


Farm Fatalities in Ireland 1993 – 2007

A Geo-Demographic Assessment of
Fatal Accidents Amongst
Elderly Workers

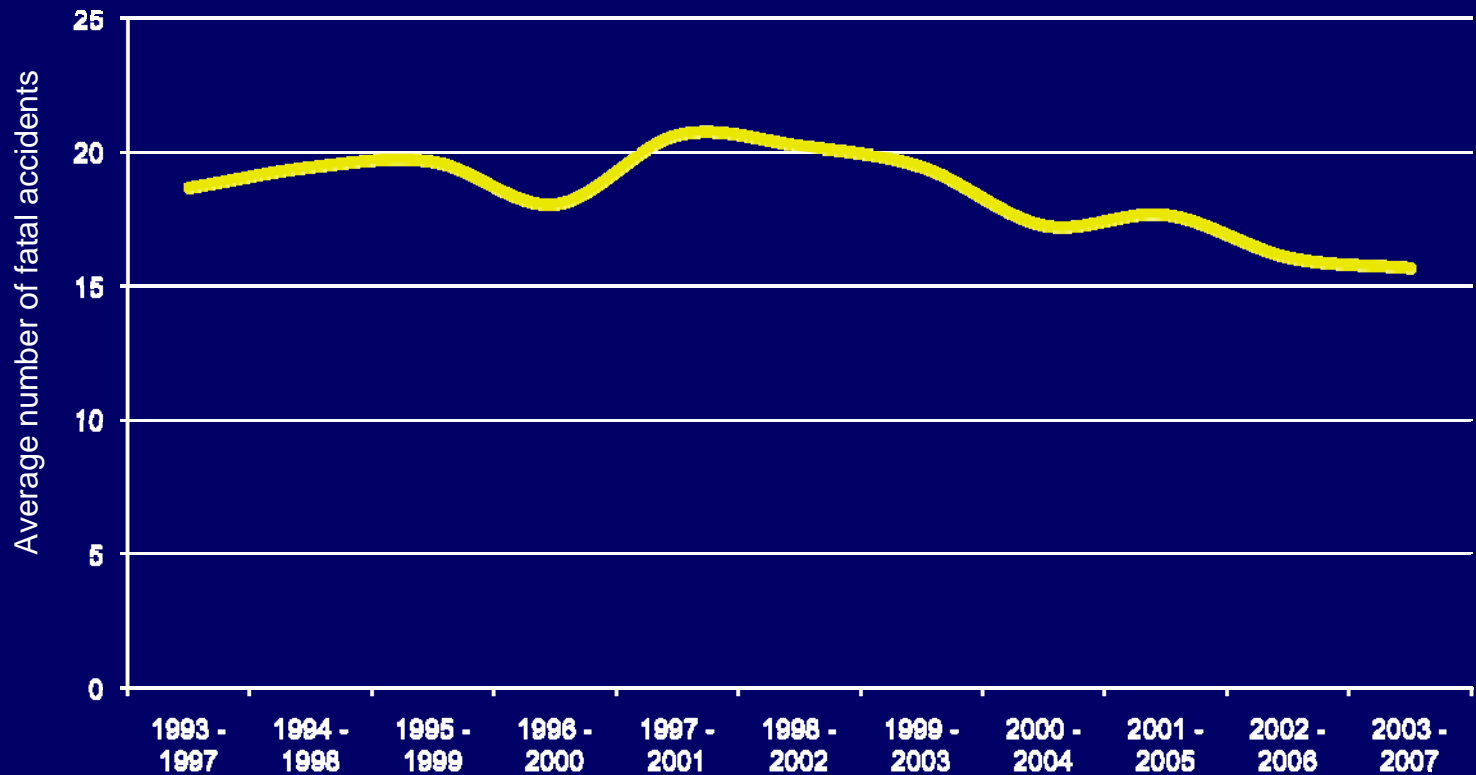
**David Meredith, John McNamara and
Marie Dalton**



Outline

- Trends in Elderly Farm Fatalities 1993 – 2007
 - Number
 - Age Distribution
 - Cause
 - Seasonality
 - Spatial Distribution

Average Number of Fatal Accidents



(Five year moving average)

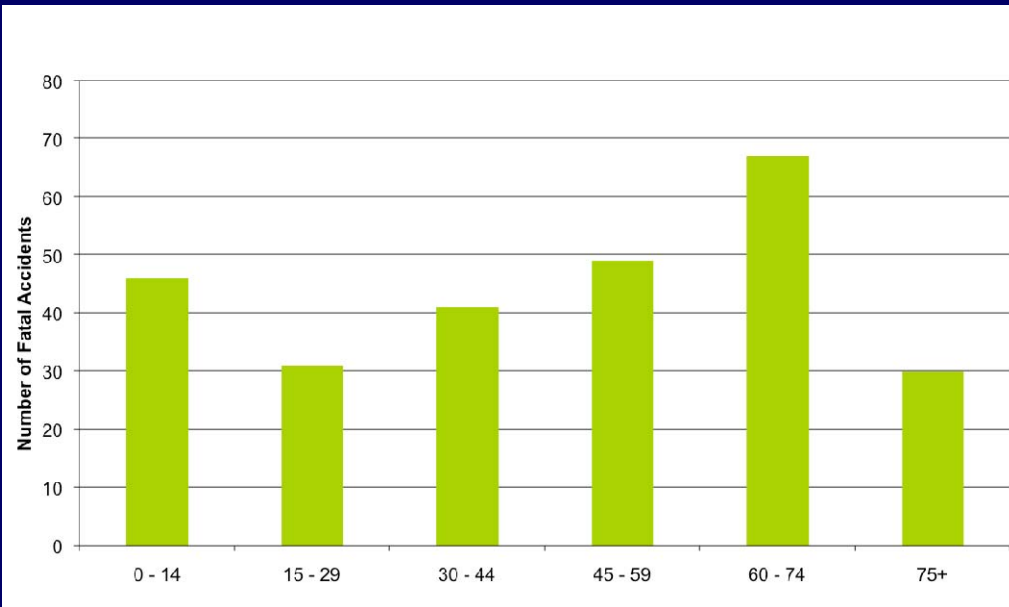


Farm Fatality Rate 1996 and 2002

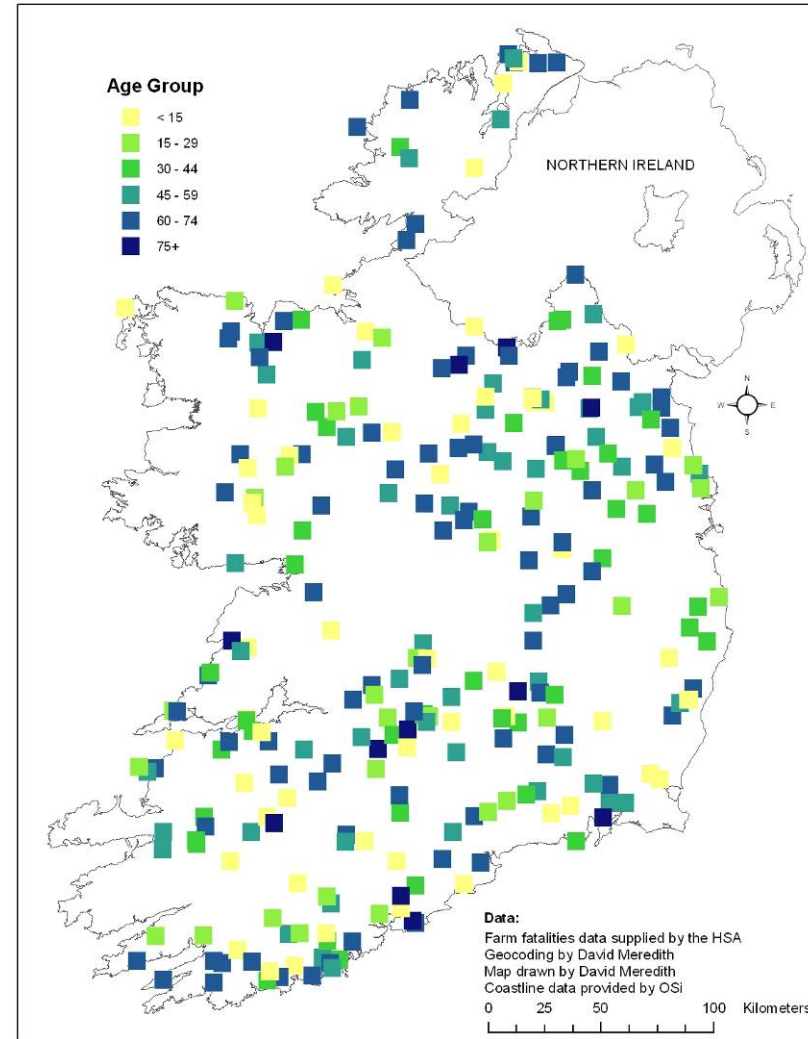
	1996	2002	Change
Occupation (Ag / Forest / Fish) (CSO)	140,449	96,279	-31%
Fatal Accidents (HSA)	12	13	8.33%
Fatalities / 10,000 workers	0.85	1.35	58%

- COP Occupation Variable
 - All persons aged 15 years and over who are at work or unemployed are classified by their present (or previous) principal occupation. A person's occupation is determined by the type of work he or she performs irrespective of the location or nature of business of his or her employer.

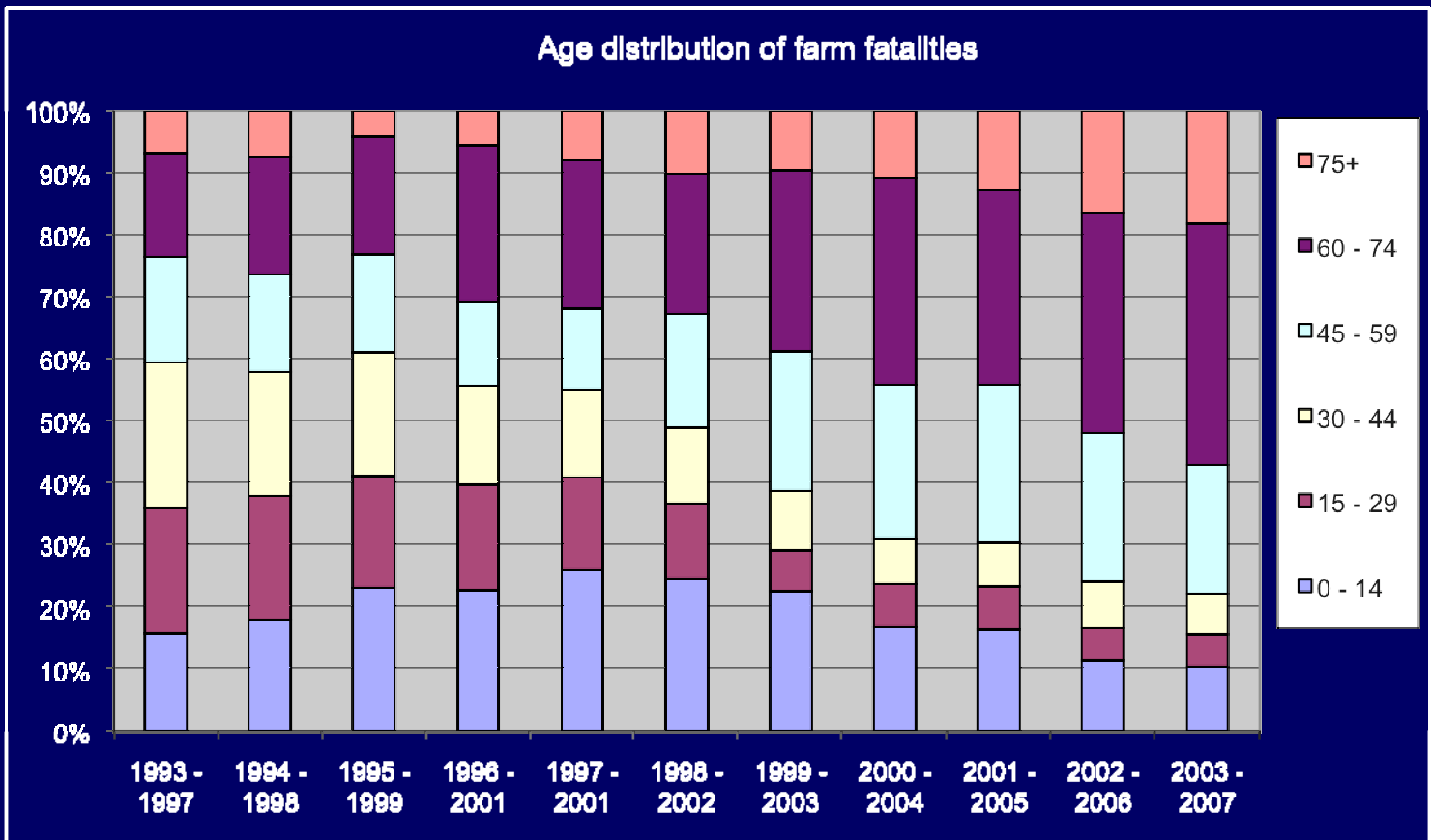
Age Distribution of Farm Fatalities



Age Group Distribution of Fatal Farm Accidents 1993 - 2007

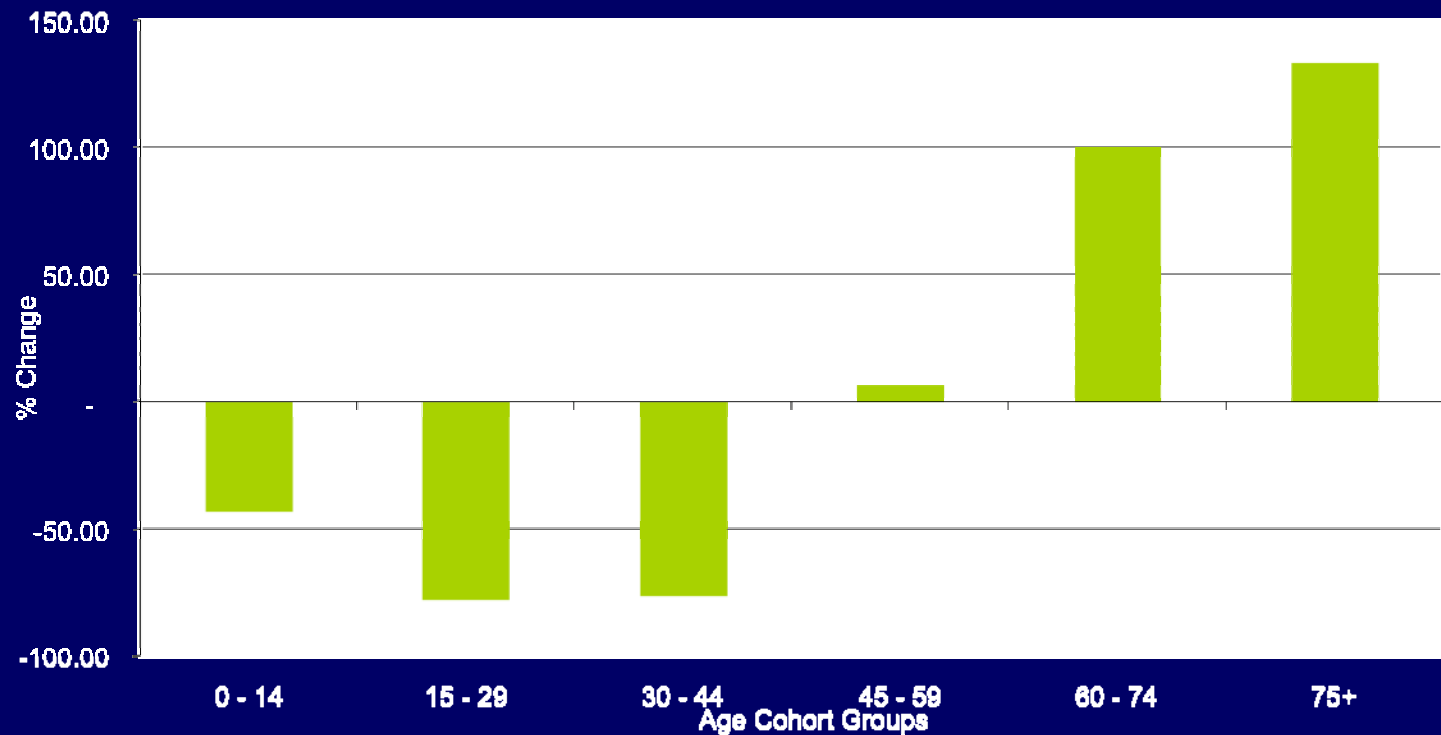


Changing Age Structure of Farm Fatalities



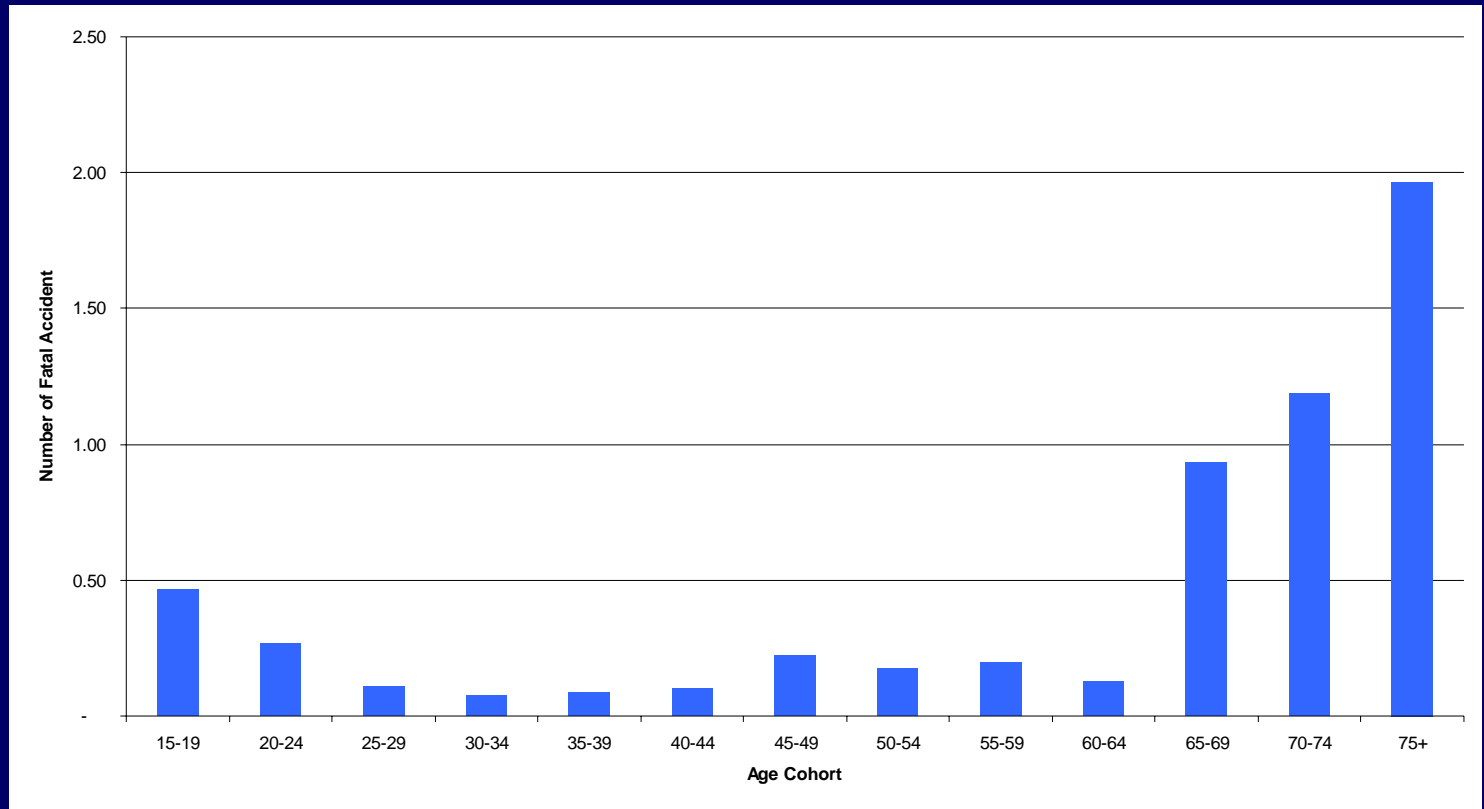
Demography of Farm Fatalities

Changing demographic profile of farm fatalities:
Average number of fatalities 1993 - 1997 and 2003 - 2007

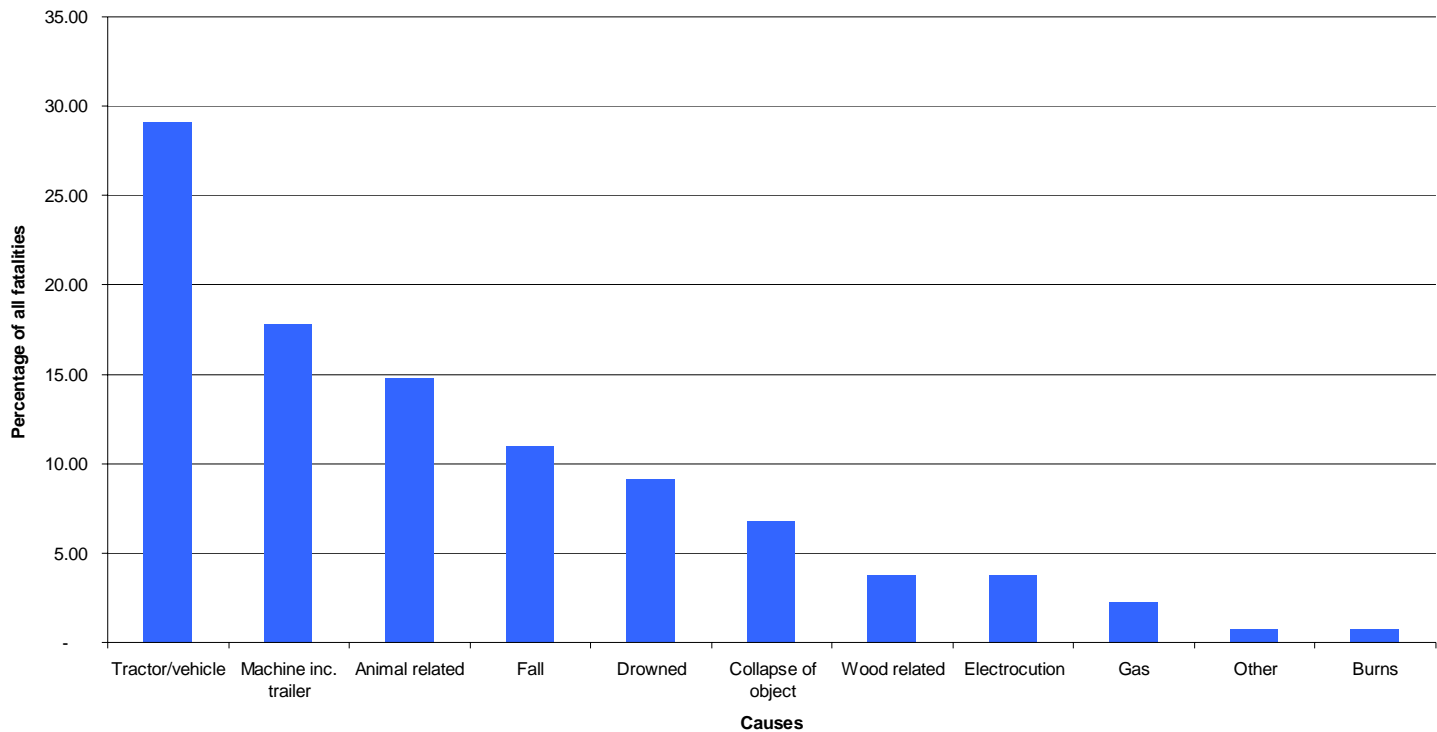


Number of Fatal Accidents Per 1000 Workers

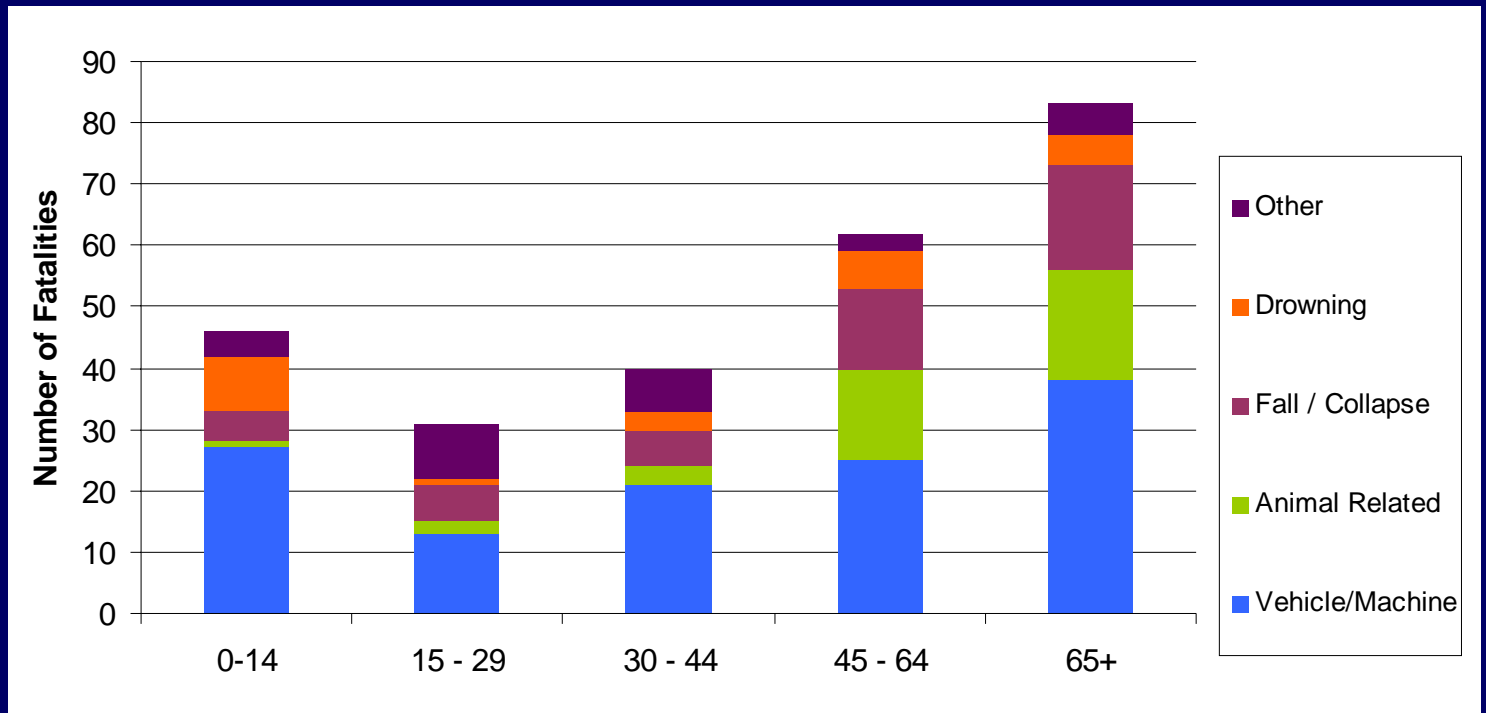
Data:
HSA
CSO, POWCAR



Primary Cause of Fatal Accidents 1993 - 2007

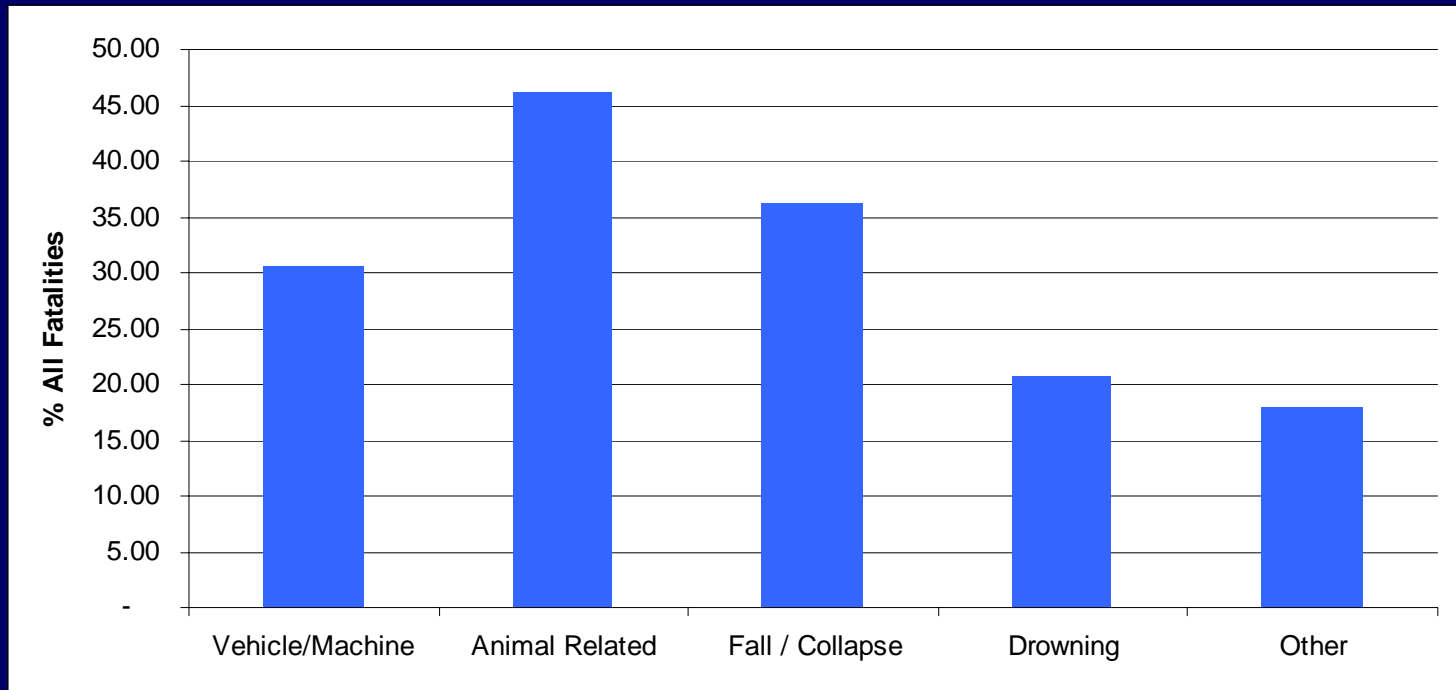


Demographic differences in fatalities

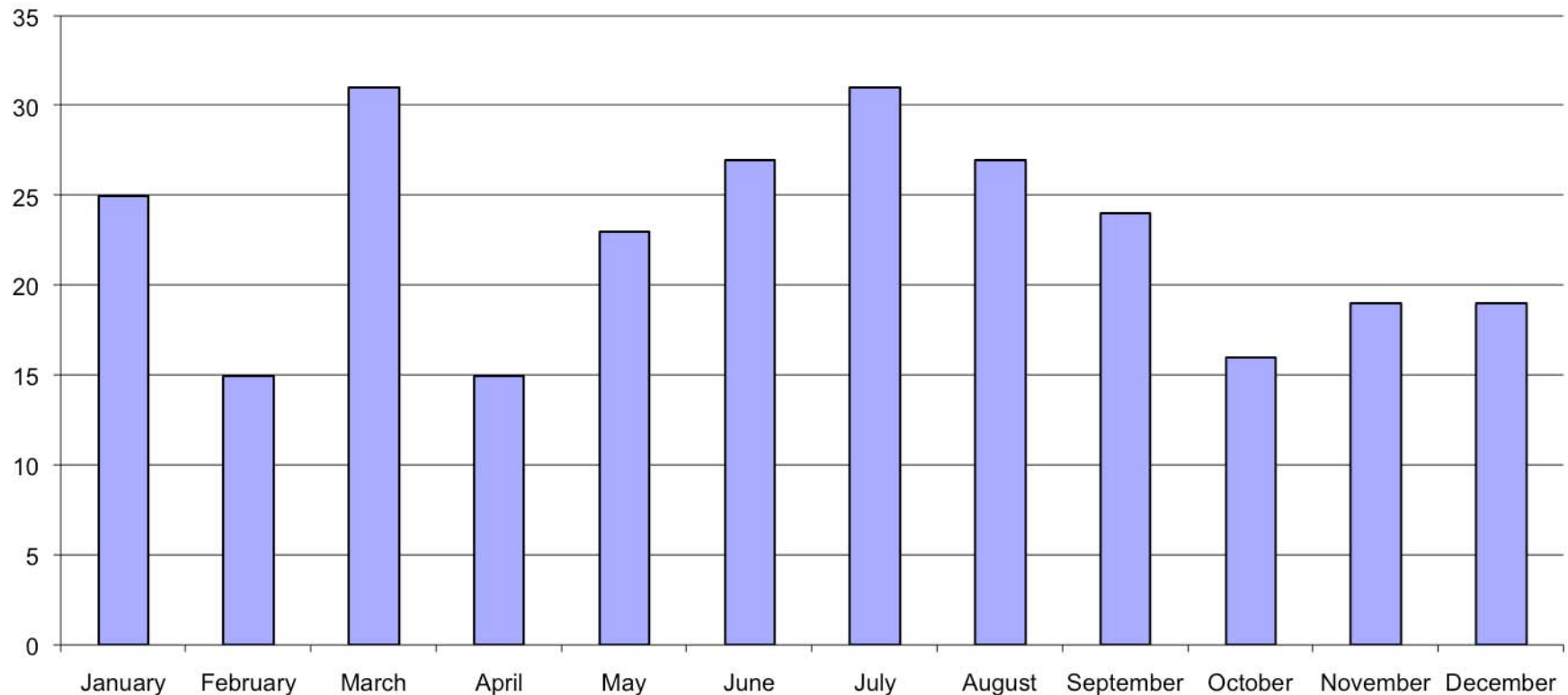




Percentage of all accidents accounted for by Elderly Farmers



Monthly Distribution of Farm Fatalities 1993 - 2007



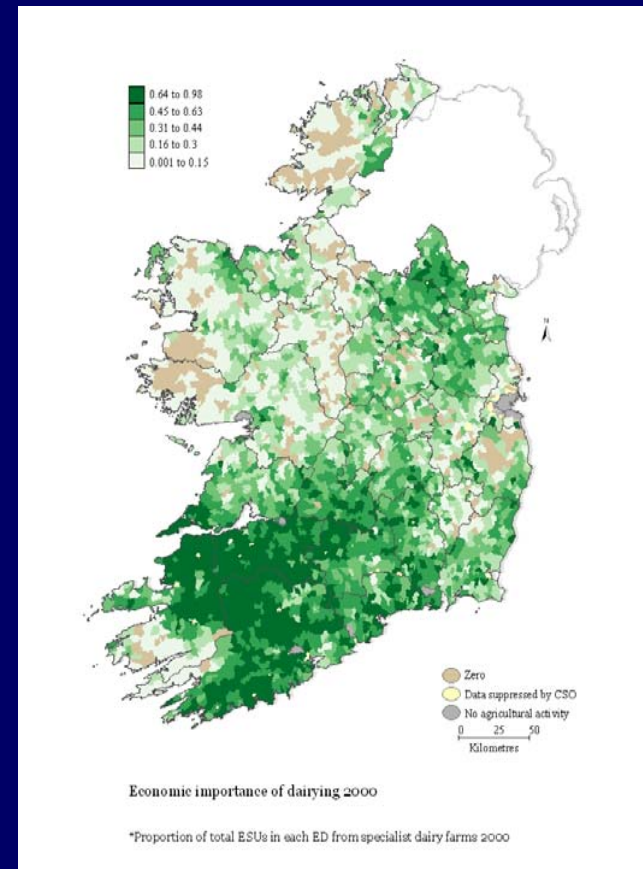
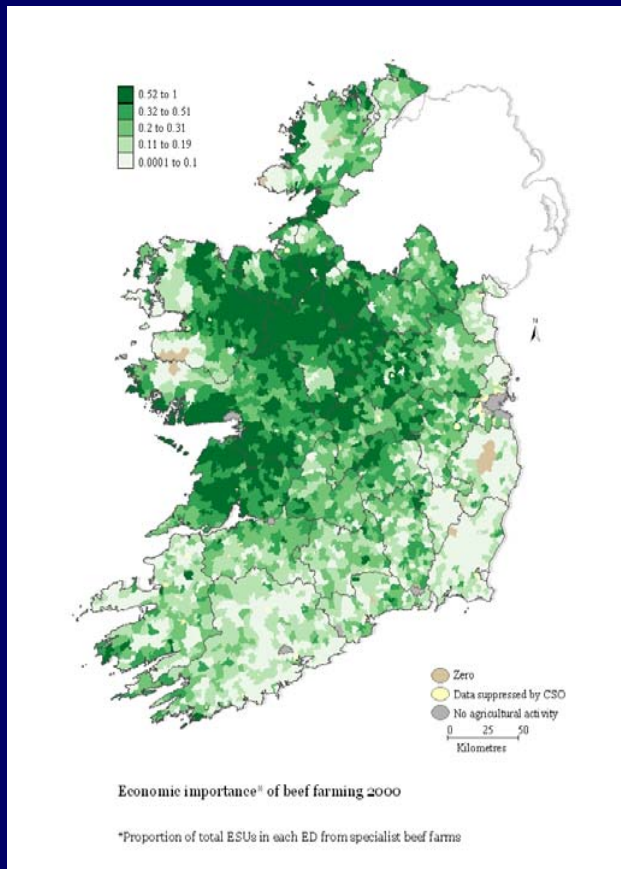


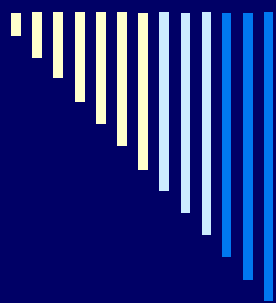
Critical Months

Age Group	Month	Percentage all fatalities
0 - 14	July	17.39
15 - 29	July	22.58
30 - 44	March	14.63
	April	14.63
	June	14.63
45 - 64	February	12.90
	June	12.90
65+	January	14.29

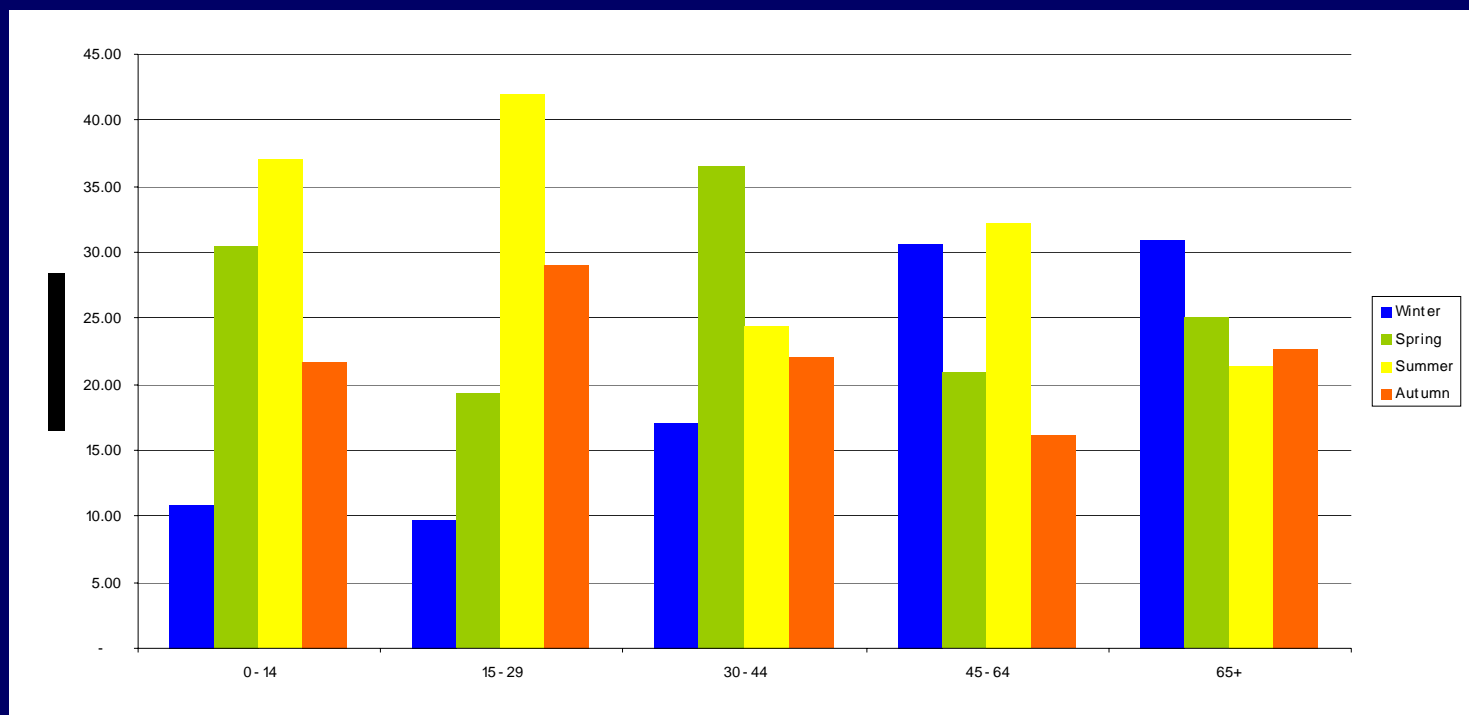
- 0 – 29
 - Younger people around farms during the summer
 - Lack of experience?
- 30 – 65
 - Reflects busy periods on farms
- 65+:
 - Farm System

Economic Significance of Agricultural Sectors



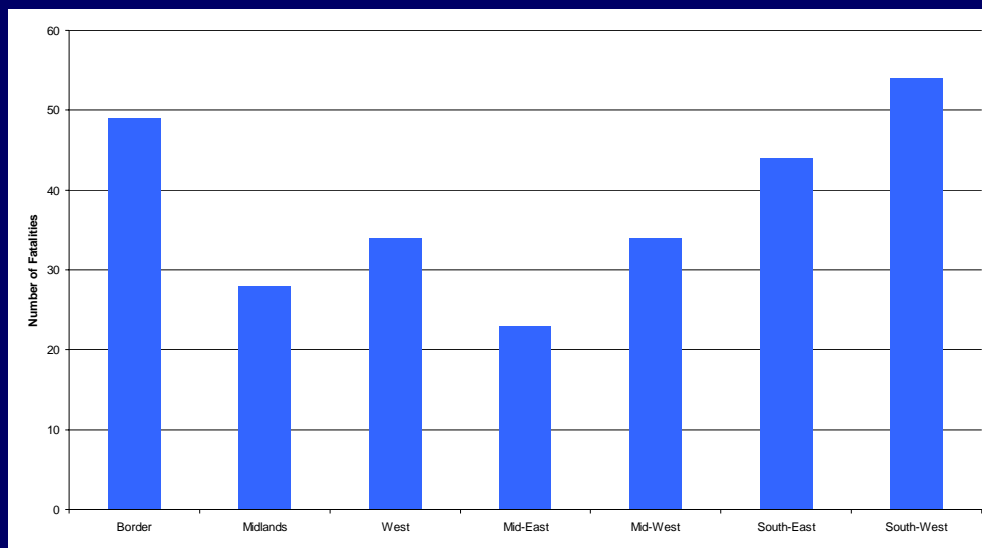
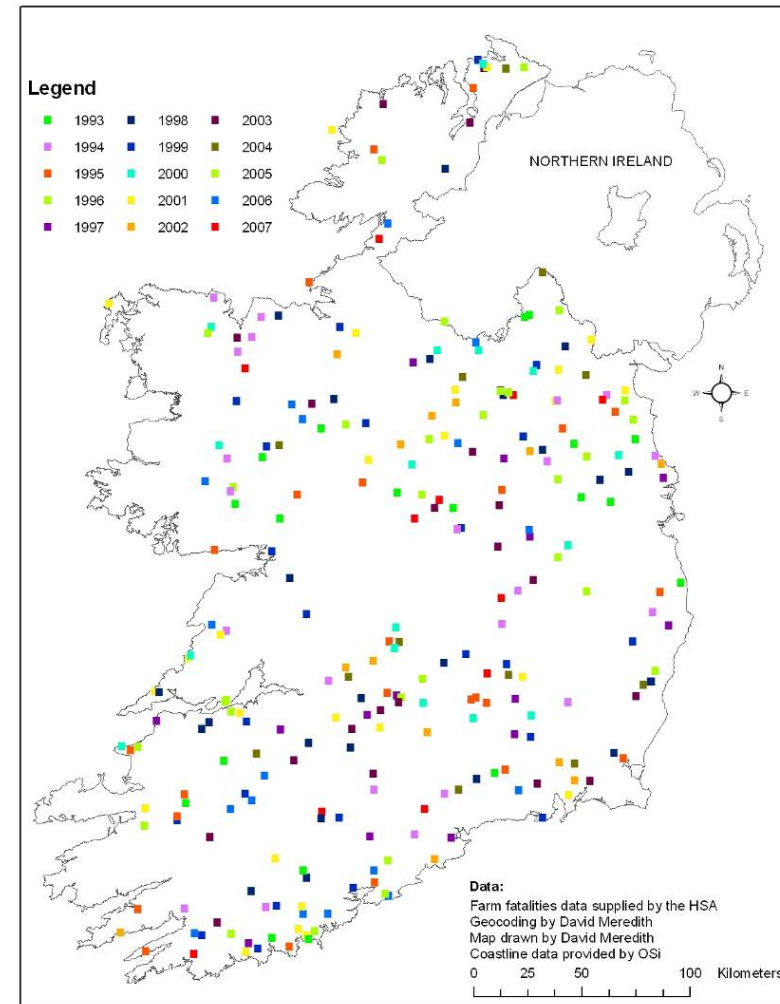


Seasonal Distribution of Fatal Accidents Amongst Demographic Groups

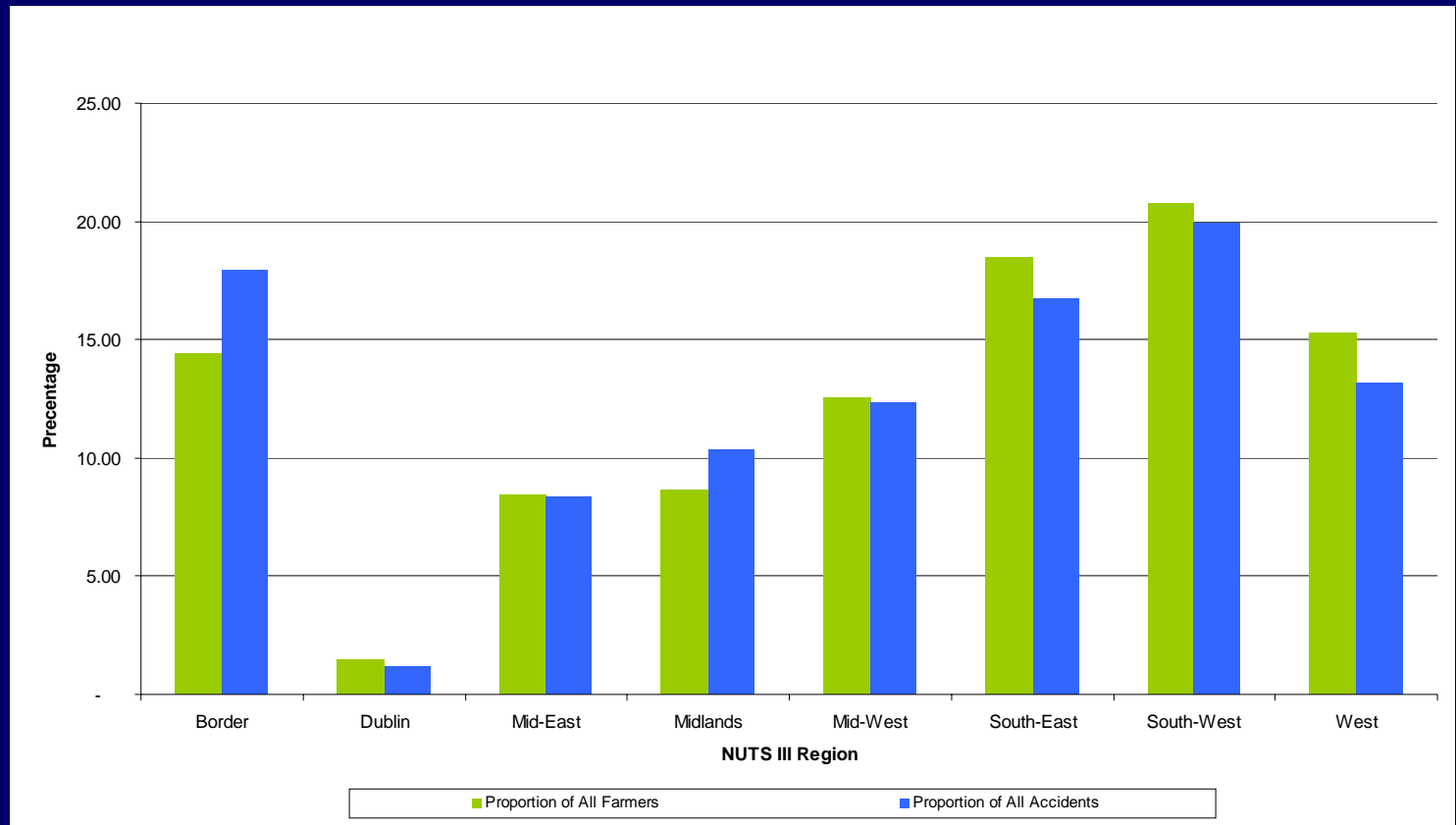


Regional Distribution of Farm Fatalities

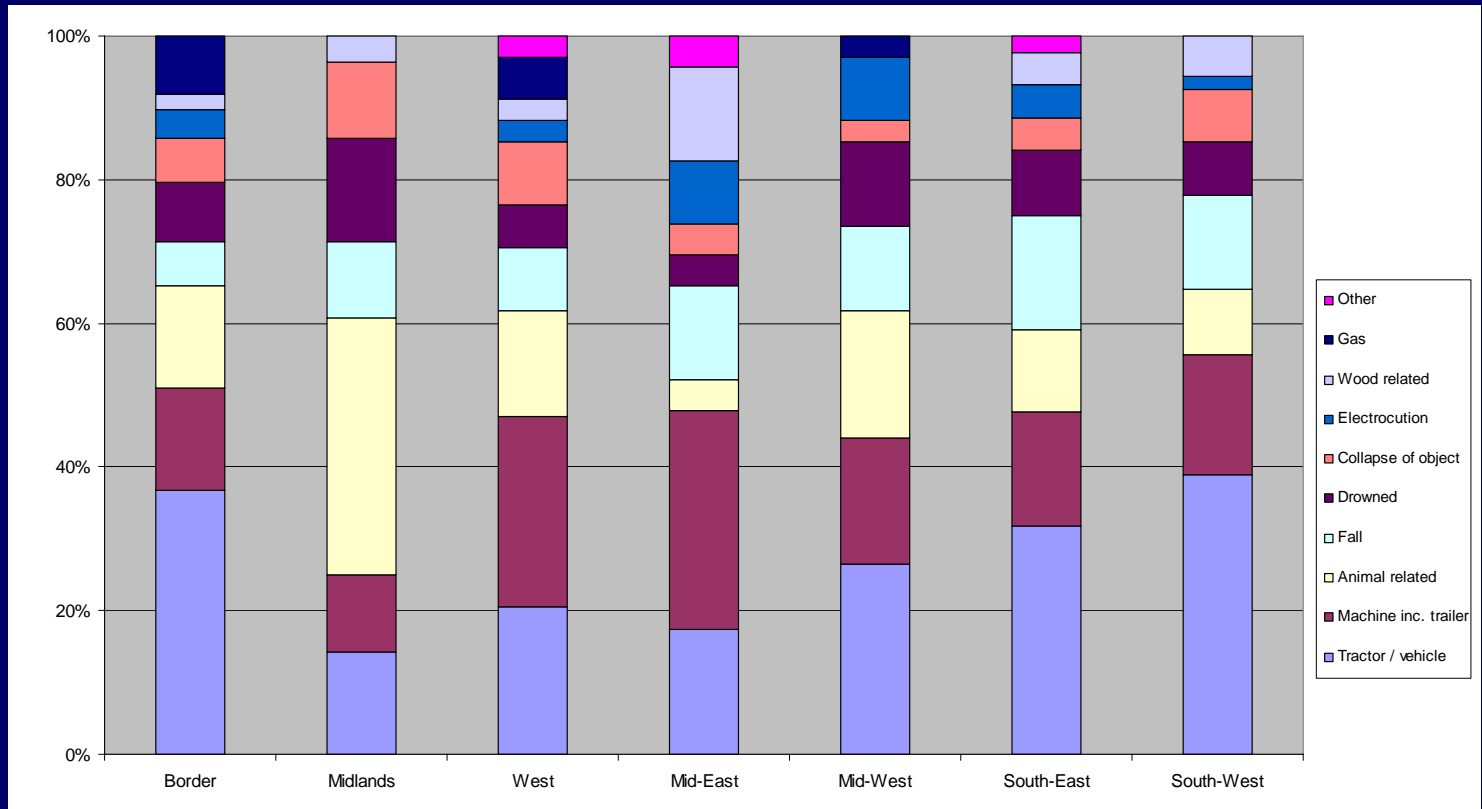
Annual Distribution of Fatal Farm Accidents 1993 - 2007



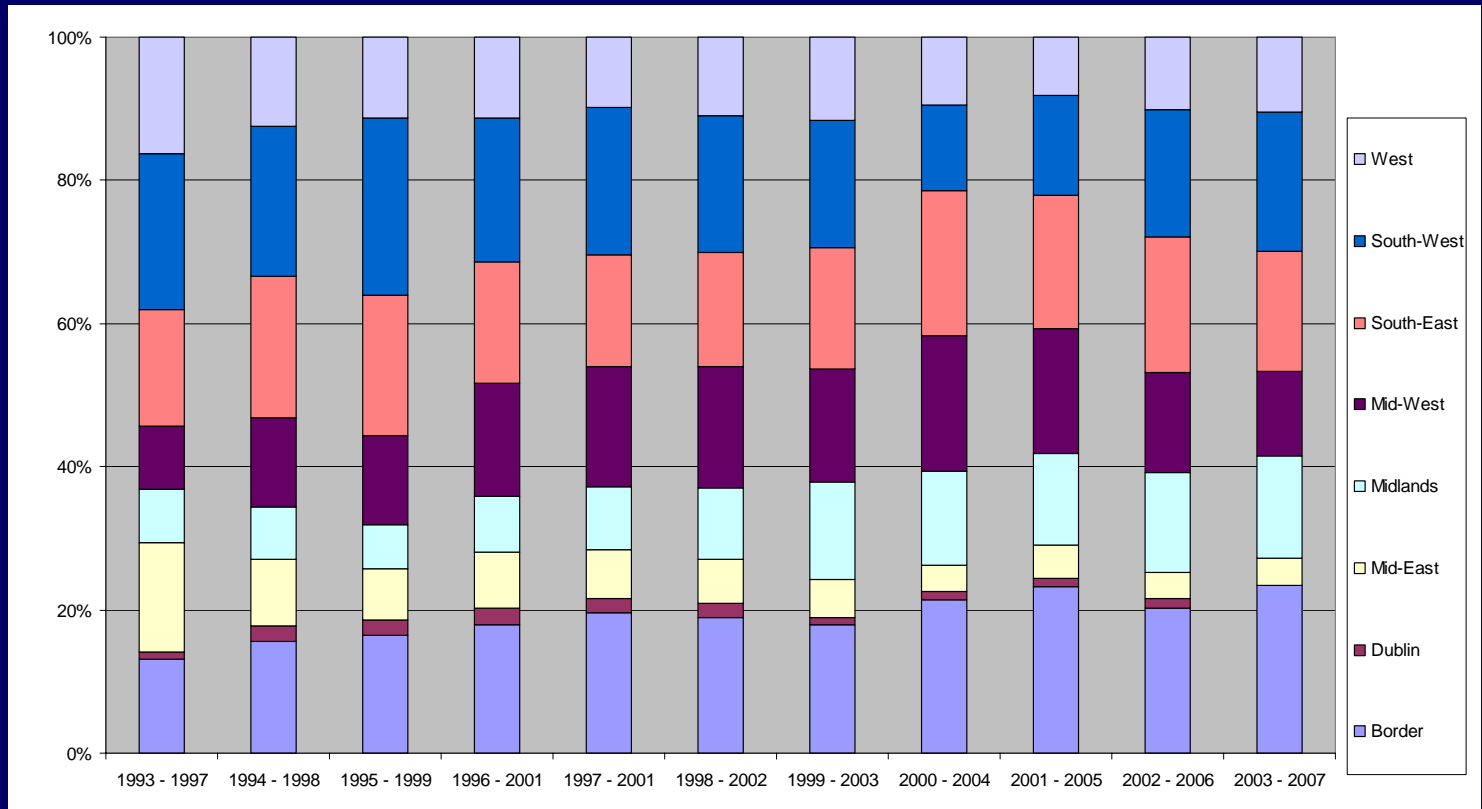
Regional comparison of the proportion of accidents relative to the proportion of all farmers



Causes of farm fatalities: Regional Differences



Regional average number of fatal accidents 1993 - 2007





Findings

- Average number of fatal accidents declining
- Most fatal accidents are accounted for by those over 60 years of age
- There was a significant change in the age structure of fatal accidents between 1993 and 2007
 - Fewer younger deaths
 - More elderly accidents
- The fatal accident rate for elderly farmers is significantly higher than any other group.
- Whilst vehicle / machine related are the most common accidents animal related accidents are the primary cause of fatalities amongst older farmers.
- Drowning remains the primary cause of fatal accidents amongst younger people on farms



Findings (continued)

- ❑ March and July are the months when most deaths occur.
- ❑ Elderly farmers are more likely to have fatal accidents during the Winter and particularly in January.
- ❑ The Border and Southwest Regions account for most accidents.
- ❑ The Border is significantly over represented in terms of the number of farm fatalities relative to the number of farmers and farm workers.



Conclusions

- The type and seasonality of fatalities reflects exposure to risk (e.g. drowning / animals)
- The high level of fatalities amongst elderly farmers may reflect
 - issues surrounding the lack of a farm successor.
 - Absence of assistance



Conclusions

- Concentration of fatalities in some regions reflects the underlying demographic structure of the farm holder / operator population.
- Additional research is underway focusing on the demographic structure of farm households, their spatial distribution and farm fatalities.