

Farm Injuries Presenting to a Regional Hospital

Dr G Lecky, Dr K Cunningham (Sligo General Hospital)

Sligo General Hospital serves a mainly rural population in the North West of Ireland. Injuries sustained on farms are a relatively common presentation to our Emergency Department. The agricultural sector has the highest rate of fatal injuries compared to any other Irish workplace. This high fatality rate is increasing despite a large fall in the number of people employed in the industry. This prospective Injury Surveillance project recorded data on all Farm Injuries presenting to our Emergency Department over a one year period.



Methods

- Prospective identification of all injuries occurring on a farm over a 12 month period.
- Injury Surveillance Proforma completed on all patients by the treating doctor.
- Information collected included age, type of injury, mechanism of injury, farm location, activity, and whether patients required hospital admission or further treatment.
- All patients' clinical notes subsequently reviewed to confirm injury diagnosis and follow-up.

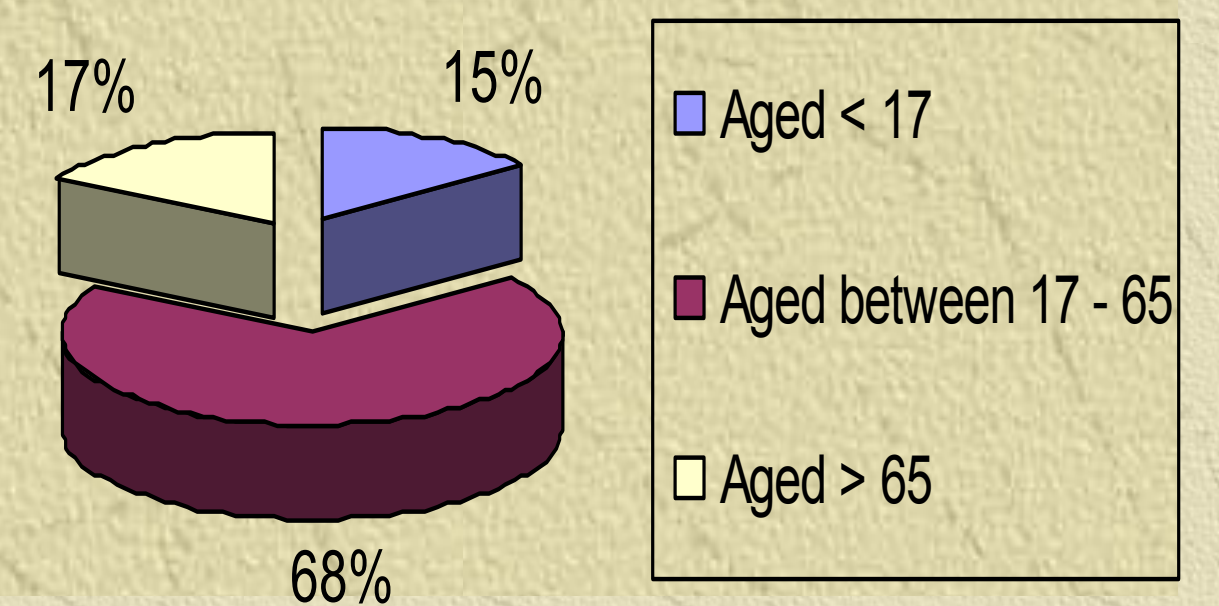
Results

During the study period 169 patients presented to our ED following an injury sustained on a farm.

- 1% of patients (2) died in hospital from their injuries.
- 11% of patients required hospital admission
- 35% needed subsequent review in specialist clinics (mainly Fracture and Maxillofacial).

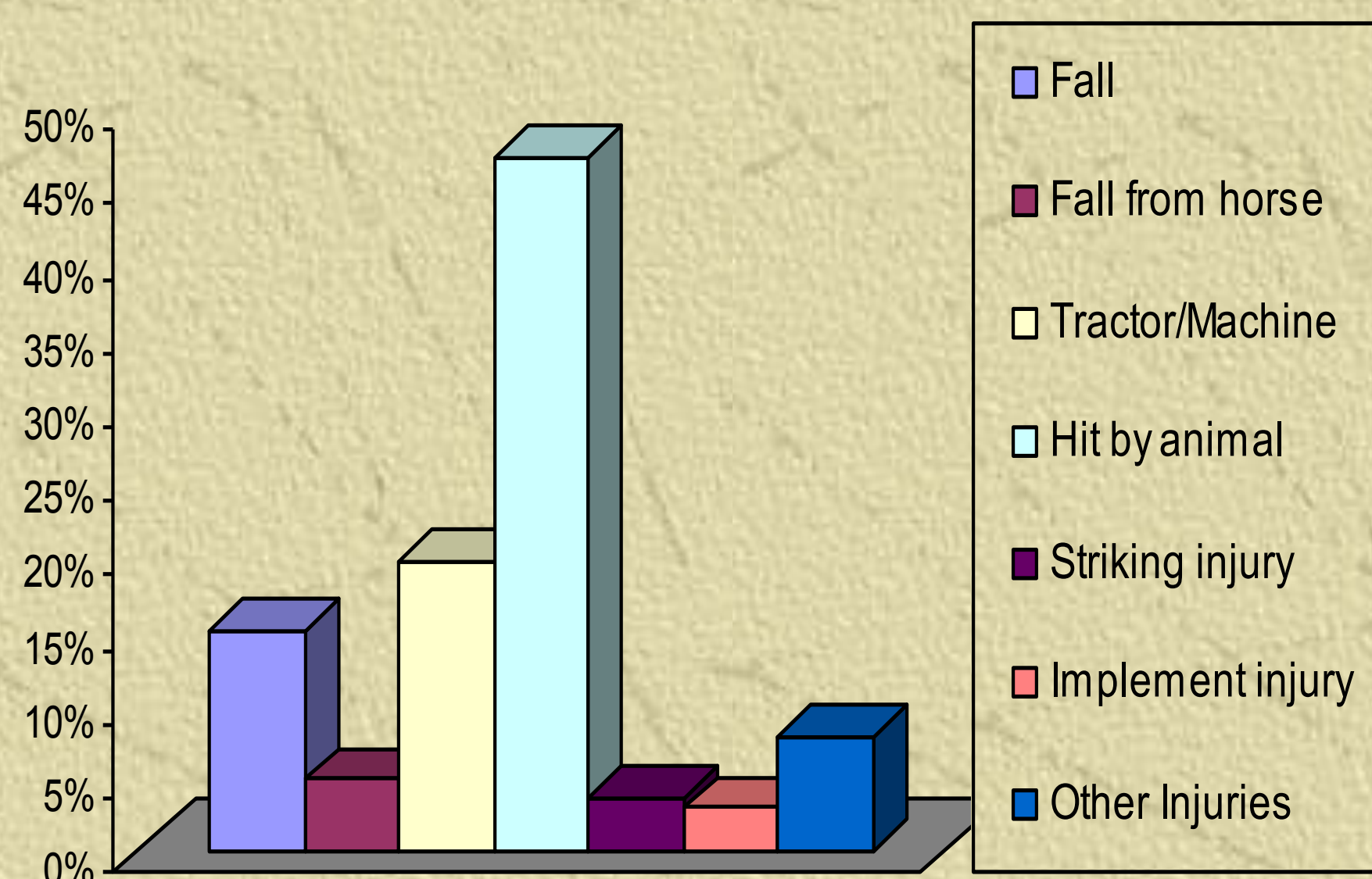
There were 2 further farm injury deaths in our catchment area in the study period.

Age Profile



92% of patients were male

Mechanism of Injury



- 47% were animal related injuries – 3% of these were bull attacks
- Tractor/Machine related injuries accounted for 20%
- 50% of fatalities nationally in last 5 years caused by Tractor/Machinery
- One third of all injuries occurred during the months of June, July & August
- Nationally one third of farm deaths occur in this period

Site of Injury

Head & Face	25%
Lower Limb (exc. Foot)	20%
Upper Limb (exc. Hand)	17%
Hand	14%
Chest	10%
Foot	9%
Back	2%
Neck	2%
Abdomen	1%

Injuries in Children

- 15% of all injuries
- Mean age of 11 years
- 76% of patients were boys
- Half of all cases occurred in the summer months
- Children have accounted for 25% of all farming deaths in last 10 years

Discussion

Injuries sustained on farms continue to be a significant cause of morbidity and mortality despite Farm Safety Programmes. The reasons for this are multifactorial. While the number working on farms has reduced dramatically there are now more part time farmers. With increased mechanisation of farming and more powerful machinery the injuries due to machinery are often more severe. Also, animals may be less familiar with human contact and the major cause of injury in our study was due to cattle.

In Ireland the farm is usually a home as well as a workplace. Children and older people accounted for 32% of injuries in our study but nationally accounted for 61% of fatalities in the last 2 years.

While there is good information on farming related deaths compiled by the Health & Safety Authority, information on non-fatal injuries is less complete. As most of the more serious injuries will first present to an Emergency Department, data from Emergency Department Injury Surveillance must be used to inform future Farm Injury prevention strategies.

Injuries in Older People

- 17% of all injuries
- Mean age of 72 years
- 48% of all farming deaths in last 2 years

Type of Injury

Soft Tissue	52%
Wound	24%
Fracture	24%