



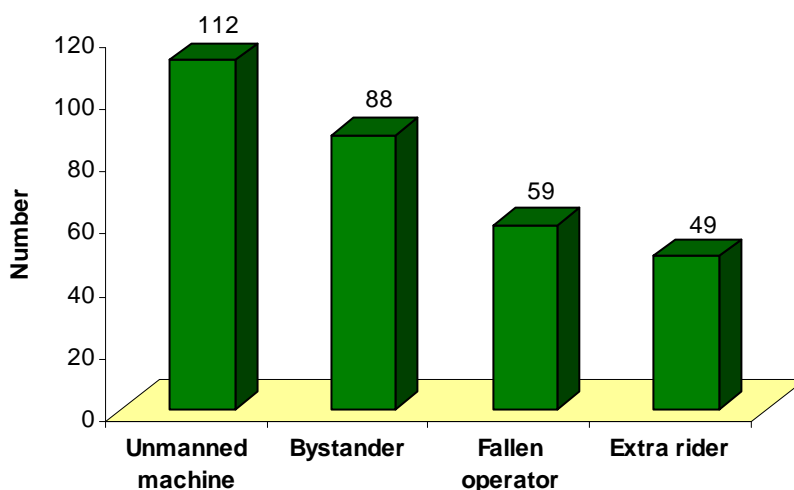
Canadian Agricultural Injury Surveillance Program

Agricultural Fatalities 1990-2004

Fast Facts: Agricultural Runovers

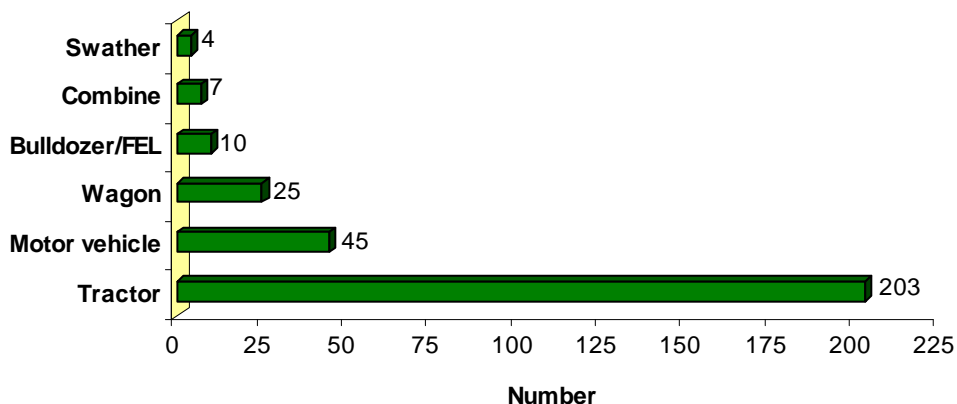
In the fifteen years from 1990 to 2004, 313 people were killed in agriculture-related runovers by machines and vehicles. 98.7% of the runover deaths occurred during agricultural work. In 74.8% of the cases, the victims themselves were also performing agricultural tasks.

Type of Runover



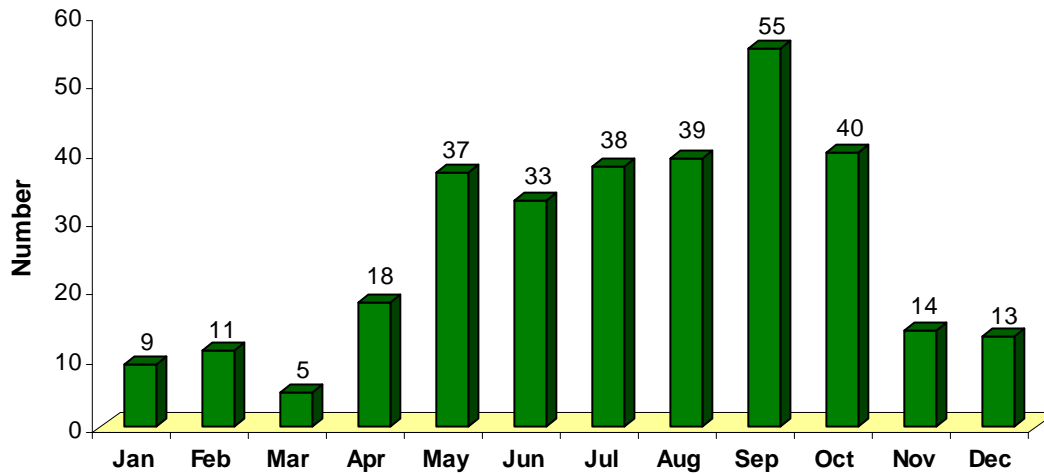
- Over all age groups, unmanned machine runovers were the most frequent type of runover¹ (35.8%), followed by bystander runovers (28.1%), fallen operator runovers (18.8%) and extra rider runovers (15.7%). In persons aged 60 and over, 53.7% of the fatal runovers involved unmanned machines. In children, bystander runovers were most common (54.5%) followed by extra rider runovers (40.9%).

Type of Machine Involved in Agricultural Runovers



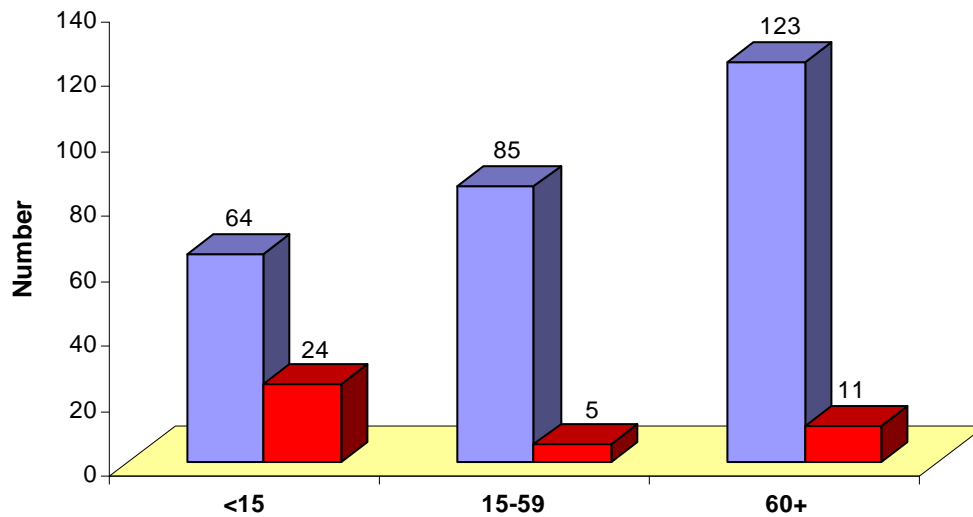
- 64.9% of the machines involved in fatal runovers were tractors, 14.9% were motor vehicles and 8.0% were wagons.

Month of Occurrence for Agricultural Runovers



- 77.3% of the fatal agricultural runovers took place between May and October.
- The highest percentage of agricultural runover fatalities occurred in September (17.6%).

Age and Gender of Agricultural Runover Victims

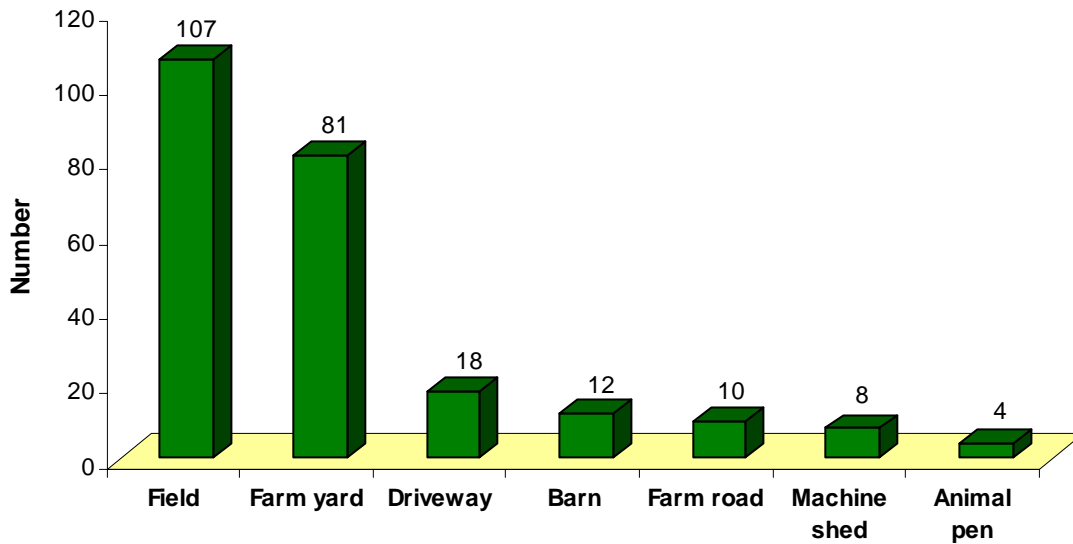


	Male	Female	Total	
<15	64	24	88	28.1%
15-59	85	5	90	28.8%
60+	123	11	134	42.8%
Total:	272	40	313	
	86.9%	12.8%		

Gender was not known in one case.

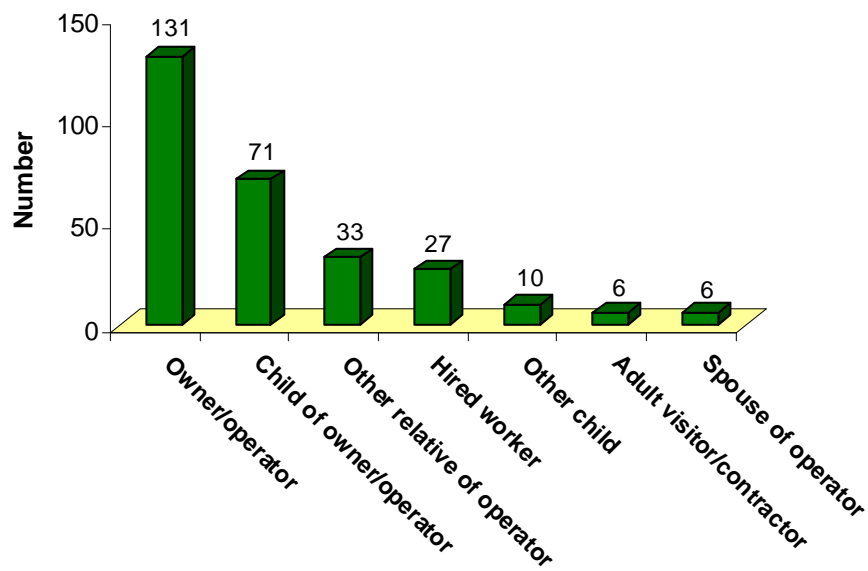
- The highest percentage of runover victims were aged 60 or over (42.8%).
- 28.8% of those killed in machine runovers were adults of working age (15 to 59). The percentage of runover victims who were aged 14 or younger was almost as high (28.1%).
- Overall, 86.9% of the fatal runover victims were male.

Location of Occurrence for Agricultural Runovers



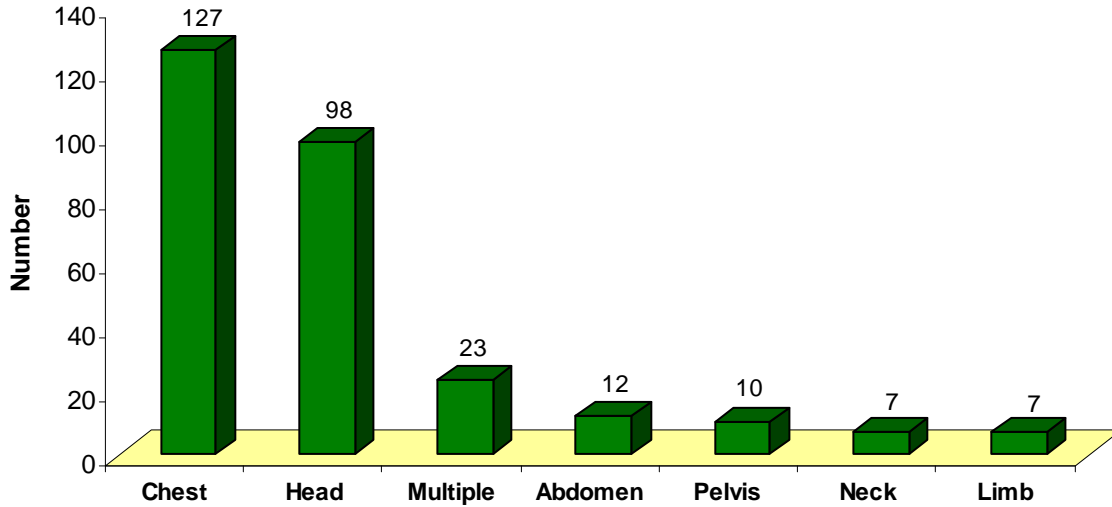
- The most common locations for fatal agricultural runovers were fields (34.2%) and farm yards (25.9%).

Relationship of Agricultural Runover Victims to Owner/Operators



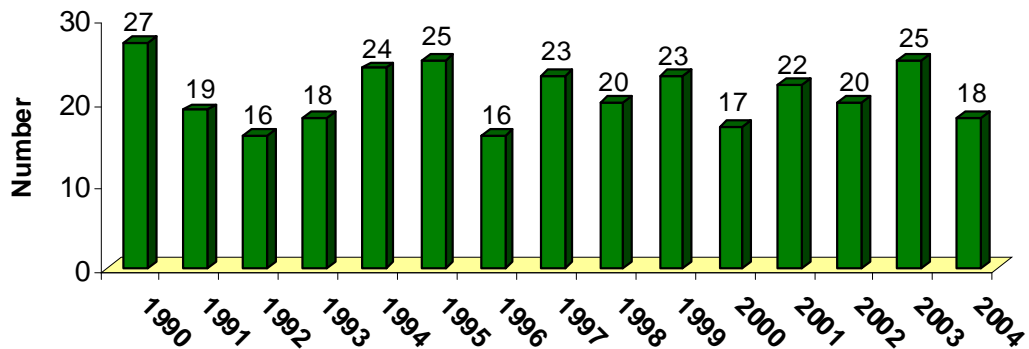
- 41.9% of those killed in agriculture-related machine runovers were owner/operators.
- Children of owner operators were involved in 22.7% of the fatal runovers.

Anatomic Locations of Agricultural Runover Injuries



- 71.9% of the fatal agricultural runovers resulted in chest or head injuries.

15-Year Trend for Agricultural Runovers



- Over the 15-year surveillance period, the average number of fatal agricultural runovers was 20.9.
- The overall trend showed no change in the annual number of fatal agriculture-related runovers from 1990 to 2004.

Recommendations

Bystander Runovers

54.5% (48) of those killed in bystander runovers were children under 15

- Preschool children should not be permitted in the farm or ranch work site, which includes the farm yard and driveway where most bystander runovers occur.
- Preschool children should be supervised closely and constantly by an adult whenever they are outside of the farm home or a safe, fenced-in play area.
- Young children cannot be supervised adequately while in the company of an adult who is working. If a child cannot be supervised independently, alternate childcare arrangements should be made.
- Drivers and operators should always walk around and check under their vehicles or machines before moving off.
- Young school children should not be permitted in areas of the farm or ranch work site where machinery is kept or used.
- Workers should not be permitted to engage in rock picking, planting or harvesting activities while in the direct path of moving machines.
- Operators of machines should exercise extreme caution when turning or reversing if field workers are performing tasks nearby.

Extra Rider Runovers

73.5% (36) of those killed in extra rider runovers were children under 15

- Extra riders are at high risk for a fatal injury.
- Children of any age should not be taken as extra riders on tractors or other farm machines. They should not be allowed to ride anywhere on a tractor or other farm machine, even those with cabs.
- Adults should only be taken as extra riders if a machine is equipped with an additional manufacturer-designed workstation or passenger seat.
- Wagon passengers should remain seated while a wagon is moving.

Unmanned Machine Runovers

64.3% (72) of those killed in unmanned machine runovers were adults aged 60 and over

- Tractors and other farm machines should not be parked on slopes. If parking on a slope is absolutely necessary, operators should not work in the potential path of the tractor.
- If an unmanned tractor's engine must be left running, the tractor and any attached equipment should be immobilized to prevent unintentional movement.
- Before commencing repairs to a vehicle or machine, operators should ensure that the transmission is placed in neutral or park and that the engine is turned off. Blocking can also be used on smaller tractors.
- Children should never be allowed to play in a vehicle or machine while repairs are taking place.
- The brakes and electrical systems of tractors, farm trucks and other vehicles should be maintained properly.
- The practice of bypass starting a tractor by short circuiting its ignition system or starting a tractor while standing on the ground beside it is associated with a high incidence of fatal runovers among alighted operators.

Fallen Operator Runovers

59.3% (35) of those killed in fallen operator runovers were adults aged 60 and over

- Seat belts should be worn when operating a tractor or other farm machine.
- Tractor operators should remain seated at all times. It is a dangerous practice to stand while operating a tractor or other farm machine. This is especially important for farmers aged 70+, who are at very high risk for fallen operator runovers as well as falls from machines.

¹Runover type definitions:

Extra rider

Passenger falls from a machine and is then runover, pinned or struck by the machine, or by a machine or implement towed by it.

Fallen operator

Operator falls from a machine and is then runover, pinned or struck by the machine, or by a machine or implement towed by it.

Unmanned

Person runover, pinned or struck by an unmanned machine, or by a machine or implement towed by it; includes being runover while attempting to board a moving unmanned machine.

Bystander

Bystander runover, pinned or struck by a manned machine, or by a machine or implement towed by it; includes being runover while attempting to board a moving manned machine.

Unclassified

Due to insufficient circumstance text, it was not possible to determine whether the fatality was caused by a bystander runover or by an unmanned runover.

²<http://www.nagcat.org/nagcat/pages/default.aspx>

