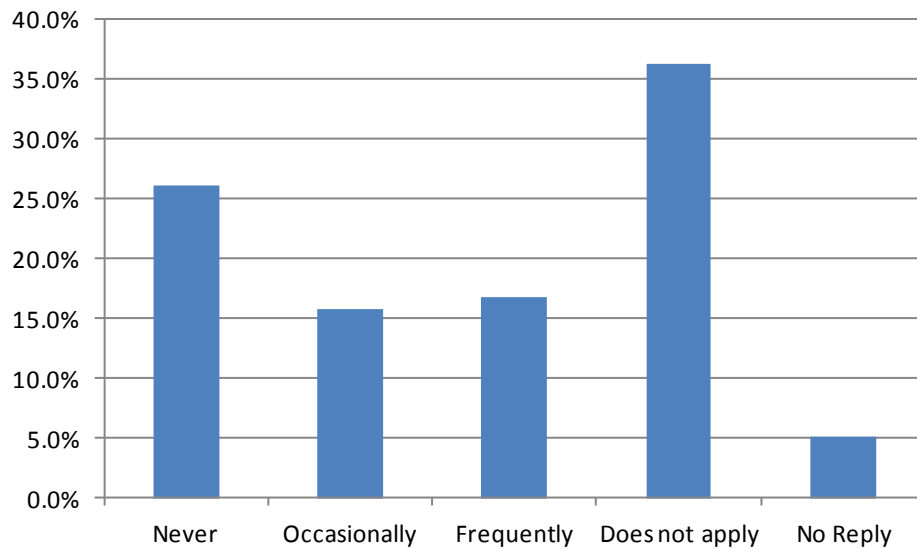
On 20% of farms, machinery was occasionally used without a fully guarded PTO and on 2% of farms machinery was frequently used a without a fully guarded PTO. Overall, there was scope for safer working on 22% of farms.

Chart 22b – Frequency (%) of Farms where a Ladder is not Footed by Someone or Something



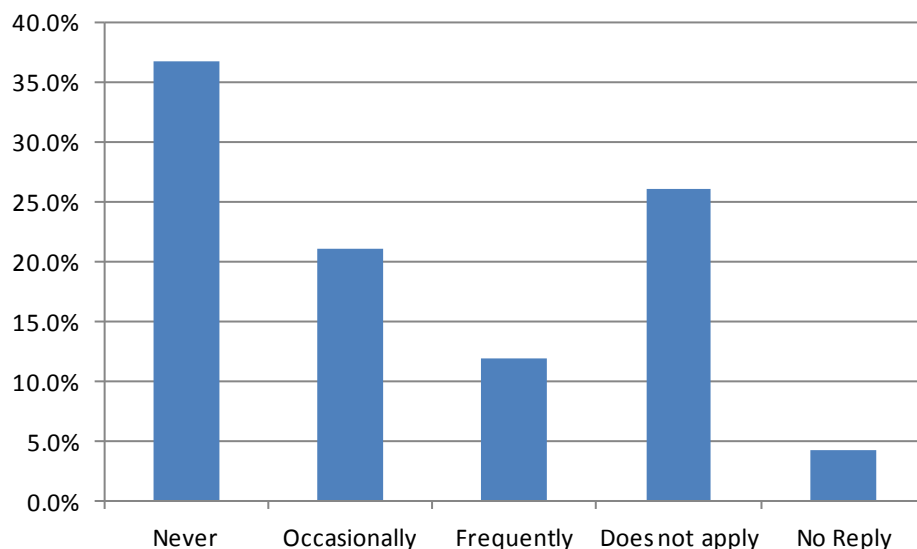
On 42% of farms a ladder was occasionally used without proper footing and on 5% of farms a ladder was frequently not footed by someone or something. Overall, there was scope for safer working on 47% of farms.

Chart 22c – Frequency (%) of Farms where a Quad is Driven without a Helmet



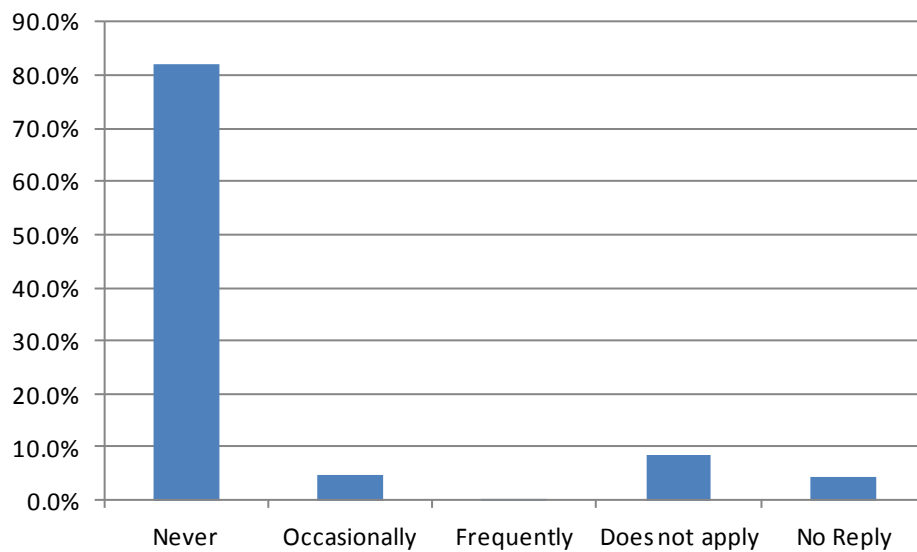
On 16% of farms quad bikes were occasionally driven by someone without a helmet and on 17% of farms quads were frequently driven by someone without a helmet. Overall, there was scope for safer working on 33% of farms.

Chart 22d – Frequency (%) of Farms where Someone Worked in a House / Pen with a Loose Bull



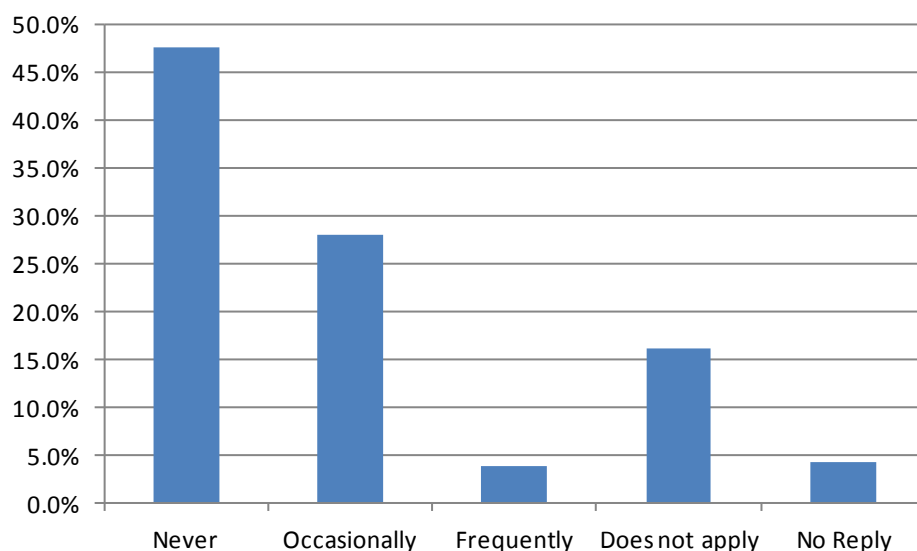
On 21% of farms someone occasionally worked in a house / pen with a loose bull and on 12% of farms someone frequently worked in a house / pen with a loose bull. Overall, there was scope for safer working on 33% of farms.

Chart 22e – Frequency (%) of Farms where Someone Carried Out Maintenance or Cleared a Blockage in a Machine without it Being Turned-Off



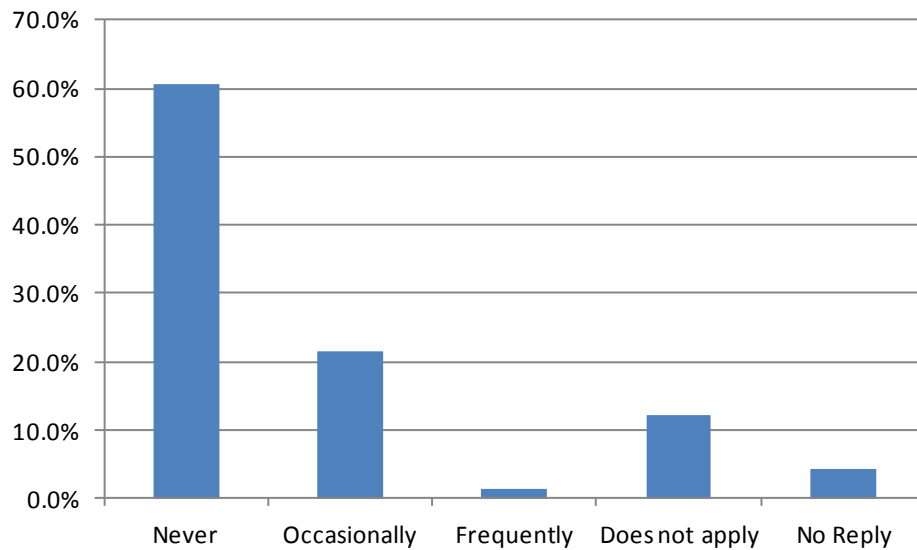
On 5% of farms work was occasionally carried out on a machine that was not turned off and on less than 0.5% of farms work was frequently carried out on a machine without it being turned off. Overall, there was scope for safer working on 5% of farms.

Chart 22f – Frequency (%) of Farms where Someone Remained beside an Underground Slurry Tank whilst Mixing Slurry



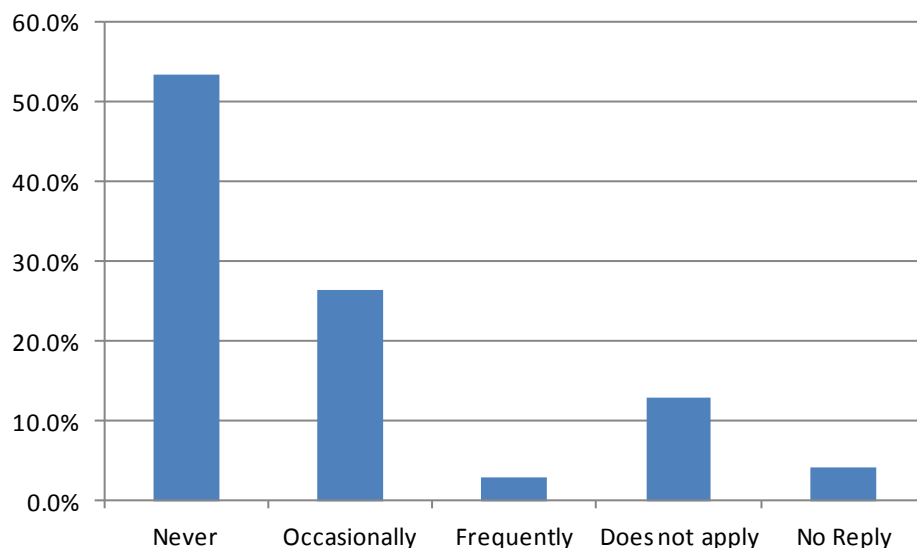
On 28% of farms someone occasionally remained beside an underground slurry tank during mixing and on 4% of farms someone frequently remained beside an underground slurry tank whilst mixing. Overall, there was scope for safer working on 32% of farms.

Chart 22g – Frequency (%) of Farms where Someone Walked on an Asbestos or Tin Roof without a Roofing Ladder



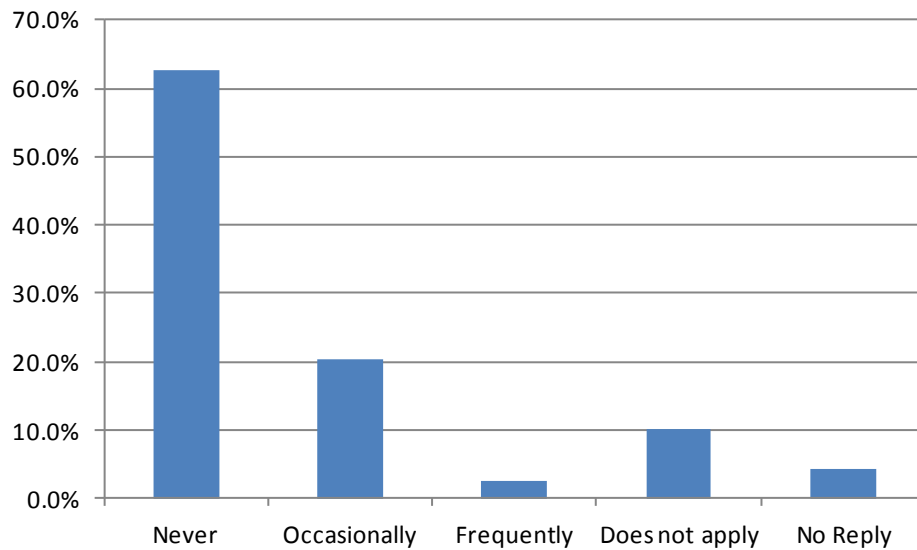
On 22% of farms someone occasionally walked on an asbestos or tin roof without a roofing ladder and on 1% of farms someone frequently walked on a roof without a roofing ladder. Overall, there was scope for safer working on 23% of farms.

Chart 22h – Frequency (%) of Farms on which Someone Carried a Child on a Tractor



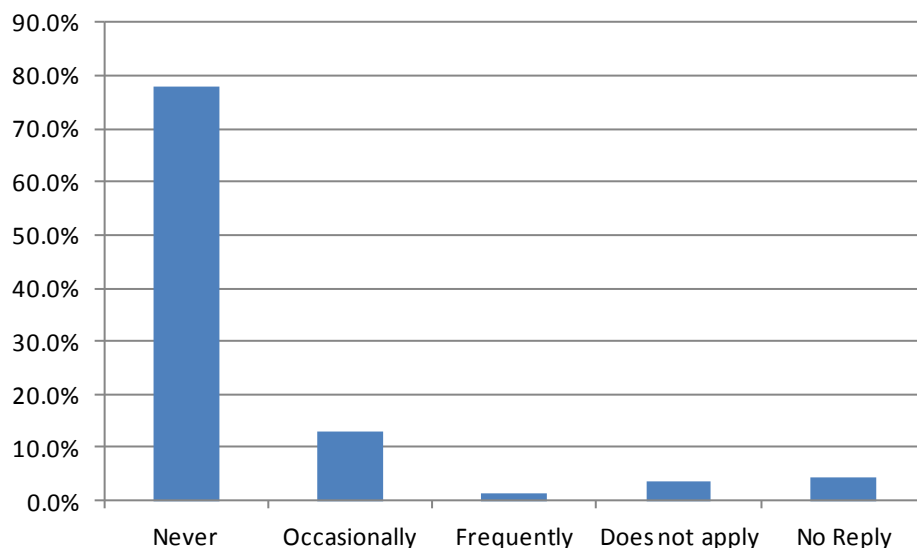
On 26% of farms a child was occasionally carried as a passenger on a tractor and on 3% of farms a child was frequently a passenger on a tractor. Overall, there was scope for safer working on 29% of farms.

Chart 22i – Frequency (%) of Farms on which Cattle not Restrained Using Cattle Handling Facilities during Treatment



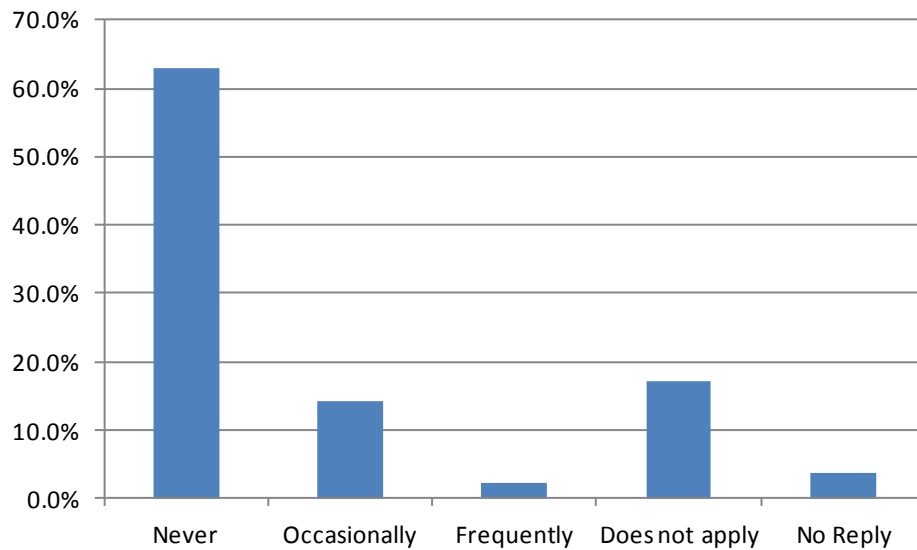
On 20% of farms cattle were occasionally not properly restrained during treatments and on 3% of farms cattle were frequently not properly restrained during treatment. Overall, there was scope for safer working on 23% of farms.

Chart 22j – Frequency (%) of Farms where Someone Operated a Vehicle with Defective Brakes



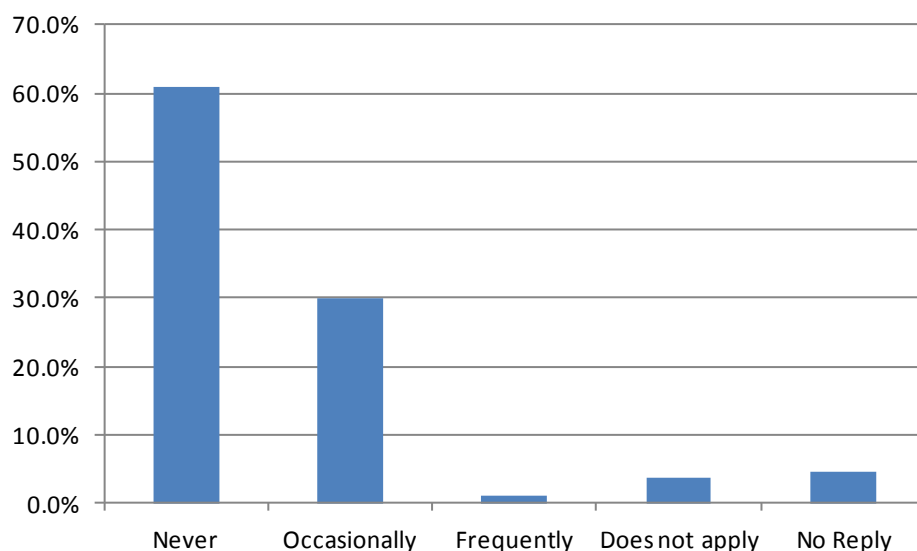
On 13% of farms a vehicle with defective brakes was occasionally in use and on 1% of farms a vehicle with defective brakes was frequently in use. Overall, there was scope for safer working on 14% of farms.

Chart 22k – Frequency (%) of Farms on which Slurry was Mixed in a Slatted Tank without Removing Housed Livestock



On 14% of farms slurry was occasionally mixed in slatted tanks without removing livestock from the building and on 2% of farms slurry was frequently mixed in a slatted tank without removing livestock. Overall, there was scope for safer working on 16% of farms.

Chart 22l – Frequency (%) of Farms where a Job was Completed despite Knowing it was Unsafe



On 30% of farms work was occasionally completed in unsafe conditions and on 1% of farms work was frequently completed despite knowing it was unsafe. Overall, there was scope for safer working on 31% of farms.

2.5.3 Barriers to Working Safely

Respondents were asked to identify the main barriers (two from a list of options) to improving safety on their farm. Although not all respondents followed this instruction, identifying either more or less than two barriers, all responses were included in the analysis summarized in Chart 23.

Chart 23 – Frequency (%) of Barriers to Improving Farm Safety, all farm types and sizes

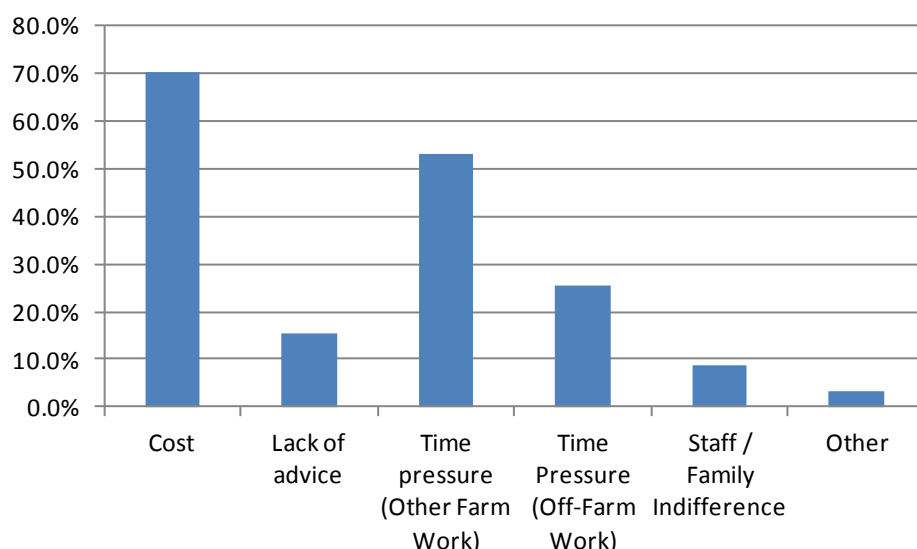


Table 2 (below) provides a full breakdown of the results by farm type.

Table 2 - Main barriers to improving farm safety by farm type (% of respondents citing each barrier)

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type
Cost	51.6	64.9	51.3	59.1	64.2	69.2	73.6	64.9	70.5	60.9
Lack of advice	11.1	13.2	14.1	13.6	17.5	8.3	17.2	16.1	9.6	3.2
Time pressure (other farm work)	62.9	51.8	49.0	71.7	66.8	79.5	48.1	50.4	68.7	16.2
Time pressure (off-farm work)	26.2	25.8	14.7	14.7	14.8	7.3	28.1	29.5	17.0	35.9
Indifference	7.0	15.1	16.4	14.5	13.6	10.1	8.2	9.0	10.0	0.0
Other	6.9	6.0	3.1	2.2	3.4	4.1	2.9	3.5	4.9	0.0

Cost was identified as an important barrier for all farm types, but was not always the most commonly cited problem. Lack of time due to other farm work was more often cited than cost for Cereal, Pig, Poultry and Dairy farms. Time pressure due to off-farm employment was a significant barrier in those sectors with larger numbers of part-time farmers. Indifference of family and staff to farm safety concerns was more often cited as a barrier on General Cropping, Horticulture, Pig and Poultry farms, than on other types of farm.

2.6 Investment in Farm Safety

2.6.1 Recently Completed Investment

Respondents were asked to identify (from a list of options) any farm improvements they had made in the previous 12 months that had a positive impact on farm safety. The results of this are shown in Chart 24 below.

Chart 24 – Frequency (%) of Recently Completed Farm Improvements, all farm types and sizes

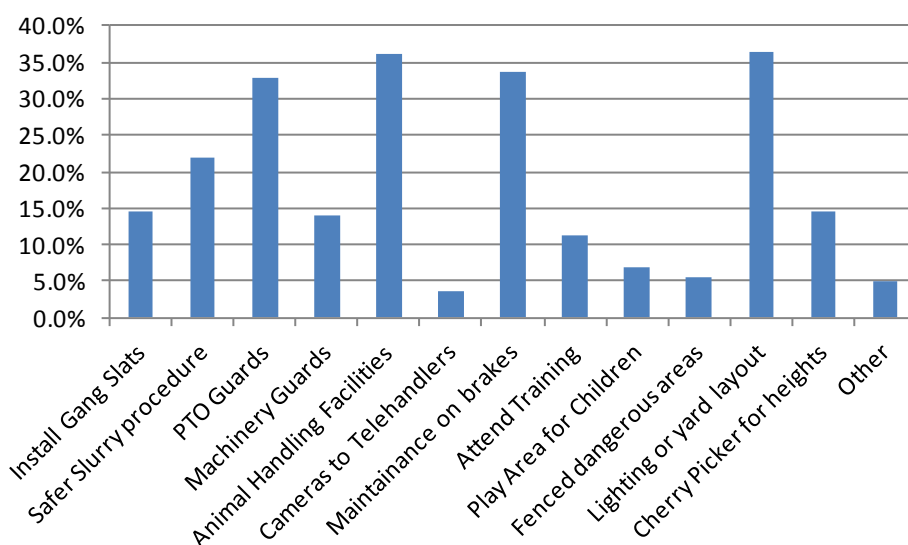


Table 3 - Recently Completed Farm Improvements, by farm type (% of respondents citing each improvement)

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type
Install Gang Slats	4.1	11.0	0.9	24.3	15.0	29.3	12.6	13.7	17.3	0.0
Safer Slurry procedure	9.8	10.5	6.5	20.8	19.8	35.9	20.2	21.8	29.9	0.0
PTO Guards	44.6	38.8	28.0	49.7	35.8	51.7	29.5	30.7	39.9	18.0
Machinery Guards	27.8	27.7	20.2	7.0	12.9	18.2	12.6	13.8	18.8	0.0
Animal Handling Facilities	11.2	17.8	13.9	23.8	23.4	37.3	37.1	40.0	37.5	16.2
Cameras to Telehandlers	12.6	12.6	2.7	0.0	5.5	6.3	2.9	3.6	3.1	3.2
Maintenance on brakes	38.9	43.9	38.4	23.7	24.2	31.2	34.2	33.7	32.8	49.0
Attend Training	15.2	20.8	7.9	2.2	13.3	17.0	10.7	9.0	14.4	13.1
Play Area for Children	4.2	7.5	10.7	7.3	6.9	7.6	7.1	6.9	3.3	0.0
Fenced dangerous areas	1.4	1.4	6.9	6.6	6.7	7.5	4.8	5.7	7.2	18.0
Lighting or yard layout	30.5	27.7	35.3	47.2	43.8	38.2	36.4	35.7	38.3	24.3
Cherry Picker for heights	29.0	27.5	16.1	15.4	24.8	24.1	11.2	15.6	23.6	3.2
Other	9.6	12.9	6.9	2.9	5.8	4.6	5.0	3.8	4.5	0.0

Fitting or replacing PTO guards, maintenance of brakes and better lighting or improved yard layout were common improvements across farm types. Improvements to animal handling facilities were common on farms with large animals. The implementation of safer slurry working procedures was highest on Dairy farms.

2.6.2 Identified Future Investment

Respondents were asked to identify any improvements they would like to implement in the future from the same list used to capture information on recent improvements. The results of this are presented in Chart 25 below.

Chart 25 – Frequency (%) of Identified Future Farm Improvements

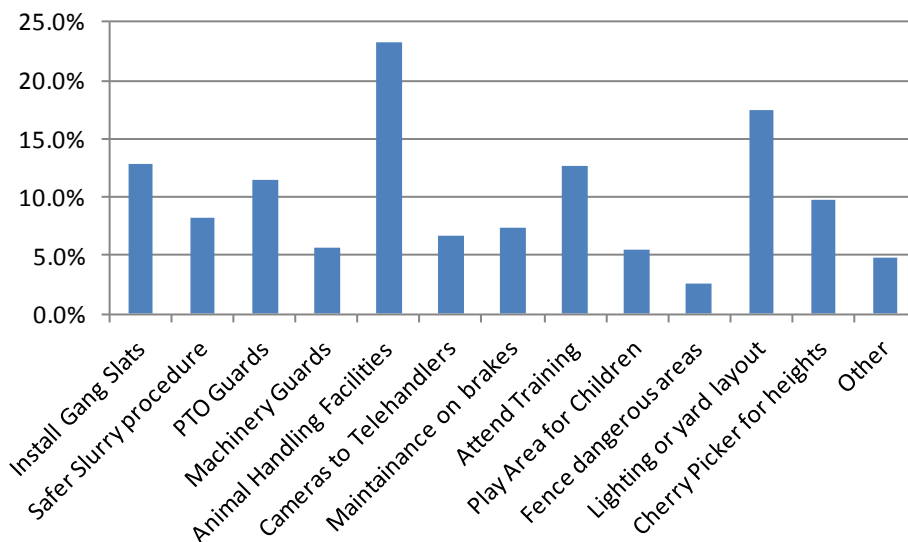


Table 4 (below) provides a detailed breakdown of the above results by farm type.

Table 4 – Potential farm improvements, by farm type (% of respondents citing each improvement)

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type
Install Gang Slats	5.5	4.3	1.6	5.1	17.8	15.6	13.8	11.0	7.1	0.0
Safer Slurry procedure	1.3	2.9	0.0	9.5	8.8	12.6	8.5	6.5	7.9	0.0
PTO Guards	16.6	11.3	8.1	7.3	14.0	11.5	11.0	12.4	11.2	13.1
Machinery Guards	8.4	3.2	9.6	2.9	7.6	5.6	5.7	5.6	5.5	0.0
Animal Handling Facilities	5.6	10.3	7.9	10.1	16.1	26.7	24.7	21.3	28.5	18.0
Cameras to Telehandlers	11.1	4.3	0.9	4.7	10.4	10.0	6.4	5.5	8.9	0.0
Maintainance on brakes	7.0	9.1	9.2	2.5	6.2	7.0	7.5	7.7	7.2	0.0
Attend Training	13.1	7.5	11.9	5.1	10.2	9.7	13.9	12.4	12.0	0.0
Play Area for Children	4.1	4.9	4.1	14.9	7.0	4.6	5.9	4.0	5.8	13.1
Fence dangerous areas	4.2	5.7	1.3	2.9	4.1	2.8	2.8	1.5	6.7	0.0
Lighting or yard layout	15.1	23.2	15.2	7.9	9.3	17.3	17.7	17.7	20.5	13.1
Cherry Picker for heights	13.9	8.3	13.0	13.1	11.3	11.4	9.2	8.6	13.8	31.0
Other	8.3	5.7	5.9	10.4	4.2	4.2	4.9	5.1	4.4	0.0

Improved animal handling facilities, lighting and yard layout and farm safety training were common choices for future improvement across farm types.

3.0 Comparisons with Other Surveys

It is possible to compare and contrast some of the results from this Northern Ireland Farm Safety Partnership Survey with those found in a previous survey by DARD and HSENI published in 'Farmers and Farm Families in Northern Ireland' (2002). The 2002 study obtained accident / injury data for 100 farms from a sample of 2,751 farms. Unlike the current study, data was collected by means of face-to face interview rather than postal questionnaire. The overall accident rate (number of farms reporting at least one accident in the previous 12 month period) was **3.4%** in the 2002 study compared with **4.8%** for the current survey. Of the people injured, the 2002 survey found that **70%** were farmers compared with **75%** in this survey. From the survey in 2002 it was inferred that 930 accidents requiring medical attention occurred on farms in Northern Ireland over a 12 month period. This can be compared with an estimate of 1,276 farm accidents inferred from this survey. In the interval (13 years) the number of farm businesses decreased from 28,500 to 24,200.

The 2002 survey found that the most common type of medical treatment was as a hospital out-patient (**65%**) and that the main injuries were laceration, cut or puncture wound (**38%**), fracture (**32%**) and other injuries (**30%**). The current survey found that hospital out-patient was also the most common type of medical treatment (**61%**) and that the main injuries were laceration, cut or puncture wound (**37%**), bruising (**28%**) and fracture (**26%**).

Both surveys found a similar pattern for time off work resulting from accidents, with most people taking no time off (**42% for 2002 survey and 47% for 2015 survey**).

The three main accident causes identified in the 2002 survey were being hit or trampled by an animal (**28%**), other causes (**21%**) and a slip or trip at ground level (**14%**). In the current survey the main causes identified were being hit or trampled by an animal (**24%**), a slip or trip at ground level (**22%**), a hand tool injury (**10%**) and a fall from a height (**10%**). It should be noted that the 'other causes' category for the 2015 survey is an aggregate of specified injuries (not all separately identified in the 2002 study) and miscellaneous injuries reported by farmers under the 'other' option.

Some comparisons can also be made with results found in a PhD thesis by Anne Finnegan of University College Dublin, 'An Examination of the Status of Health and Safety on Irish Farms (2007)'. The analysis used data gathered as a supplement to the 2002 National Farm Survey in Ireland. The PhD thesis discovered an injury rate of **2.2%** which contrasts with **4.8%** found in this survey. The most common type of medical treatment was to be treated as an outpatient (**33%**). The main types of injuries identified were fractures / broken bones (**31%**) and open wounds (akin to laceration, cut or puncture wounds) (**23%**). It was also found that the main three causes of injuries were livestock (**26%**), trips and falls (**22%**) and machinery (**20%**) which is similar to findings in our survey where livestock and trips and falls were identified as major causes.

4.0 Key Findings

The main findings for the 2015 Farm Safety Partnership Survey are:

Awareness of Farm Safety Campaigns

- **82%** of respondents were aware of the Farm Safety Partnership 'SAFE' campaign.
- **57%** were aware of the HSENI 'Be Aware Kids' campaign.

Accidents Requiring Professional Medical Attention

- **4.8%** of farms had one or more accidents, requiring professional medical attention, in the 12 months prior to the survey.
- Based on the accident rate per farm, an estimated 1,276 farms accidents requiring medical attention occurred in Northern Ireland in the previous 12 months.
- On farms where accidents requiring medical attention occurred, **90%** had one accident and **10%** had two accidents.
- **61%** of injuries were treated in hospital out-patient departments, **21%** of injuries required admission as a hospital in-patient and **18%** of injuries were treated at a doctor's surgery.
- For **75%** of accidents requiring medical attention the injured party was a farmer.
- Of people requiring professional medical attention **24%** were in the 65+ age group, **75%** being in age groups between 16-64 years and **1%** were under 16 years.
- Following an accident requiring professional medical attention **47%** of the injured took no time off work, **35%** undertook no farm work for between 1-30 days, **8%** required 31-60 days off and **10%** required over 60 days off.
- The main causes of accidents requiring medical attention were: being hit / trampled by an animal (**24%**), a slip or trip at ground level (**22%**), a hand tool injury (**10%**) and a fall from height (**10%**).
- The three main types of injury identified from accidents requiring medical attention were: cuts and lacerations (**37%**), bruising (**28%**), and fractures (**26%**).

Minor Accidents and Near Misses

- There had been at least one minor injury or near miss on **16.8%** of farms in the 12 months prior to the survey.
- The three main causes of minor injury identified were: a slip or trip at ground level (**30%**), being hit / trampled by an animal (**27%**), and a hand tool injury (**15%**).
- The three main causes of near miss identified were: being hit / trampled by an animal (**32%**), a slip or trip at ground level (**28%**) and contact with machinery (**9%**).

Higher Risk Behaviour

- The three potentially unsafe work practices that occur most frequently were: working on a ladder not properly footed (occasional / frequent on **47%** of farms), working in a house / pen with a loose bull (occasional / frequent on **33%** of farms) and driving a quad without wearing a helmet (occasional / frequent on **33%** of farms).
- Some **31%** of respondents admitted completing a job despite knowing it was unsafe on one or more occasions.

Hazard Identification

- The five main farm safety hazards identified by respondents on their farms were: being hit or trampled by an animal (**76%**), contact with machinery (**61%**), slips or trips at ground level (**56%**), a fall from height (**52%**) and manual lifting which might go wrong (**46%**).

Barriers to Safe Working

- The two main barriers to working safely identified by respondents were: cost of improving safety measures (cited for **70%** of farm businesses) and time pressure of other farm work (cited for **53%** of farm businesses).

Farm Safety Improvements

- Respondents identified the most common improvements made in the previous 12 months as: improved lighting or layout of farmyard (**36%** of farms), improved animal handling facilities (**36%** of farms), carried out maintenance on tractor brakes (**34%** of farms) and fitted or replaced PTO guards (**33%** of farms).
- Respondents identified the most common improvements required as: improving animal handling facilities (**23%** of farms), improving lighting or layout of farmyard (**17%** of farms), installing safety gang slats or outside mixing points at slurry tank (**13%** of farms) and attending farm safety training (**13%** of farms).

Appendix

This appendix includes further detail of results presented in the main body of this report. Exceptions to this are Chart 11 for which no further detail is available and Chart 22 where only All Types figures are available. For reference purpose the titles of tables in this appendix correspond to their chart numbers in the main report.

Chart 1 – Status of Survey Respondents

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Farmer	91.7	90.3	84.7	87.8	95.8	94.7	93.5	93.6	94.3	55.4	93.2
Other family member	8.3	8.3	11.4	9.7	3.5	5.0	6.2	6.1	5.0	41.5	6.4
Other	0.0	1.4	3.9	2.5	0.7	0.3	0.4	0.3	0.7	3.2	0.5

Chart 2 – Age of Survey Respondents

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Under 16	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1
16 - 29	0.0	4.8	1.3	2.5	4.6	3.9	2.8	4.4	3.1	18.0	3.4
30 - 39	5.5	8.1	7.9	5.4	7.2	11.6	9.5	7.7	8.3	0.0	9.1
40 - 49	21.3	20.5	16.3	16.7	32.1	25.1	18.5	17.0	23.3	21.1	19.4
50 - 59	24.8	27.2	30.0	37.0	27.7	28.4	24.3	25.2	29.2	18.0	25.3
60 - 64	20.6	16.9	14.2	11.3	10.7	12.7	12.9	10.4	8.8	13.1	12.4
65+	27.8	21.1	26.2	27.2	17.7	17.2	30.9	34.0	26.7	29.9	29.3
No Reply	0.0	1.4	4.1	0.0	0.0	1.1	0.9	1.5	0.6	0.0	1.0

Chart 3 – Awareness of Farm Safety Partnership ‘SAFE’

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Yes	90.4	87.1	68.9	85.2	80.2	87.8	79.7	83.4	85.9	78.9	81.6
No	9.6	12.9	31.1	14.8	19.8	12.2	20.3	16.6	14.1	21.1	18.4

Chart 4 – Awareness of HSENI ‘Be Aware Kids’

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Yes	69.6	56.9	52.3	48.3	55.1	65.7	54.6	56.1	67.0	73.3	56.7
No	30.4	43.1	47.7	51.7	44.9	34.3	45.4	43.9	33.0	26.7	43.3

Chart 5 – Concern about own Farm Safety

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
No Concerns	30.4	25.3	35.0	33.0	24.7	17.4	25.6	27.0	24.8	21.1	25.1
A Few Concerns	51.7	54.7	46.1	38.6	57.0	61.2	51.7	51.7	55.9	73.3	53.0
Serious Concerns	6.9	8.1	5.5	14.9	7.7	11.6	10.3	9.4	6.7	0.0	9.9
No Reply	11.0	11.9	13.5	13.5	10.7	9.7	12.4	11.9	12.6	5.5	11.9

Chart 6 – Proportion (%) of Farms with One or More Accidents Requiring Medical Attention

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Yes	4.1	5.1	6.3	5.1	4.6	10.2	3.7	5.0	7.6	0.0	4.8
No	95.9	94.9	93.7	94.9	95.4	89.8	96.3	95.0	92.4	100.0	95.2

Chart 7 – Distribution (%) of Accidents per Farm Requiring Medical Attention

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
1 accident	66.7	100.0	85.5	100.0	100.0	87.5	85.6	100.0	100.0	0.0	90.0
2 accidents	33.3	0.0	14.5	0.0	0.0	12.5	14.4	0.0	0.0	0.0	10.0

Chart 8 – Proportion (%) of Farms with One or More Accidents Requiring Medical Attention

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Very Small	5.2	4.1	6.3	0.0	3.4	7.6	3.5	4.6	6.3	0.0	4.0
Small	0.0	0.0	4.3	11.1	2.2	6.0	3.6	7.8	11.5	0.0	5.3
Medium	0.0	0.0	20.0	16.7	12.5	12.7	8.3	0.0	0.0	0.0	10.0
Large / Very Large	0.0	20.0	2.9	0.0	5.3	12.8	11.1	11.1	14.3	0.0	11.2
All Sizes	4.1	5.1	6.3	5.1	4.6	10.2	3.7	5.0	7.6	0.0	4.8

Chart 9 – Distribution (%) by Status of Injured Persons

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Farmer	100.0	56.2	65.4	100.0	65.4	68.3	76.4	79.1	70.6	0.0	74.5
Spouse	0.0	0.0	0.0	0.0	0.0	1.5	5.4	6.8	0.0	0.0	4.2
Son / Daughter	0.0	0.0	0.0	0.0	0.0	12.9	10.2	6.8	19.8	0.0	9.7
Other family	0.0	0.0	20.1	0.0	19.7	1.6	5.5	0.0	0.0	0.0	3.6
Other	0.0	43.8	14.5	0.0	15.0	15.7	2.6	7.4	9.6	0.0	8.0

Chart 10 – Distribution (%) by Age of Injured Person

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Under 16	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	19.8	0.0	1.3
16 - 29	0.0	50.0	34.6	0.0	0.0	15.8	3.8	4.5	9.6	0.0	8.1
30 - 39	0.0	21.9	0.0	0.0	19.7	10.9	11.5	11.3	31.6	0.0	12.0
40 - 49	33.3	0.0	0.0	56.4	50.4	24.4	22.0	9.0	9.6	0.0	19.8
50 - 59	33.3	28.1	45.3	43.6	15.0	23.4	15.3	34.0	21.4	0.0	22.4
60 - 64	0.0	0.0	0.0	0.0	0.0	12.4	16.0	13.5	0.0	0.0	12.9
65+	33.3	0.0	20.1	0.0	15.0	13.1	30.0	27.7	8.0	0.0	23.6

Chart 12 – Distribution (%) by the Number of Days the Injured Person was Unable to Work

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
0 Days	66.7	56.2	47.0	56.4	69.3	49.1	43.1	44.5	80.2	0.0	47.4
1 - 30 days	33.3	21.9	20.1	0.0	15.7	31.6	38.7	37.4	19.8	0.0	34.6
31 - 60 days	0.0	0.0	0.0	0.0	15.0	8.1	10.2	6.8	0.0	0.0	8.2
Over 60 Days	0.0	21.9	32.9	43.6	0.0	11.2	8.0	11.3	0.0	0.0	9.8

Chart 13 – Distribution (%) by Medical Attention Required

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Hospital In Patient	33.3	0.0	32.9	43.6	15.0	17.8	24.2	18.0	9.6	0.0	20.7
Hospital Out Patient	66.7	71.9	67.1	56.4	65.3	66.3	54.1	65.5	78.6	0.0	61.1
Doctor's Surgery	0.0	28.1	0.0	0.0	19.7	15.9	21.7	16.4	11.8	0.0	18.2

Chart 14 – Frequency (%) of Injuries (more than one injury possible per accident)

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Laceration	66.7	50.0	34.6	100.0	39.4	31.3	40.6	26.1	50.8	0.0	36.6
Fracture	33.3	21.9	32.5	0.0	15.0	30.1	20.8	38.1	11.8	0.0	26.2
Bruising	0.0	0.0	0.0	56.4	15.7	23.9	32.9	27.0	42.9	0.0	28.4
Sprains	33.3	28.1	0.0	0.0	0.0	14.3	8.9	6.8	0.0	0.0	9.6
Infection	0.0	0.0	0.0	43.6	0.0	3.1	6.7	7.4	0.0	0.0	5.6
Internal injury	0.0	0.0	32.9	0.0	0.0	1.5	2.6	0.0	0.0	0.0	2.0
Burns	0.0	0.0	0.0	0.0	15.0	5.0	1.3	0.0	0.0	0.0	2.1
Other	33.3	0.0	0.0	0.0	15.0	9.4	11.5	14.8	15.9	0.0	11.7

Chart 15 – Frequency (%) of Primary Accident Causes

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Slip (ground level)	33.3	50.0	20.1	0.0	15.0	22.0	19.8	19.4	42.9	0.0	21.5
Fall (from height)	33.3	0.0	0.0	0.0	15.0	15.0	10.2	4.5	8.0	0.0	10.0
Manual Lifting	0.0	0.0	32.9	0.0	19.7	1.6	2.6	0.0	0.0	0.0	2.5
Struck by object	0.0	0.0	12.4	0.0	0.0	1.6	1.3	4.5	0.0	0.0	2.1
Hit by animal	0.0	0.0	0.0	0.0	15.7	23.5	28.4	26.1	11.8	0.0	24.4
Contact with machinery	0.0	21.9	0.0	56.4	0.0	11.1	6.4	13.5	0.0	0.0	9.0
Injured using hand tool	33.3	28.1	14.5	43.6	19.7	4.7	13.5	5.2	0.0	0.0	10.0
Affected by gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Immersion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Flame	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.4
Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Corrosive	0.0	0.0	0.0	0.0	15.0	5.0	0.0	0.0	0.0	0.0	1.5
Other	0.0	0.0	20.1	0.0	0.0	14.1	17.9	21.6	37.3	0.0	17.4
No Reply	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0	1.1

Chart 16 - Frequency (%) of Injuries (more than one injury possible per accident) for accidents resulting in the injured person being unable to work for 31 days+

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Laceration	0.0	0.0	0.0	100.0	0.0	16.3	14.0	25.0	0.0	0.0	17.6
Fracture	0.0	100.0	0.0	0.0	0.0	74.1	57.9	75.0	0.0	0.0	62.4
Bruising	0.0	0.0	0.0	0.0	0.0	8.2	36.9	12.5	0.0	0.0	21.5
Sprains	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0	2.4
Infection	0.0	0.0	0.0	100.0	0.0	8.2	0.0	12.5	0.0	0.0	6.5
Internal injury	0.0	0.0	100.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	6.1
Burns	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	100.0	8.2	21.0	12.5	0.0	0.0	16.2

Chart 17 - Frequency (%) of Primary Accident Causes for accidents resulting in the injured person being unable to work for 31 days+

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Slip (ground level)	0.0	100.0	0.0	0.0	100.0	15.9	7.0	12.5	0.0	0.0	13.7
Fall (from height)	0.0	0.0	0.0	0.0	0.0	51.9	14.0	25.0	0.0	0.0	24.6
Manual Lifting	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
Struck by object	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hit by animal	0.0	0.0	0.0	0.0	0.0	24.0	50.9	12.5	0.0	0.0	31.8
Contact with machinery	0.0	0.0	0.0	0.0	0.0	0.0	7.0	25.0	0.0	0.0	8.3
Injured using hand tool	0.0	0.0	0.0	100.0	0.0	0.0	7.0	0.0	0.0	0.0	5.1
Affected by gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Immersion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Flame	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Corrosive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	8.2	14.0	25.0	0.0	0.0	13.6
No Reply	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Chart 18 – Proportion (%) of Farms with One or More Minor Injuries or Near Misses

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Yes	15.2	7.0	11.0	15.5	17.5	26.7	15.2	15.7	23.1	34.2	16.8
No	84.8	93.0	89.0	84.5	82.5	73.3	84.8	84.3	76.9	65.8	83.2

Chart 19 – Frequency (%) Primary Cause of Minor Injuries

	Cereals	General	Horticulture	Pigs	Poultry	Dairy	Cattle and	Cattle and	Mixed	Other	All
	%	%	%	%	%	%	%	%	%	%	%
Slip (ground level)	25.0	0.0	62.0	24.9	24.7	27.0	32.3	27.1	22.8	33.3	29.8
Fall (from height)	0.0	11.4	0.0	0.0	14.8	5.1	3.3	3.1	4.1	0.0	3.7
Manual Lifting	24.6	0.0	0.0	49.8	9.9	7.9	9.2	11.1	13.8	0.0	9.8
Struck by object	6.5	0.0	0.0	0.0	0.0	2.5	2.0	1.8	0.0	33.3	2.6
Hit by animal	6.2	25.7	0.0	0.0	9.9	30.9	25.7	34.2	35.9	0.0	26.9
Contact with machinery	12.3	11.4	13.9	0.0	4.9	4.4	4.0	3.3	2.8	0.0	4.0
Injured using hand tool	25.4	51.5	24.0	12.6	21.1	12.8	15.0	10.3	13.1	33.3	14.6
Affected by gas	0.0	0.0	0.0	0.0	0.0	0.6	1.0	0.0	0.0	0.0	0.6
Immersion	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.4
Flame	0.0	0.0	0.0	12.6	0.0	4.1	3.6	3.1	3.4	0.0	3.4
Electricity	0.0	0.0	0.0	0.0	4.9	0.0	1.0	0.0	0.0	0.0	0.6
Corrosive	0.0	0.0	0.0	0.0	4.8	2.0	1.3	1.0	0.0	0.0	1.3
Other	0.0	0.0	0.0	0.0	5.1	2.6	1.0	4.9	4.1	0.0	2.1

Chart 20 – Frequency (%) Primary Cause of Near Misses

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Slip (ground level)	50.0	12.5	12.4	22.2	19.5	28.2	25.9	34.3	25.9	45.9	27.6
Fall (from height)	0.0	12.5	7.5	11.1	8.0	3.5	6.3	2.5	8.2	45.9	6.2
Manual Lifting	0.0	12.5	15.1	11.1	0.0	4.0	4.7	7.6	0.0	0.0	4.9
Struck by object	0.0	12.5	0.0	11.1	3.5	3.0	4.1	4.4	4.0	0.0	3.9
Hit by animal	0.0	0.0	15.1	22.2	29.8	34.0	33.9	34.6	29.3	8.1	32.4
Contact with machinery	0.0	12.5	15.1	11.1	3.4	5.9	10.8	4.6	11.4	0.0	8.6
Injured using hand tool	25.0	12.5	7.5	0.0	3.4	8.7	7.3	6.0	8.2	0.0	7.2
Affected by gas	0.0	0.0	0.0	0.0	7.8	5.6	1.7	1.6	0.0	0.0	2.4
Immersion	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.0	0.0	0.3
Flame	0.0	0.0	0.0	0.0	0.0	1.2	0.3	2.7	0.0	0.0	0.8
Electricity	0.0	12.5	7.5	11.1	15.8	1.8	3.7	0.0	4.9	0.0	3.3
Corrosive	0.0	0.0	12.4	0.0	8.9	3.5	0.0	0.0	0.0	0.0	1.0
Other	25.0	12.5	7.5	0.0	0.0	0.6	0.9	0.8	8.2	0.0	1.3

Chart 21 – Frequency (%) of Main Farm Safety Hazards

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Slip (ground level)	45.6	51.7	67.1	57.7	50.5	41.9	58.6	55.8	55.3	29.9	55.5
Fall (from height)	59.9	56.8	51.1	42.9	59.0	54.7	50.5	50.9	54.4	96.8	51.9
Manual Lifting	58.6	51.4	55.6	54.6	42.4	33.6	48.7	44.9	43.8	24.3	46.1
Struck by object	14.0	19.7	10.1	13.5	12.1	10.8	16.4	16.1	14.9	34.2	15.6
Hit by animal	30.5	36.1	16.9	69.2	48.9	85.4	76.9	79.5	76.4	60.9	75.6
Contact with machinery	78.0	77.4	64.3	52.8	61.2	62.9	60.7	58.2	60.6	36.6	60.7
Injured using hand tool	62.8	53.9	56.6	33.7	40.6	29.8	40.0	41.4	45.2	44.6	40.0
Affected by gas	20.9	26.4	9.0	51.8	43.6	63.0	36.7	37.0	44.3	0.0	39.1
Immersion	6.8	3.2	2.1	2.5	5.8	7.2	3.5	3.7	5.5	0.0	4.0
Flame	11.5	1.4	6.1	0.0	5.8	3.1	4.0	3.7	2.4	0.0	3.9
Electricity	47.0	60.7	52.0	46.4	48.6	42.2	39.7	41.2	48.8	49.0	41.4
Corrosive	12.3	12.6	15.3	2.2	23.6	20.4	7.3	8.3	9.6	0.0	9.5
Other	6.9	4.6	2.5	6.6	2.8	2.3	2.2	2.0	1.8	0.0	2.3

Chart 22 – Frequency (%) of Farms Engaged in Work Practices

	Never	Occasionally	Frequently	Does not apply	No Reply
	%	%	%	%	%
Chart 22a	69.3	20.1	1.5	5.0	4.1
Chart 22b	45.6	42.1	4.9	3.3	4.2
Chart 22c	26.1	15.7	16.8	36.3	5.1
Chart 22d	36.7	21.1	11.9	26.0	4.2
Chart 22e	82.1	4.8	0.3	8.5	4.3
Chart 22f	47.6	28.1	3.9	16.2	4.2
Chart 22g	60.6	21.5	1.5	12.0	4.4
Chart 22h	53.5	26.5	2.8	13.0	4.1
Chart 22i	62.8	20.3	2.6	10.0	4.3
Chart 22j	77.9	12.8	1.3	3.6	4.4
Chart 22k	62.9	14.1	2.3	17.0	3.7
Chart 22l	60.9	29.9	1.1	3.5	4.6

Chart 23 – Frequency (%) of Barriers to Improving Farm Safety

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Cost	51.6	64.9	51.3	59.1	64.2	69.2	73.6	64.9	70.5	60.9	70.5
Lack of advice	11.1	13.2	14.1	13.6	17.5	8.3	17.2	16.1	9.6	3.2	9.6
Time pressure (other farm work)	62.9	51.8	49.0	71.7	66.8	79.5	48.1	50.4	68.7	16.2	68.7
Time pressure (off-farm work)	26.2	25.8	14.7	14.7	14.8	7.3	28.1	29.5	17.0	35.9	17.0
Indifference	7.0	15.1	16.4	14.5	13.6	10.1	8.2	9.0	10.0	0.0	10.0
Other	6.9	6.0	3.1	2.2	3.4	4.1	2.9	3.5	4.9	0.0	4.9

Chart 24 – Frequency (%) of Recently Completed Farm Improvements

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Install Gang Slats	4.1	11.0	0.9	24.3	15.0	29.3	12.6	13.7	17.3	0.0	17.3
Safer Slurry procedure	9.8	10.5	6.5	20.8	19.8	35.9	20.2	21.8	29.9	0.0	29.9
PTO Guards	44.6	38.8	28.0	49.7	35.8	51.7	29.5	30.7	39.9	18.0	39.9
Machinery Guards	27.8	27.7	20.2	7.0	12.9	18.2	12.6	13.8	18.8	0.0	18.8
Animal Handling Facilities	11.2	17.8	13.9	23.8	23.4	37.3	37.1	40.0	37.5	16.2	37.5
Cameras to Telehandlers	12.6	12.6	2.7	0.0	5.5	6.3	2.9	3.6	3.1	3.2	3.1
Maintainance on brakes	38.9	43.9	38.4	23.7	24.2	31.2	34.2	33.7	32.8	49.0	32.8
Attend Training	15.2	20.8	7.9	2.2	13.3	17.0	10.7	9.0	14.4	13.1	14.4
Play Area for Children	4.2	7.5	10.7	7.3	6.9	7.6	7.1	6.9	3.3	0.0	3.3
Fenced dangerous areas	1.4	1.4	6.9	6.6	6.7	7.5	4.8	5.7	7.2	18.0	7.2
Lighting or yard layout	30.5	27.7	35.3	47.2	43.8	38.2	36.4	35.7	38.3	24.3	38.3
Cherry Picker for heights	29.0	27.5	16.1	15.4	24.8	24.1	11.2	15.6	23.6	3.2	23.6
Other	9.6	12.9	6.9	2.9	5.8	4.6	5.0	3.8	4.5	0.0	4.5

Chart 25 – Frequency (%) of Identified Future Farm Improvements

	Cereals	General Cropping	Horticulture	Pigs	Poultry	Dairy	Cattle and Sheep LFA	Cattle and Sheep LL	Mixed	Other Type	All Types
	%	%	%	%	%	%	%	%	%	%	%
Install Gang Slats	5.5	4.3	1.6	5.1	17.8	15.6	13.8	11.0	7.1	0.0	7.1
Safer Slurry procedure	1.3	2.9	0.0	9.5	8.8	12.6	8.5	6.5	7.9	0.0	7.9
PTO Guards	16.6	11.3	8.1	7.3	14.0	11.5	11.0	12.4	11.2	13.1	11.2
Machinery Guards	8.4	3.2	9.6	2.9	7.6	5.6	5.7	5.6	5.5	0.0	5.5
Animal Handling Facilities	5.6	10.3	7.9	10.1	16.1	26.7	24.7	21.3	28.5	18.0	28.5
Cameras to Telehandlers	11.1	4.3	0.9	4.7	10.4	10.0	6.4	5.5	8.9	0.0	8.9
Maintainance on brakes	7.0	9.1	9.2	2.5	6.2	7.0	7.5	7.7	7.2	0.0	7.2
Attend Training	13.1	7.5	11.9	5.1	10.2	9.7	13.9	12.4	12.0	0.0	12.0
Play Area for Children	4.1	4.9	4.1	14.9	7.0	4.6	5.9	4.0	5.8	13.1	5.8
Fence dangerous areas	4.2	5.7	1.3	2.9	4.1	2.8	2.8	1.5	6.7	0.0	6.7
Lighting or yard layout	15.1	23.2	15.2	7.9	9.3	17.3	17.7	17.7	20.5	13.1	20.5
Cherry Picker for heights	13.9	8.3	13.0	13.1	11.3	11.4	9.2	8.6	13.8	31.0	13.8
Other	8.3	5.7	5.9	10.4	4.2	4.2	4.9	5.1	4.4	0.0	4.4