

The Canadian Agricultural Injury Surveillance Program

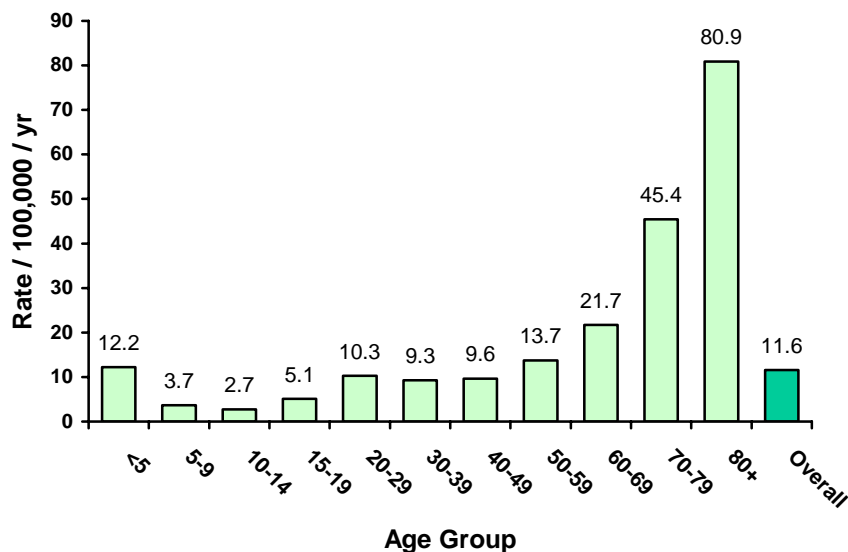


SUMMARY REPORT: AGRICULTURAL INJURIES AND DEATHS IN SENIOR FARMERS

- Farmers aged 60 and over suffer 34.6% of all agricultural fatalities and 23.8% of agricultural hospitalizations, though they represent only 13.2% of the farming population.

Fatal Agricultural Injuries in Senior Farmers

Age-specific agricultural fatality rates, 1990-2000



In the eleven years from 1990-2000, 433 senior farmers were victims of agricultural fatalities. 398 of these fatalities were work-related. Between April 1990 and March 2000, 3,571 farmers aged 60+ were hospitalized for treatment of agricultural injuries.

Farmers aged 60+ are at high risk for machine-related injuries, including rollovers, unmanned runovers, and being pinned or struck by a machine. Rollover fatalities are preventable. Senior farmers are more likely to use older tractors without seatbelts or Rollover Protection Structures (ROPS). Retrofitting seatbelts and ROPS on all tractors, and regular maintenance of tractors and other machinery would reduce the incidence of machine-related fatal and hospitalized injuries to senior farmers.

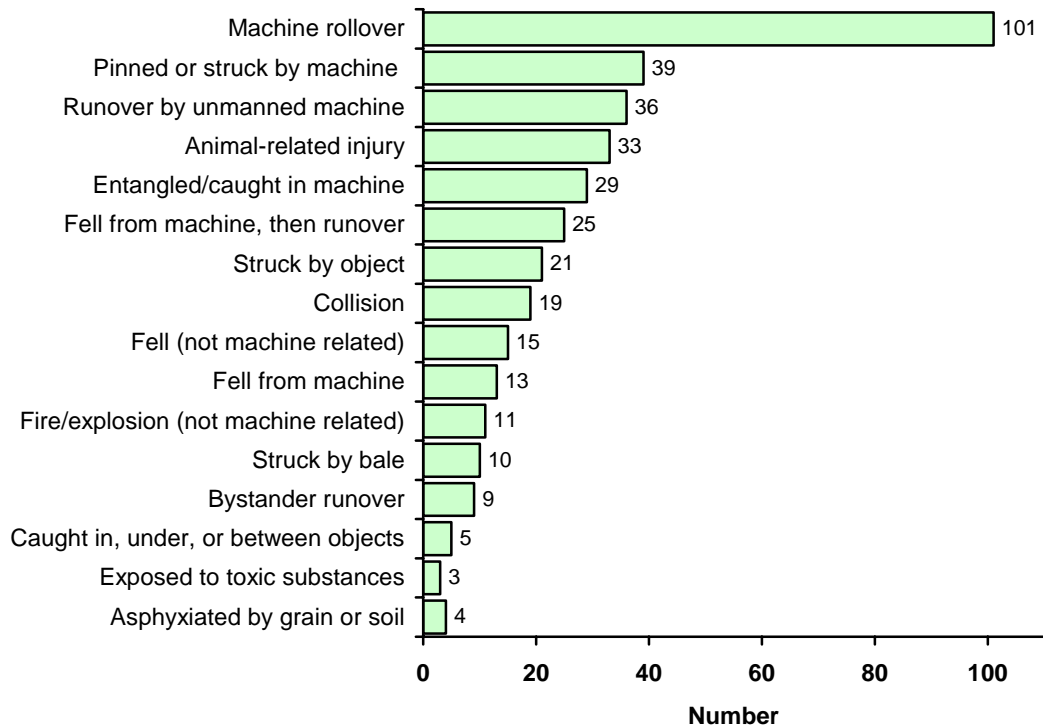
Unmanned runovers subsequent to jumpstarting old tractors are a leading cause of fatalities for this age group. Among persons 60 years and older, 51% of the runover deaths occurred when a dismounted operator was run over by his/her unmanned machine, often subsequent to a jump starting procedure. A tractor should never be started by means of its side ignition box. Of the fatalities where the victims were "pinned or struck by a machine", 18% were due to alighted operators being pinned against fixed objects by unmanned tractors or trucks in motion. These fatalities have the same pattern of occurrence as the unmanned machine runovers. In a common

scenario, an operator leaves his/her tractor idling to perform a chore while standing in front of the tractor, which then slips into gear or rolls down an incline into the operator. Before dismounting a tractor, an operator should always turn its engine off and set the brakes.

30% of the runover deaths occurred when an operator fell from his/her tractor and was then run over by it. It is important for tractor operators to stay seated and to use a seatbelt at all times. Operators can easily lose their balance when traveling over rough terrain, resulting in fatal falls.

Work-related agricultural fatalities in adults 60+ from 1990-2000

Total number of cases: 398



In 16 cases, the cause of injury was listed as "Other". There were also two cases each of machine-related fire, electrocution, drowning and overexertion.

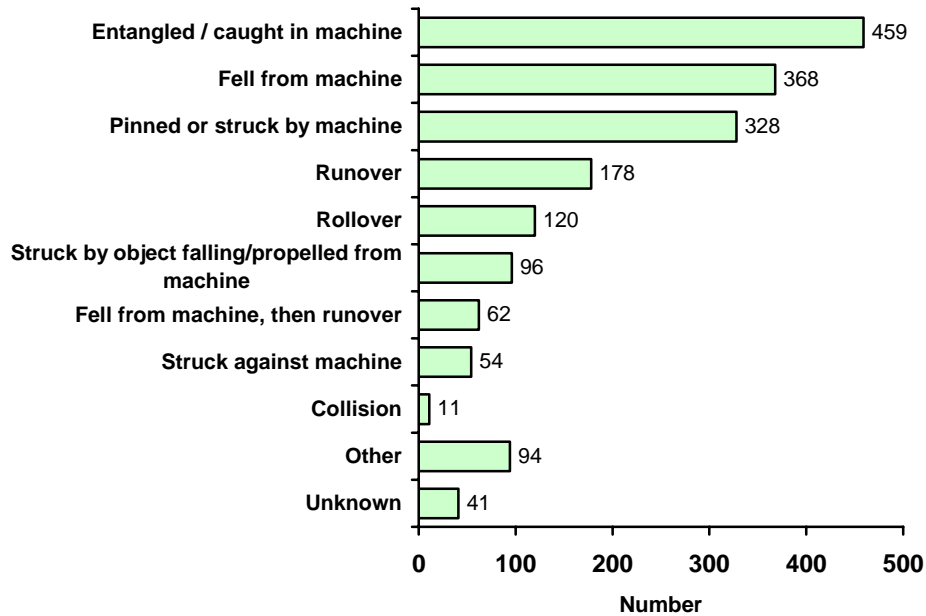
Rollovers, being pinned or struck by a machine, runovers, and animal-related injuries were the most common causes of fatalities in senior farmers.

Hospitalized Agricultural Injuries in Senior Farmers

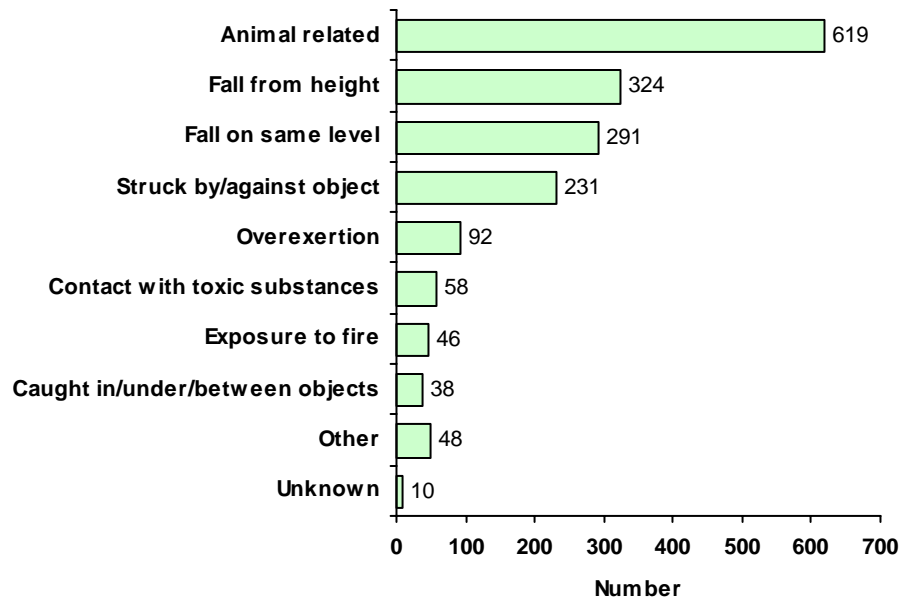
Being entangled or caught in operating farm machinery was the leading cause of hospitalized machine-related injuries to senior farmers (25.3%), though entanglement occurred more frequently in younger farmers. (35.3% of the machine-related injuries to farmers aged 15-59 were due to entanglement). Falls from machines were more common in older farmers than in younger farmers. In farmers aged 60+, 20.3% of hospitalized machine-related injuries were due to falls from machines, compared to 12.8% for farmers aged 15-59.

Hospitalized agricultural injuries in adults 60+ from April 1990-March 2000

Machine-related injuries- Total number of cases: 1,811

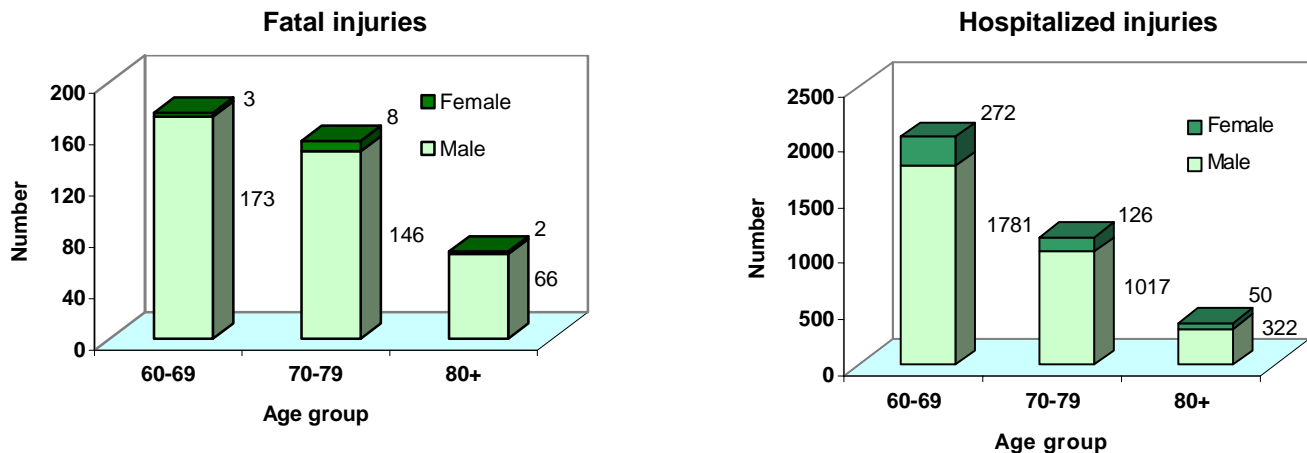


Non machine-related injuries- Total number of cases: 1,757



For senior farmers, the two leading causes of hospitalized non machine-related injuries were animal trauma (often involving bulls) and falls from height. Falls on the same level were far more likely to lead to hospitalized injuries in senior farmers (16.6%) than in younger farmers (6.2%).

Agricultural Injuries in Senior Farmers by Age Group and Gender



96.7% of the senior farmers who were killed while engaged in farm work were male. Although only 1% of Canada's farming population is aged 80 or over, 6.4% of all agricultural fatalities occurred in that age group.

87.4% of the senior farmers who were hospitalized for agricultural injuries were male. The proportion of females who were hospitalized was much higher than the proportion of females who sustained fatal injuries. This is partially due to a high number of hospitalizations among females aged 60+ for fractures due to falls. It may be that in older females falls are more likely to result in injuries requiring hospitalization than in older males.

SUMMARY

The top five causes of agricultural fatalities among senior farmers are:

- 1) Rollovers
- 2) Being pinned or struck by a machine
- 3) Unmanned runovers
- 4) Animal-related trauma
- 5) Being entangled or caught in a machine

The top five causes of hospitalized agricultural injuries among senior farmers are:

- 1) Animal-related trauma
- 2) Being entangled or caught in a machine
- 3) Falling from a machine
- 4) Being pinned or struck by a machine
- 5) Falling from height (non machine)

Many injuries to senior farmers could be prevented if:

- ROPS and seatbelts are retrofitted on all tractors
- Tractors and other machinery are maintained properly, especially braking and ignition systems
- Tractors are not used to tow heavy loads, such as disabled vehicles
- Tractor engines are shut off and brakes are set prior to dismounting
- Guards are used on PTOs and other moving machine components
- Tight fitting clothing is worn when working near PTOs, conveyors and other moving machinery
- Best practices are observed in the handling of large animals, especially bulls and horses

*More detailed information about agricultural injuries in senior farmers is available from CAISP's national report **Agricultural Injuries in Canada for 1990-2000**. The report can be downloaded free from www.CAISP.ca. This information is derived from data collected and analyzed by CAISP collaborators and staff. CAISP is funded by Agriculture and Agri-Food Canada and managed in cooperation with the Canadian Agricultural Safety Association.*