

Canadian Agriculture Injury Reporting

# Women in Agriculture

1990 – 2020



**CASA | ACSA**

Canadian Agricultural Injury Reporting  
Surveillance des blessures agricoles au Canada

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#### Canadian Agricultural Injury Reporting

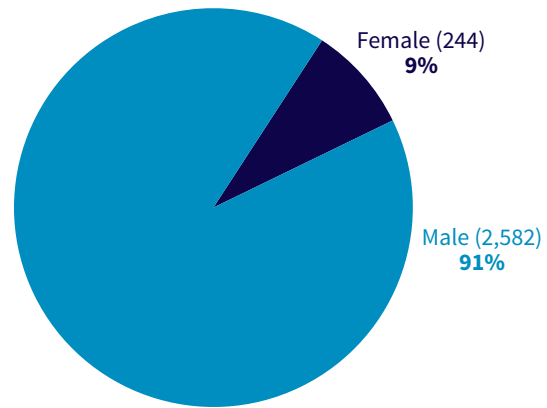
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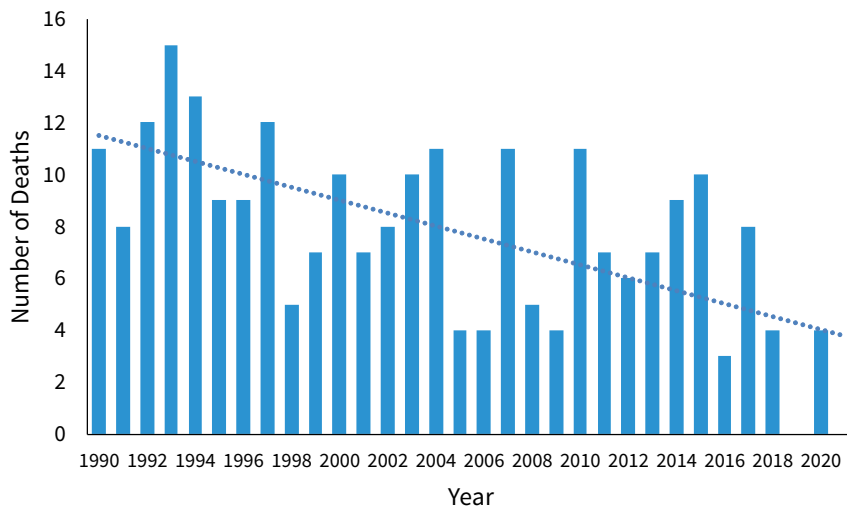
## PERCENT OF AGRICULTURE-RELATED DEATHS BY SEX, 1990-2020

Over the 31-year period from 1990 to 2020, there were 2,826 agriculture-related deaths.

Of those deaths, 9% (n=244) were girls and women who died as a result of an agriculture-related injury. This includes injuries as a result of direct agriculture-related work / activity, or injury-related deaths due to living in a farming environment.



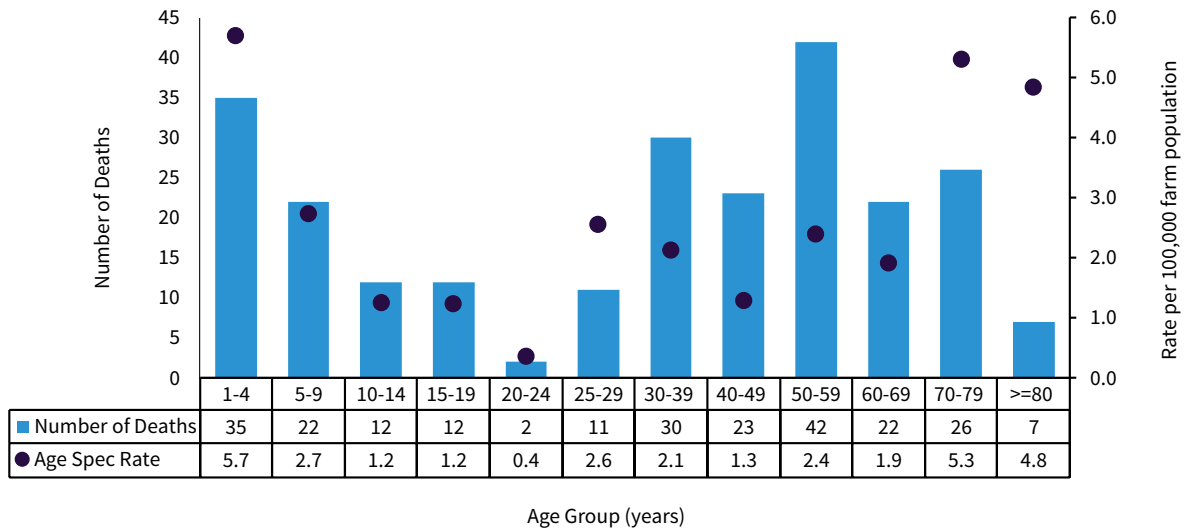
## NUMBER OF FEMALE AGRICULTURE-RELATED DEATHS BY YEAR, 1990-2020



Over the 31-year period from 1990 to 2020, there were 244 girls and women who died as a result of an agriculture-related injury.

During the first 16 years (1990 – 2005), there were 9.4 female agriculture-related deaths each year. During the latter 15 years (2006 – 2020), there were an average of 6.2 female deaths each year. There was a 34% decrease between the 2 averages.

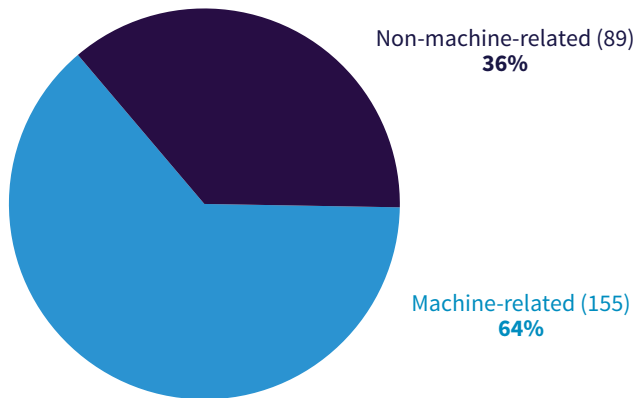
## NUMBER AND RATE OF FEMALE AGRICULTURE-RELATED DEATHS BY AGE GROUPS, 1990-2020



When analyzing the number and rates of female agriculture-related deaths, women 50 to 59 years of age had the highest number of deaths (n=42) with a rate of 2.54 deaths per 100,000 population. However, it was girls 1 to 4 years of age that had the highest rate at 5.7 deaths per 100,000 population (n=35).

The next highest rate seen in Alberta female farmers from 70 to 79 years of age, with a rate of 5.3 deaths per 100,000 (n=26). The next highest rate was women 80 years of age and older with a rate of 4.8 deaths per 100,000 with only 7 deaths.

**PERCENT OF AGRICULTURE-RELATED DEATHS BY MACHINE OR NON-MACHINERY-RELATED, 1990-2020**

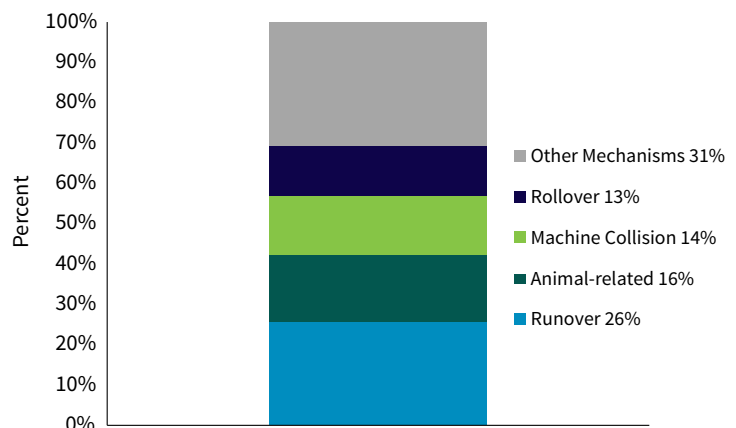


Of the 244 girls / women who died, 64% (n=155) involved machinery, while 36% (n=89) were non-machine-related.

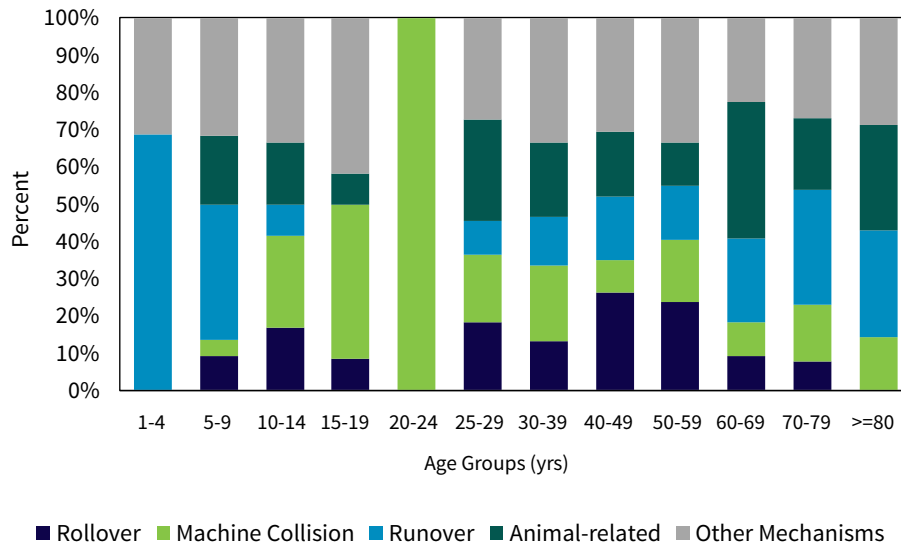
**PERCENT OF AGRICULTURE-RELATED DEATHS BY MACHINE OR NON-MACHINERY-RELATED, 2011-2020**

Of the 244 female agriculture-related deaths, runovers accounted for 26% (n=63), animal-related deaths accounted for an additional 16% (n=40). This was followed by collision-related deaths, accounting for 14% (n=35). Rollovers accounted for 13% (n=31).

The largest portion was other mechanisms accounting for 31% (n=75). This category consists of 16 different machine and non-machine mechanisms.



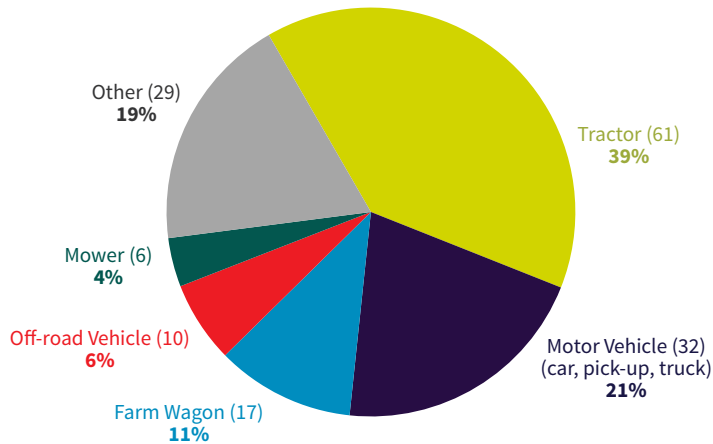
## PERCENT OF FEMALE AGRICULTURE-RELATED DEATHS BY TOP 4 MECHANISMS AND AGE GROUPS, 1990-2020



When analyzing the leading cause of agriculture-related injuries for girls and women by age group:

- runovers were the leading cause of deaths accounting for 69% (n=24) of all deaths for girls 1 to 4 years of age.
- runovers accounted for 36% (n=8) of deaths for girls 5 to 9 years of age.
- collisions with farm machinery were the leading cause deaths for 25% (n=3) of girls 10 to 14 years of age.
- collisions involving farm equipment accounted for 42% (n=5) of deaths for girls 15 to 19 years of age.
- collisions involving farm equipment accounted for 100% (n=2) of deaths for women 20 to 24 years of age.
- animal-related injuries were the leading cause of death for 27% (n=3) of women 25 to 29 years of age.
- animal-related injuries and machines collisions each accounted for 20% (n=6) of deaths of women 30 to 39 years of age.
- rollovers accounted for 26% (n=6) of deaths for women 40 to 49 years of age.
- rollovers accounted for 24% (n=10) of deaths for women 50 to 59 years of age.
- animal-related injuries accounted for 36% (n=8) of deaths for women 60 to 69 years of age.
- runovers accounted for 31% (n=8) of deaths for women 70 to 79 years of age.
- runovers and animal-related deaths each accounted for 29% (n=2) of deaths for women 80 years of age and older.

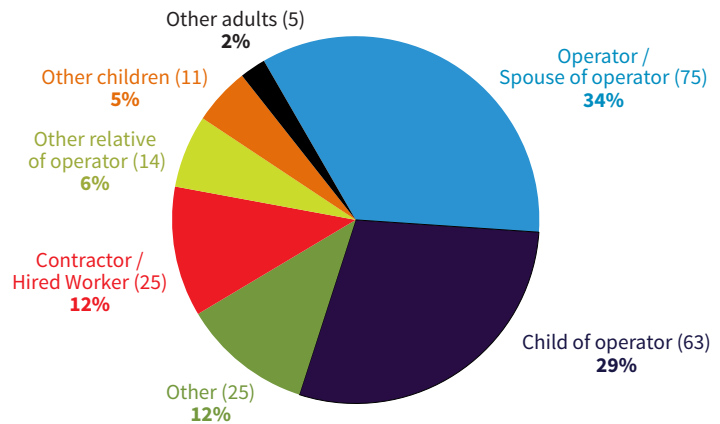
### PERCENT OF FEMALE AGRICULTURE-RELATED DEATHS BY MACHINE TYPE, 1990-2020



Of the 155 machine-related deaths, 39% (n=61) involved a tractor. In 21% (n=32), the deceased was either the driver, passenger, or bystander of a motor vehicle collision with a piece of farm equipment. Another 11% (n=17) involved a farm wagon, and 6% (n=10) involved an off-road vehicle. This would mainly include all-terrain vehicles, dirt bikes, and snowmobiles. Another 4% (n=6) were as a result of injuries from a lawn / grass mower. Another 19% (n=29) involved 14 other various pieces of farm equipment.

### PERCENT OF FEMALE AGRICULTURE-RELATED DEATHS BY RELATIONSHIP, 1990-2020

The relational connection to the farm operation was known and documented in 218 of the female agriculture-related deaths. One in 3 (n=75) of the deceased was identified as the operator or spouse of the owner / operator. Twenty-nine percent (n=63) of these deaths were children of the owner / operator, and another 12% (n=25) were classified as “other”. All of these deceased classified as “other” were not related to the owner / operator, and were drivers / passenger / bystander of a motor vehicle collision with farm machinery.



Twelve percent (n=25) of these deaths were hired help or contractors, while 6% (n=14) were considered “other relative” of the operator. This includes: mothers, sister, granddaughter of owner / operator. Other children (children’s friends) accounted for 5% (n=11 deaths), and 2% (n=95) were identified as other adults (visitors).

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