



Farm Safety Association

Ontario Farm Fatalities and Hospitalized Farm Machinery Injuries to Children Aged 0-15 Years

Introduction

During the 15-year period from 1980 to 1994, the Ontario Farm Safety Association (FSA) documented 86 farm work-related fatalities to children under the age of 16 years in the Province. These fatalities involved children who were in the workplace while farm work was being performed. During 1984 to 1992, a Queen's University research group identified 24 additional farm fatalities to Ontario children of the same ages, the majority of which **did not** involve farm work. In addition, between 1985 and 1991, the Queen's group identified 262 hospitalized injuries to Ontario children that were caused by agricultural machinery. This report provides basic information about the nature of these deaths and injuries, which occurred both on family farms and on the operations of agricultural employers.

Data Sources

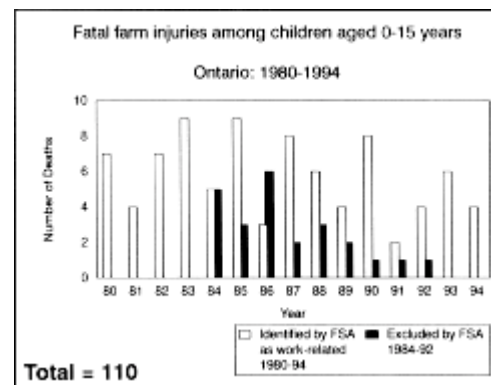
Several sources of data were used to describe these deaths and injuries. Fatal farm injuries were described using case reports documented in a registry maintained by the Ontario Farm Safety Association for the years 1980-1994. Some additional farm fatalities were identified and described for the years 1984-1992 from records kept as the Registrar General of Ontario and at the Office of the Chief Coroner of Ontario. Hospitalized farm machinery injuries were identified from records of patients discharged from Ontario hospitals between 1985 and 1991. Additional information was obtained directly from the medical records departments of the 180 hospitals where these injuries were treated. Only the

data was accessed from these sources and confidentiality of the injury victims was maintained.

FARM FATALITIES TO CHILDREN

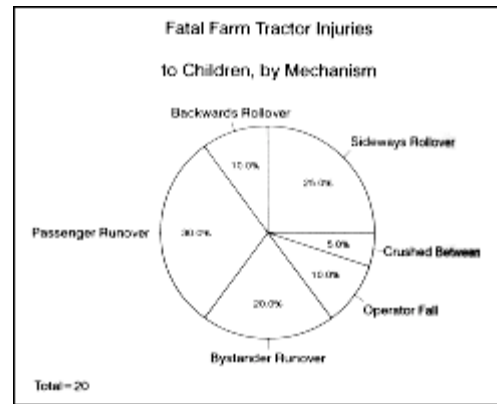
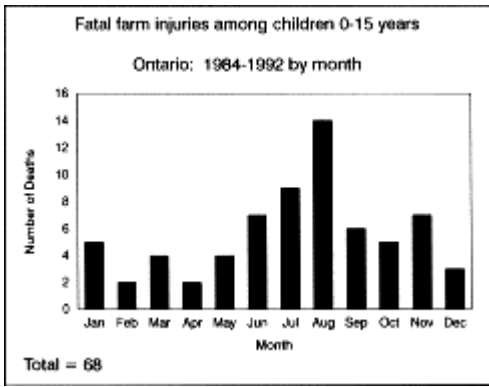
Year

The number of farm fatalities to Ontario children documented by the FSA between 1980 and 1994 ranged from a low of 2 to a high of 9 per year. Fatalities excluded by the FSA as being non-work related from 1984-1992 totalled 24 deaths.



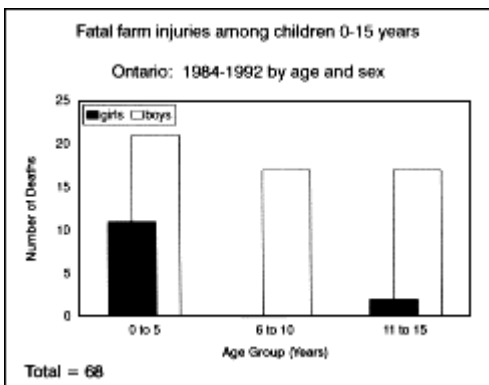
Month

The strong peak in these fatalities happened during the summer months of July and August, when children are on summer holidays. This also corresponds to the most active times of field work on many Ontario farms.



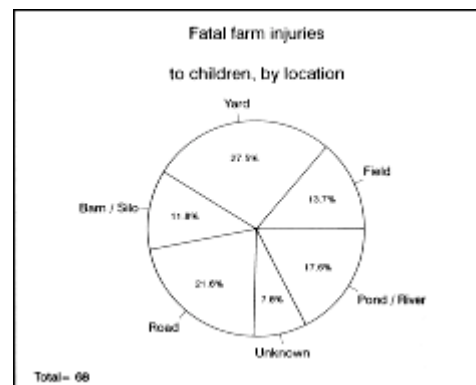
Age and Sex

The vast majority of these deaths were to boys. There were approximately four (4) deaths to boys for each death to a girl. Of importance is the fact that over the age of six, there were almost no deaths to girls.



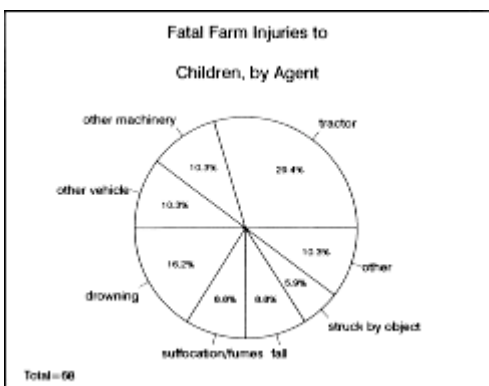
Location

Deaths to children occurred in many different types of farm location, including farm yards, fields, roads and driveways, and waterways. These deaths occurred most frequently in the Western and Central Counties of the Province.



Causes of Death

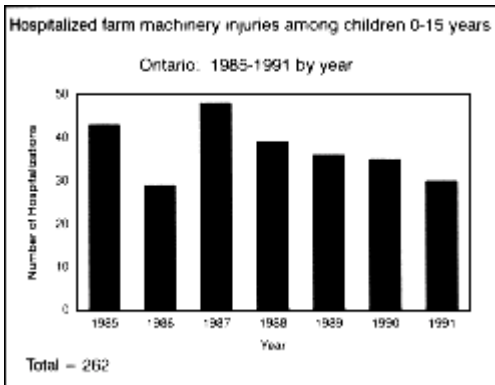
The farm tractor was the leading agent of injury leading to death, followed by drownings and deaths caused by other vehicles and machinery for all farm fatalities. Among the twenty deaths caused by farm tractors, ten were caused by runovers and seven involved rollovers.



HOSPITALIZED FARM MACHINERY INJURIES TO ONTARIO CHILDREN

Year

The number of hospitalized farm machinery injuries to Ontario children aged 0-15 years ranged from a low of 29 in 1986 to a high of 48 in 1987. The number of injuries documented steadily declined between 1987 and 1991.

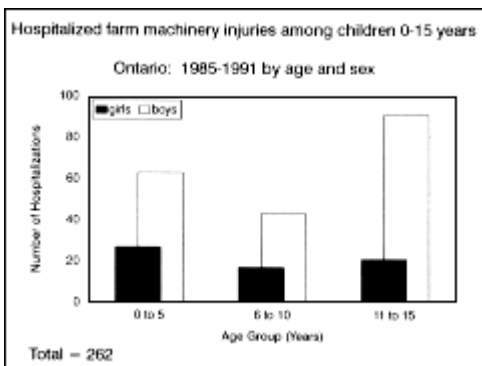


Month

Similar to the fatalities, the summer months of July and August were associated with the largest numbers of hospitalized farm machinery injuries among Ontario children. This corresponds to the increased activity involving machinery on most Ontario farms at this time. Few injuries occurred during the cold weather months of November through March.

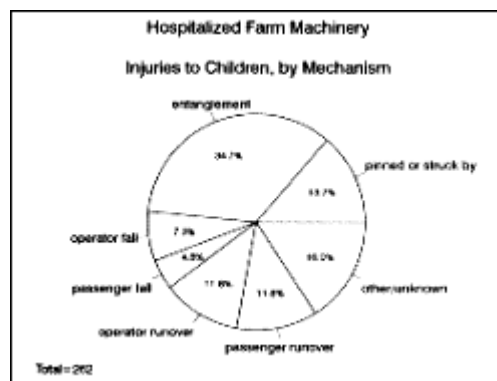
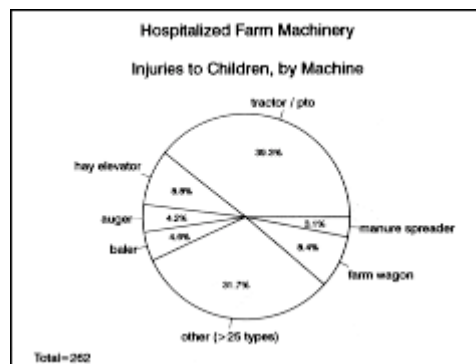
Age and Sex

Ninety injuries were observed in the 0-5 age group, 60 injuries among 6-10 year-olds, and 112 among 11-15 year-olds. Injuries to boys outnumbered those to girls in all age groups. For every female injury involving farm machinery there were three involving males.



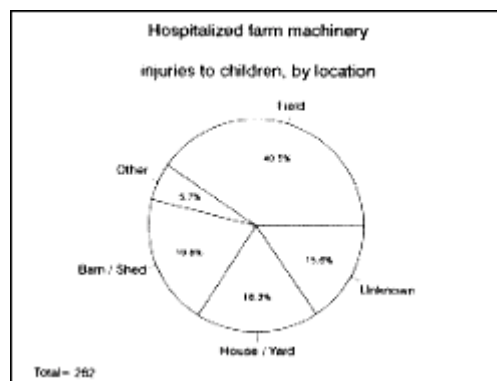
Causes

Over 40 different types of machinery were involved in the injury events. The most common are described in the accompanying figure. The leading machine, accounting for just over one-third of the injuries, was the farm tractor. The leading mechanism of injury was entanglement in moving and often unguarded machinery. Run overs and being struck by machinery were also important causes of injury.



Location of Injury

Farm machinery injuries to children occurred in many different farm locations. The most common of these were farm fields, farm houses, and barns.



COMMON PATTERNS OF

INJURY AND DEATH

These analysis show that there are common patterns of accidental injury and death among Ontario farm children. Three of these are:

- Children who are unsupervised or inappropriately supervised during the busy summer months
- Children who are allowed to be in the proximity of unguarded or moving farm machinery
- Children who are performing work tasks which are inappropriate for their age

WHAT CAN BE DONE?

Rural organizations and farm families who are concerned about safety of children on Ontario farms can do much to reduce their risk. Some ideas for prevention are:

- Construct barriers on farms to prevent young children from being exposed to the farm hazards. A separate, supervised, fenced play

area has been built on many farms.

- Developing a better and affordable rural child care, especially during busy summer months
- Ensure that all farm machinery is appropriately and safely guarded
- Educate farm families with young children about the risks of letting their children accompany them to the farm worksite
- Select work tasks that are appropriate for the age of the child

Conclusion

The findings in this report point to a number of patterns of injury and should assist the farming community in developing educational and other programs targeted at specific problems and age groups. When we all work together for a common goal of accident reduction and injury prevention, we all benefit in the end.

The information in this report was developed through the co-operation of the following organizations:



Farm Safety Association Inc.
22-340 Woodlawn Road West,
Guelph, Ontario N1H 7K6
Telephone: (519) 823-5600



**Ontario Ministry of Agriculture,
Food and Rural Affairs**

**Centre for Injury Prevention and Research
Kingston, Frontenac, and Lennox and
Addington/Queen's University Teaching Health
Unit,
221 Portsmouth Avenue,
Kingston, Ontario K7M 1V5**