

Figure 1
Deaths due to tractors and farm vehicles 2006 – 2015

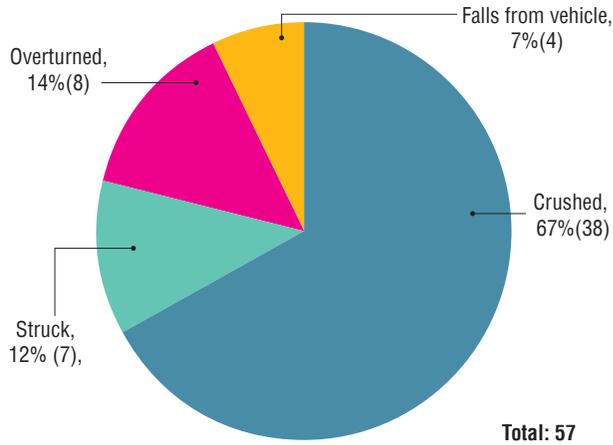
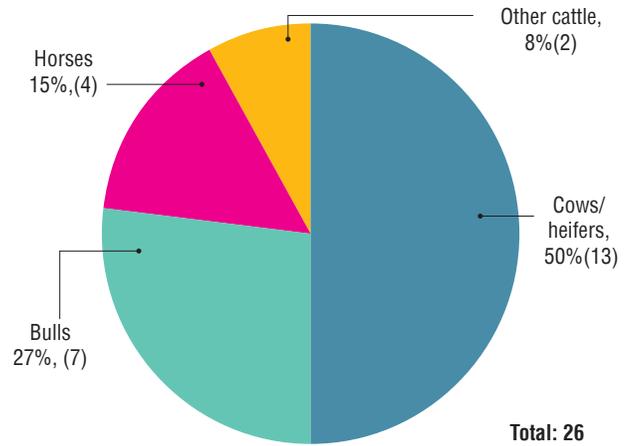


Figure 2
Deaths due to livestock 2006 – 2015



Deadly danger often lurks where you least expect it

John McNamara
National Health and Safety Specialist,
Teagasc

In psychology, there is a term called “dread risk”. As humans, we dread catastrophic events and seek to avoid these. A good example is PTO entanglement which leads to gruesome injury. In contrast, who dreads the movement of a relatively slow moving vehicle? Or a usually placid cow? Both are key dangers.

Preventing death due to farm vehicles
Safety research conducted by Teagasc indicates that farmers predominantly see farm safety with tractors and machines as involving “PTO and machine entanglements” whereas in reality most fatal vehicle accidents occur due to being “struck, crushed or a fall”.

While keeping the risks of entanglement to the fore, we need to communicate the full range of causes of vehicle accidents among farmers.

Consistently, about 50% of accidents are attributable to machinery use. Ten-year data show the following:

- For vehicles, being crushed (67%) is the most frequent cause of death followed by falling from the vehicle (12%), overturning (14%) and being struck (7%).

- For machinery, being crushed (38%) or struck (35%) are the most frequent causes of death followed by PTO (11%) and machine entanglement (11%) and falls from machines (3%).

The most frequent causes of tractor and machine deaths are: tractor crushing, being struck or falling from a vehicle. This happens most often in the farmyard and involves relatively slow moving vehicles.

With larger modern tractors, near-distance visibility can be reduced making it much harder to see persons near the vehicle such as children or older adults.

Safe parking is crucial to prevent accidents due to tractors rolling forwards or backwards.

The key steps in safe parking are:

- Park in a safe area.
- Apply parking brake.
- Place in correct parking gear.
- Lower attachments to ground.
- Switch off engine.
- Remove key.
- Dismount facing the tractor.

Vigilance

Safety vigilance is needed when in proximity to moving vehicles/machines as they have the power to kill by crushing. Of course, all revolving machines part need to be fully guarded where possible and always keep well away from rotating shafts.

Preventing deaths from cow attacks

Cow attacks now outstrip bull attacks as a cause of animal-related farm deaths (Figure 2). Extra vigilance is required when working near cows. Breeding for temperament can also play an important part in cutting the safety risk with cows.

In advance of calving, examine your calving pens to see what protection is provided. With a well-designed pen, the calving gate pivots from a pillar at the front of the pen beside the head-gate and provides protection to the farmer as it rotates inwards.

Genetic studies show that heritability of genetic factors controlling docility is in the 0.2 to 0.4 range (about the same as for milk yield), which allows considerable scope to breed for docility over a number generations. Cow aggression before or after calving is also a genetic trait that can be reduced through breeding. Breeding from aggressive animals should be avoided and such animals should be culled from herds.

In conclusion, the alarmingly high number (30) of farm workplace deaths in 2014 sent shock waves through the sector. In 2015, fatal accidents returned to the average level (19). Up to 25 October 2016, 14 farm deaths have taken place. Please pay attention to all sources of danger, they may lurk in unexpected places.