## Front-end Tractor Attachments — Stats & Facts



## **FACTS**

- 1. Because of their high center of gravity, tractors are more susceptible to rolling or turning over than vehicles like passenger cars and trucks, which have a low center of gravity.
- 2. While all tractor operators are at risk of overturning a tractor, highest rates of fatalities occur:
  - in farms involved in crop production
  - among farm family members
  - among older operators
- 1. The most frequent causes of tractor-related deaths are side and rear overturns. The vehicles typically involved in these incidents are older tractors that are not equipped with Roll-Overprotective Structures (ROPS).
- 2. Tractor roll-overs are one of the most common causes of injury and death on farms.
- 3. Tractor overturn incidents can result in major injuries (crushing injuries, broken bones, and so on) and even death.
- 4. Side overturns are the most common type of tractor overturn incident. In a side overturn incident, a tractor rolls onto its side.
- 5. The two major factors at play inside overturn incidents are center of gravity and centrifugal force.

## **STATS**

- Tractor overturns are the leading cause of fatal injuries on US farms, resulting in an average of about 130 deaths each year.
- 1 in 10 operators overturns a tractor in his or her lifetime.
- 80% of deaths caused by tractor overturns involve experienced operators.
- The 5-year average death rate was 4.9 deaths per 10,000 farms.
- Deaths mostly occurred in the morning and in summer and fall months.
- Ninety-one percent of all fatalities were to males.
- Each year, an average of 132 American farm workers are crushed to death as tractors overturn during operation.
- If tractors without ROPS are not retrofitted, NIOSH estimates that 2,800 rollover-related deaths could occur during the period that these tractors remain in use (an estimated 31 years).
- Forty percent of the 250 persons involved in unprotected tractor rollover incidents died. In contrast, only 2%, or one person died, of the 61 persons operating ROPS-equipped tractors that rolled over.

