

Final Report

# **Executive Summary**

The most recent statistics available show that the fatality rate for workers across all sectors of the Irish economy is 1.8 per 100,000. The fatality rate for agriculture is an outlier and remains stubbornly high, ranging between 7.7 and 17.7 per 100,000 depending on the method of calculation used. Fatalities in agriculture is an EU wide problem where the average rate of farm fatalities is estimated to be 12.0 per 100,000 (estimate based on limited data). Table 1 sets out the actual number of farm fatalities over the past five years.

Table 1: Fatalities in the Agriculture Sector in Ireland 2016-2020

2016	2017	2018	2019	2020
21	25	15	19	20

Almost two thirds (64%) of fatal incidents on Irish farms over the last five years involved people in vulnerable age groups. 58% of fatalities involved individuals 65 years and above which is almost evenly divided between individuals in the 65-74 years age group (30%) and the balance (28%) in the 75 years and above category. 6% of farm fatalities involved individuals between 0 and 17 years.

This information clearly identifies the age cohorts requiring most attention. The at risk groups represent a significant number, with 2018 labour force data confirming that 23% of workers in the Agriculture, Forestry and Fishing sector were aged 65 years or over1, a much greater proportion than the 3% in the general Irish workforce.

Farm Family CPD (Online) aims to make a significant contribution towards one of the significant problems of our time facing Irish agriculture. Farm Family CPD designed, developed and delivered online health and safety training to 312 farm families throughout Ireland. The training offered was designed to be practical, helpful and targeted all family members and generations living and working on Irish farms. For the first time, training was designed and developed not only for the principal farmer but specifically for the vulnerable age groups.

The following course titles demonstrate that the training is targeted at the people involved in farming who are susceptible to a fatal or life changing incident;

- Running a Safer Farm (Farm Principal)
- Keeping Yourself Safe (12-16yrs)
- Keeping Yourself Safe (>65yrs)
- Keeping Yourself Safe (Employee & Non-Paid Family Workers)
- Livestock, Machinery & Buildings (Essential Safety for All)

This training was offered to farm families online using a fit for purpose learning management system FLEX. The software is designed specifically to create, distribute and manage the delivery of educational content and is fully GDPR compliant. For the first time farm families were offered the opportunity to work from home, at the kitchen table, to assess their farm health and safety practices and behaviours and complete training essential to their wellbeing.

All participant cohorts found the training useful and agreed that online farm safety training help them make farm safety a higher priority. All cohorts agreed that the online farm safety training provided was very effective.

#### **SECTION 1: FINANCIAL REPORT**

Table 2 hereunder, categorises the distribution of funding received by salaries, contract and other as set out in the Stage 2 application for funding together with the actual distribution of spending over the lifetime of the project under the same headings. Also included is the final spending figure for the project which completed the proposal within budget with an underspend of 2.22% in the amount of €7,958.43.

**Table 2: Summary of Project Costings** 

Category	Forecast	%	Actual	%
Salaries	€249,000	69%	€150, 674.94	43%
Contract	€50,000	14%	€180,790.67	51%
Other	€60,500	17%	€20,075.96	6%
Total	€359,500	100%	€351,541.57	100%
% Funding	100%	-	97.78%	-

Table 3 hereunder, further categorises the abovementioned costs in line with DAFM project management reporting requirements to include the reports submitted to DAFM during the lifetime of the project i.e. May 2022-December 2022, January-May 2023, June-August 2023 and September to November 2023 management reports.

Table 3: Total Expenditure: May 2022 to November 2023

Category	Total Paid
Personnel Costs	€146,395.03
Travel	€4,279.91
Other Direct Costs	€3,822.31
Administration Costs	€0.00
Implementation Costs	€197,044.33
Total	€351,541.57

As mentioned, the project was implemented within budget with a small surplus remaining. Due to the nature of the development work of the project, the highest costs fell under the contract and implementation headings which included the contractor costs (92% of implementation costs) associated with both Cobblestone and the learning management system (7% of implementation costs).

Following a selection process from a list of contract providers capable of providing the services required by the project, it was decided to increase the contract services part of the project for three reasons:

- To benefit from new perspectives Innovation is a key value for FFCPD and introducing experience and a learning and development capability from a broader range of sectors would help avoid group think and help achieve the highest standard of learning design and production possible.
- Larger Team & Collaboration Introducing a partner with a multidisciplinary team
  capable of working end to end with FRS Training on the solution through all the
  stages of course development from discovery through storyboarding, learning
  design, production and publishing would enhance the existing partnership behind
  FFCPD which includes farm family representatives, HSA, Teagasc, FBD, IFA and
  FRS Network.
- 3. Value for Money & more Value Added To provide the best outcome possible, the lifecycle of a course needs to be integrated at all stages of course development. Working with a partner providing an end-to-end service resulted in greater value for money. It also allowed FRS Training to invest additional resources in QA of the learning designs and content produced.

The second highest cost category was salaries and together with implementation costs accounted for 94% of the actual budget. The salary costs included FRS Training staff who worked on the delivery of the project. These included a full time Project Coordinator, Bernadette O'Connor who coordinated all aspects of the project for the duration including correspondence with Operating Group stakeholders and oversight of all project partners as outlined. Other salary costs included Peter Slattery, Project Manager who allocated a portion of his time as required to oversee all aspects of the project and report to both DAFM and the Operating Group.

The balancing involvement included QA work of all learning and development work by Maria Dunne, QA Manager, FRS Training and Muireann Brophy who provided marketing and assistance with enrolment of learners on the learning management system.

## **SECTION 2: PROJECT DESCRIPTION**

The project was implemented over four phases as follows:

## **Phase 1: Preparation Phase**

- Appointment of a Project Coordinator
- Scheduling of learning & development and instructional design capacity as required
- Procurement and commissioning of computers & phones
- Development of the Farm Family CPD (Online) website
- Appointment of Cobblestone Learning

## **Phase 2: Development Phase**

During the following five online training courses were developed.

- Running a Safer Farm (Farm Principal)
- Keeping Yourself Safe (12-16yrs)
- Keeping Yourself Safe (>65yrs)
- Keeping Yourself Safe (Employee & Non-Paid Family Workers)
- Livestock, Machinery & Buildings (Essential Safety for All)

All courses passed through the following steps:

- Definition of learning outcomes
- Storyboarding setting out the learning journey to the various learning outcomes
- Subject matter experts involvement which developed all aspects of the content, including technical information, visual aids, narrative, script for audio visual production together with the quizzes and questions designed to make the learning outcomes measurable.
- Rigorous internal and external quality assurance took place at each step. The Farm Family Review Group evaluated and signed off on learning outcomes, storyboarding and learning design. The QA Manager separately reviewed all material.
- Final QA required the approval of the Operational Group.

## **Phase 3: Training Phase**

The project delivered training to 312 farm families across Ireland. During the training phase farm families had access to:

- over the phone administration assistance to help them register on the LMS
- assistance downloading the LMS App
- the five training courses online
- online surveys were completed by participants to assist with the evaluation

#### **Phase 4: Evaluation & Dissemination Phase**

Information gathered during the Training Phase was evaluated.

- Final Report
- Followed by dissemination by Operating Group members

Reporting to the Operational Group and DAFM throughout as required.

## **SECTION 3: DETAILED REPORTING**

#### **Baseline Data & KPIs**

Table 4 below sets out the baseline data for the project by participant course type, together with the main KPI of exceeding 300 farm families participating in the project.

Table 4: No. of Participants by Project Cohort

Participant Course Type & KPI	No. of Participants
Farm Principals	212
12-16 Year Olds	61
>65 Years Old	71
Employees & Non-Paid Family Workers	126
Livestock, Machinery & Buildings	143
No. of Farm Families	312

# **Project Evaluation**

# Running a Safer Farm (Farm Principals)

Table 5 below contains the course evaluation. 97% of respondents found the course useful with 95% of respondents either agreeing or strongly agreeing that online farm safety training would help them to run a safer farm. Also, having completed the course, 97% committed to removing at least one of the high-risk situations on their farm.

Table 5: Course Evaluation for Running a Safer Farm (Respondents N=97, 46% of 212 Participants)

Question	Answer	Results
Did you find the course useful?	Yes	97%
Did you find the course useful?	No	3%
Having completed this course is farm safety a higher priority for you?	Yes	97%
Having completed this course is farm safety a higher priority for you?	No	3%
Can you commit to removing at least one of the high-risk situations on		
your farm?	Yes	97%
Can you commit to removing at least one of the high-risk situations on		
your farm?	No	3%
Online safety training will help me run a safer farm	Disagree	5%
Online safety training will help me run a safer farm	Agree	46%
	Strongly	
Online safety training will help me run a safer farm	Agree	49%
Would you recommend this course to other farmers?	Yes	98%
Would you recommend this course to other farmers?	No	2%

## **Keeping Yourself Safe (12-16yrs)**

Table 6 below contains the course evaluation. 100% of respondents found the course useful. 96% made farm safety a higher priority having completed the course and 100% of respondents said they are more likely to play a more active role in farm safety having completed the course.

Table 6: Course Evaluation for Keeping Yourself Safe (12-16 years) (Respondents N=25, 41% of 61 Participants)

Question	Answer	Results
did you find the course useful?	Yes	100%
did you find the course useful?	No	0%
having completed this course, is farm safety a higher priority for you?	Yes	96%
having completed this course, is farm safety a higher priority for you?	No	4%
are you more likely to play an active role in farm safety on your farm?	Yes	100%
are you more likely to play an active role in farm safety on your farm?	No	0%
would you recommend this course to a family member or friend?	Yes	100%
would you recommend this course to a family member or friend?	No	0%

online safety training is effective.	Disagree	4%
online safety training is effective.		60%
	Strongly	
online safety training is effective.	Agree	36%

# **Keeping Yourself Safe (>65yrs)**

Table 7 below contains the course evaluation. 100% of respondents found the course useful and 100% of respondents made farm safety a higher priority having completed the course. 93% of respondents were more likely to review their role time.

Table 7: Course Evaluation for Keeping Yourself Safe (>65 years) (Respondents N=14, 20% of 71 Participants)

Did you find the course useful?	Yes	100%
Did you find the course useful?	No	0%
Having completed this course is farm safety a higher priority for you?	Yes	100%
Having completed this course is farm safety a higher priority for you?	No	0%
Are you more likely to review your role over time on the farm having	INO	0%
completed this course?	Yes	93%
Are you more likely to review your role over time on the farm having		
completed this course?	No	7%
Online safety training is effective?	Disagree	0%
Online safety training is effective?	Agree	64%
	Strongly	
Online safety training is effective?	Agree	36%
Would you recommend this course to other farmers?	Yes	100%
Would you recommend this course to other farmers?	No	0%

# **Keeping Yourself Safe (Employees & Non-Paid Family Workers)**

Table 8 below contains the course evaluation. 97% of respondents found the course useful and 94% of respondents made farm safety a higher priority having completed the course. 95% of respondents either agreed or strongly agreed that online farm safety training was extremely effective.

Table 8: Course Evaluation for Keeping Yourself Safe (Employees & Non-Paid Family Workers) (Respondents N=73, 58% of 126 Participants)

Question	Answer	Results
Did you find the course useful?	Yes	97%
Did you find the course useful?	No	3%
Having completed this course - is farm safety a higher priority for you?	Yes	94%
Having completed this course - is farm safety a higher priority for you?		6%
Will this course help you carry out your safety duties on the farm where		
you work?	Yes	97%

Will this course help you carry out your safety duties on the farm where		
you work?	No	3%
Having completed this course, are you more likely to discuss the risks on		
the farm where you work with your employer?	Yes	99%
Having completed this course, are you more likely to discuss the risks on		
the farm where you work with your employer?	No	1%
Would you recommend this course to other farm employees?	Yes	99%
Would you recommend this course to other farm employees?	No	1%
Online safety training is effective.	Disagree	4%
Online safety training is effective.	Agree	68%
	Strongly	
Online safety training is effective.	Agree	27%

# Livestock, Machinery & Buildings (Essential Safety for All)

Table 9 below contains the course evaluation. 97% of respondents found that the course would help them to recognise and reduce some of the dangers associated with livestock, 98% when working with tractors, machinery & buildings and 98% when working with quad bikes.

Table 9: Course Evaluation for Keeping Yourself Safe (>65 years) (Respondents N=93, 65% of 143 Participants)

Question	Answer	Results
Does this course help you recognise and reduce some of the dangers when		
working with livestock?	Yes	97%
Does this course help you recognise and reduce some of the dangers when		
working with livestock?	No	3%
Does this course help you recognise and reduce some of the dangers when		
working with tractors, machinery and buildings?	Yes	98%
Does this course help you recognise and reduce some of the dangers when		
working with tractors, machinery and buildings?	No	2%
Does this course help you recognise some of the dangers of working with		
quad bikes (ATVs)?	Yes	99%
Does this course help you recognise some of the dangers of working with		
quad bikes (ATVs)?	No	1%
Would you recommend this course to other farmers?	Yes	99%
Would you recommend this course to other farmers?	No	1%
Having taken this course, are you interested in further online safety		
training relating to livestock, machinery and buildings?	Yes	96%
Having taken this course, are you interested in further online safety		
training relating to livestock, machinery and buildings?	No	4%

## Value for Money

Table 10 below shows the economics of online training and how quickly the cost per learner drops. Project participants had access to two courses, one course relevant to both their age and status on the farm i.e. principal, 12-16 years old, >65 years old and employee or non-paid family worker and an essential safety course on livestock, machinery and buildings, which was relevant to all.

The cost/course per participant for the FFCPD project is €342.63. The development costs are absorbed across 513 learners. Given the satisfaction levels with online farm safety training from the course evaluations, it is reasonable to extrapolate that over a longer time span learner numbers would rise and at the 5,000 participant level the value for money associated with online farm safety training is evident.

One of the project objectives is to take the first step in developing a national training programme which is scalable and clearly provides value for money.

No. of Learners	513	1,000	3,000	5,000
Total Cost	€351,541	€351,541	€351,541	€351,541
Cost/Learner/ Course	€685.26	€351.54	€117.18	€70.30
Cost/Learner/ Course (2 Courses)	€342.63	€175.77	€58.59	€35.15

Table 10: Cost per Learner/Course for Online Health and Safety Training

## **SECTION 4: LESSONS LEARNED**

The project operated from July 2022 to November 2023. Set out hereunder are the main observations and lessons learned following implementation of the project.

- In the main, farm families are very open and interested in online health and safety training.
- From promoting the training at shows such as the National Ploughing Championships and the Tullamore Show, it is clear that most young people are very safety conscious and concerned about risk takers in their family.
- Farm families take time to complete online training. This is evident from the lag time observed between course registration and course completion.
- Family members worry about the safety of others, principals worry about the younger and older generations, older generations worry about the younger generations and vice versa.
- In the main, personal safety is a secondary consideration to the safety of others.
- Over 65s who are not familiar with technology are generally happy to complete online courses with the assistance of others.
- Mandatory course evaluation should be a design feature of the courses so that
  participants cannot opt out of the evaluation if they want to complete the course.
  It is important to note that the design of the course included a number of
  exercises which were necessary to increase the interaction levels. These

- exercises included requests for basic information on the participant's farm situation. As a result, we opted to make all exercises discretionary.
- More time needs to be allocated to the training phase. Online courses need to be available at all stages of the year and this will improve uptake.
- Different family generations complete courses at different stages (i.e. they do not complete them concurrently).
- To fully utilise the programme, a training phase of twelve months would be the optimum amount of time. This timeframe would cover all seasons and all farm activities.
- As all farm generations do not complete the courses concurrently, a twelve-month period allows time for cultural change to develop, which is necessary for behavioural change to take place within a family.

## **SECTION 5: ACTIONS TO CARRY FORWARD**

Continuity	-Assess if further operational funding is available -A twelve-month period would be an optimum timeframe to increase the participation level up to 5,000 learners
QA	-Review courses annually and edit in line with changing legislation -Update statistics once new data is available
Promotion	-Continue to promote courses through all channels especially through farmer facing organisations like Teagasc, IFA, FRS and FBD -Use the annual farming calendar to promote the courses at different stages of the year. Spring, Summer, Autumn and Winter all provide different promotion opportunities.
Development	-The courses are designed to operate separately or together and on their own provide a very relevant baseline of topics made relevant for each cohort on the farm. Further courses could be developed to address in more detail topics such as quads, cows and calves, tractor blindspots, working at heights etc.

## **SECTION 3: DISSEMINATION**

The aim of Farm Family CPD is to contribute to a national farm health and safety training model aimed at changing behaviour and developing risk averse attitudes and behaviours.

The target audience of policy makers (DAFM), relevant authorities (HSA & Teagasc), farmer facing organisations (FBD, IFA, Teagsac Advisory and FRS) will all have an active role in disseminating the project findings and use them to inform their ongoing work in the sector.

The project findings include:

1. Results

# 2. Data & Insights

Table 11 below identifies the types of information available for farm principals, 12-16 year olds, >65 year olds and employees and non-paid family workers.

**Table 11: Dissemination of Project Findings by Operating Group Members** 

Results	The quantitative results of the project will include: -levels of participation -levels of satisfaction -levels of completion -levels of behavioural change
Data & Insights	As the training is delivered online it operates in a data rich environment. Due to computer science a range of participation information is available which is not personal data but in aggregate is useful in terms of patterns of participation in the training which provides insights into learner behaviour in farm families. It is important to state that all categories of data associated with eLearning will be disclosed and consent requested to allow any potential use of this type of information. This category of data is always non personal but in aggregate can help us to understand better the adoption of new practices.

Finally, the project findings may potentially be of interest to other EU countries facing similar challenges and the findings will be made available where appropriate through Teagasc and the HSA. The key project findings will also be available on the Farm Family CPD Website.