



**CASA | ACSA**

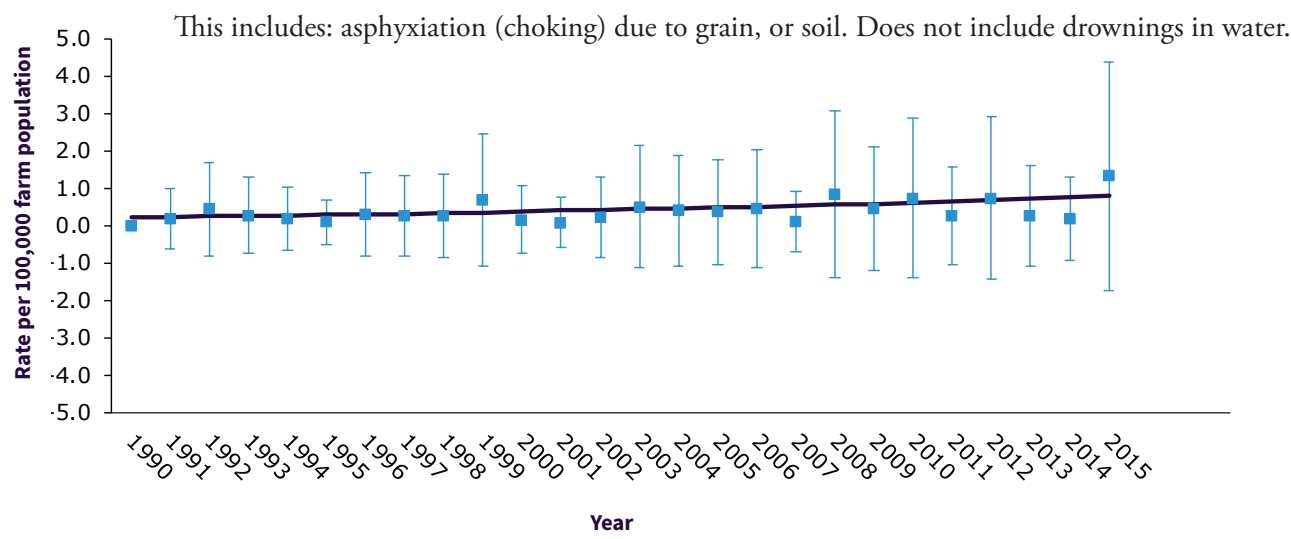
Canadian Agricultural Injury Reporting  
Surveillance des blessures agricoles au Canada

**ASPHYXIATION**

# **Agriculture-Related Fatalities**

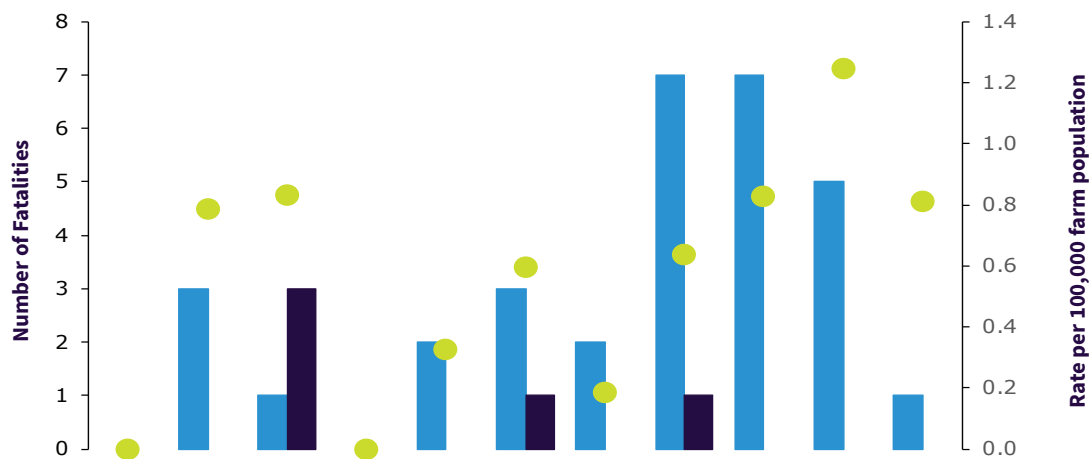
**2006 – 2015**

# AGRICULTURE-RELATED ASPHYXIATION FATALITY RATE BY YEAR, 1990-2015



Over the 26 year period the agriculture-related fatality rate due to asphyxiation (choking on grain or soil) had a statistically significant increase of 5.1% each year.

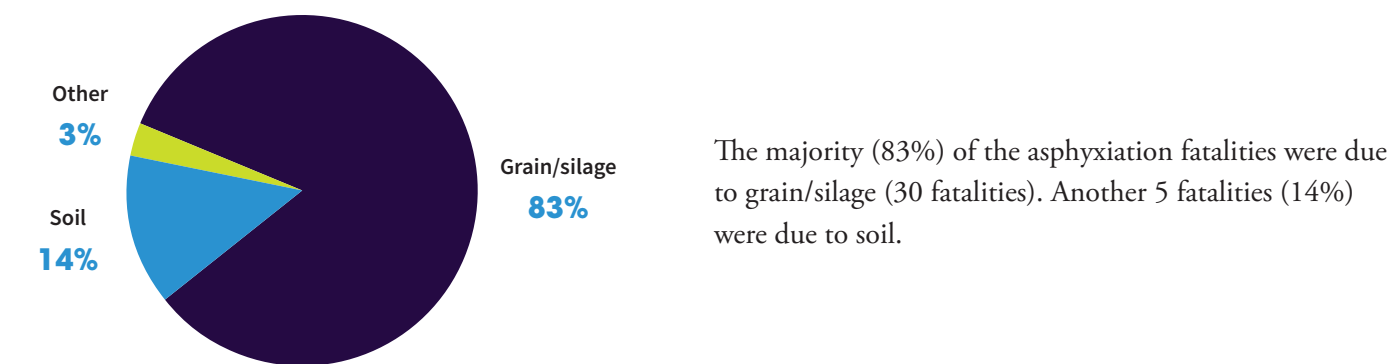
## ASPHYXIATION-RELATED FATALITY NUMBERS BY AGE GROUP AND SEX, 2006-2015



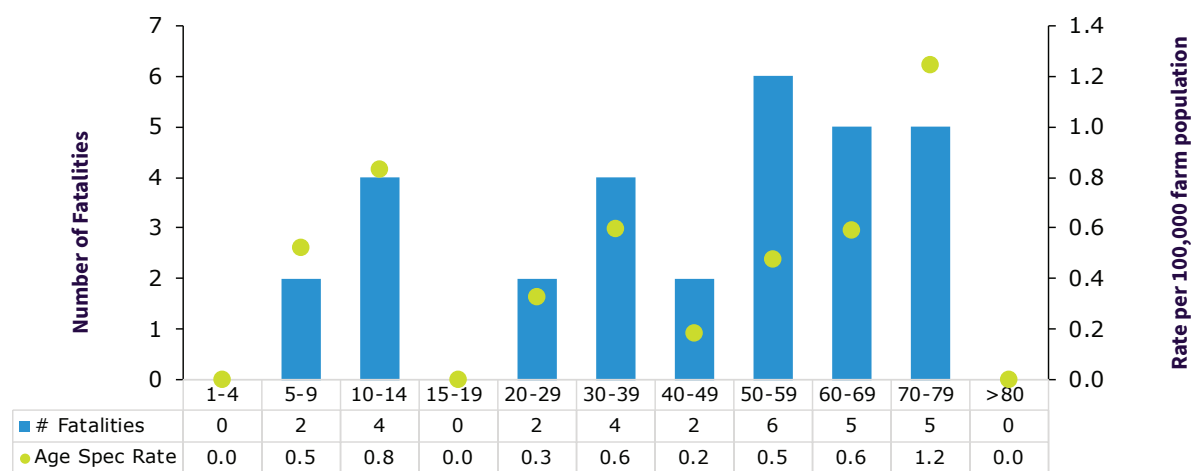
|                                               | 1-4 | 5-9 | 10-14 | 15-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | >80 | Total | %   |
|-----------------------------------------------|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-----|
| Males                                         | 0   | 3   | 1     | 0     | 2     | 3     | 2     | 7     | 7     | 5     | 1   | 31    | 86  |
| Females                                       | 0   | 0   | 3     | 0     | 0     | 1     | 0     | 1     | 0     | 0     | 0   | 5     | 14  |
| Total                                         | 0   | 3   | 4     | 0     | 2     | 4     | 2     | 8     | 7     | 5     | 1   | 36    | 100 |
| Percent of asphyxiation fatalities            | 0   | 8   | 11    | 0     | 6     | 11    | 6     | 22    | 19    | 14    | 3   | 100   |     |
| Age Specific Rate per 100,000 farm population | 0.0 | 0.8 | 0.8   | 0.0   | 0.3   | 0.6   | 0.2   | 0.6   | 0.8   | 1.2   | 0.8 | 0.5   |     |

Eighty-six percent of the agriculture-related deaths due to asphyxiation of grain/silage or soil were male. Farmers 50 to 59 years of age had the highest number of asphyxiation-related deaths. However, farmers 70 to 79 years of age highest rate with 1.2 fatalities per 100,000 farm population.

# ASPHYXIATION DUE BY CAUSE, 2006-2015



# ASPHYXIATION DUE TO GRAIN/SILAGE, 2006-2015



Of the 30 fatalities due to asphyxiation involving grain/silage, farmers 50 to 59 years of age had the highest number with 6 fatalities, but those 70 to 79 years of age had the highest rate with a rate of 1.2 fatalities per 100,000 farm population. This was followed by children 10 to 14 years of age.

## ASPHYXIATION DUE TO SOIL, 2006–2015

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Of the 5 fatalities due to asphyxiation involving soil, 4 of the fatalities (80%) occurred while digging a trench and the other death involved repairs to a water well.

## PREVENTION MESSAGES

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- Always lockout and tag out unloading equipment before entering a bin.
- Never work alone in a bin. Have someone watching who can call for help.
- Always wear a harness and lifeline. Do NOT “walk down the grain.”
- Keep children out of grain bins, beds, and wagons at all times. Grain flow can cover them before anyone realizes what is happening.
- Lock out the control circuit before entering a bin, whether or not grain is flowing. Be especially careful around automatic unloading equipment.
- If you have become trapped in a bin of flowing grain with nothing to hold onto but you are still able to walk, stay near the outside wall. Keep walking until the bin is empty of grain flow stops. If you are covered by flowing grain, cup your hands over your mouth, and take short breaths until help arrives.
- If another person becomes submerged in grain, assume they are alive and begin rescue operations immediately. Never attempt a rescue by going into the grain bin yourself.



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