

# TEXAS AGRICULTURE FATALITY STATISTICS

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Texas has long been a state grounded in a tradition of hard work, self-reliance, and productivity. Nowhere is this more evident than in the farmers and ranchers that contribute to the Texas agriculture industry. According to the National Agriculture Statistics Service (NASS), in 2002 Texas led the nation in number of farms (123,000), total land in farms (131 million acres), and livestock and product commodity sales (\$9.3 billion). In 2001, the NASS ranked Texas number two in overall agricultural commodities with 13.8 billion dollars in cash sales, behind only California with 25.9 billion dollars in cash sales. These accomplishments were due in large part to the productivity of small farm operations. In 2002, the NASS reported that 68 percent of all Texas farms ranged from \$1,000 to \$9,999 in gross value of agricultural products sold. Unfortunately, such productivity does have human consequences. For example, Bureau of Labor Statistics (BLS) data for 2001 ranked Texas number one in total workplace fatalities (536). Given the inherent danger of agriculture work (and the farming occupation, in particular) and that the majority of Texas farms are exempt from Occupational Safety and Health Administration (OSHA) regulations, the risk of accidental injury and death in the agriculture industry continues to be high. Thus, it is imperative that employers, educators, and farm safety professionals continue to teach workers how to identify workplace hazards, how to avoid injury, and how to respond in case of emergency.

## INDUSTRY AND OCCUPATION PERSPECTIVE

Figure 1 shows the total number of fatalities per major Texas industry for 2001. According to data provided by the Texas Workers' Compensation Commission (TWCC), the agriculture industry ranked eighth with 36 fatalities. While this number is low relative to other industry classifications, the death rate among Texas workers remains high.

Of the 10.5 million Texas workers in 2001, the Texas Workforce Commission estimated average annual agriculture industry employment at 372,290. Consequently, agriculture ranked fourth in overall death rate at 9.7 fatalities per 100,000 employees. The highest death rate was among the mining industry at 31.3 fatalities per 100,000 employees. *Note: Death rates include only workers 16 years and older.*

TWCC data show that the farming occupation, those involved in agriculture and livestock production, accounted for 79 percent of the total agriculture work force. The inherent dangers involved in farming and ranching, such as frequent contact with powerful machinery, implements, and animals, result in a high susceptibility to injury. Figure 2 illustrates the number of agriculture industry and farm occupation deaths from 1996 through 2001. Although the total number of agriculture deaths declined, farming accounted for more than 86 percent of total fatalities for 2001.

Figure 1. Number of Fatal Occupational Injuries by Industry, Texas, 2001

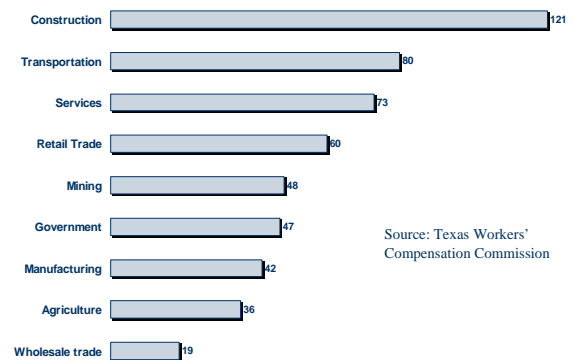
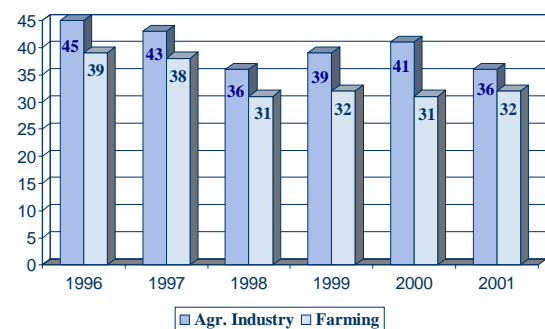


Figure 2. Texas Agriculture Industry and Farm Occupation Deaths

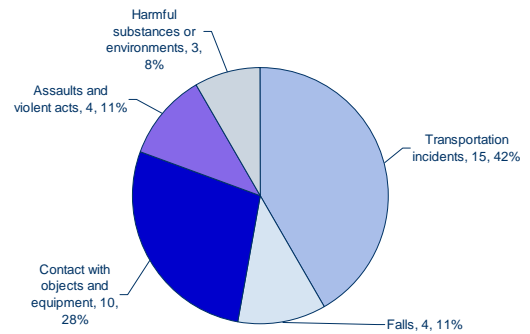


## CAUSE OF DEATH

Agriculture workers are frequently exposed to potentially hazardous work environments, machinery and equipment, and animals. Work is often labor-intensive, requiring the utmost concentration for extended periods of time. Unfortunately, environmental, physical, and physiological stresses may lead farmers to take unusual and unnecessary risks. To many farmers, these risks have become acceptable considering past successes under similar situations. Thus, farmers are slow to adopt safer practices and behavior changes that have lowered fatality rates in other high-risk industries, such as mining and construction.

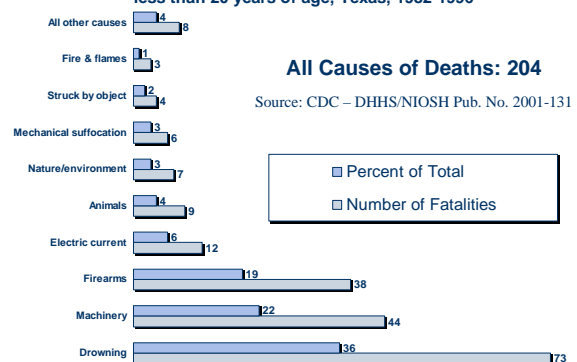
In 2001, the TWCC summarized the major causes of fatalities within the agriculture industry (Figure 3). Of 36 fatalities, 15 (or 42 percent) were due to highway and non-highway transportation incidents. This number is slightly lower than the national average of 49 percent for transportation-related fatalities in the agriculture industry. Although not specified, these fatalities include accidental death while operating tractors. Twenty-eight percent (or 10 fatalities) resulted from contact with objects and equipment. (The national average for deaths due to contact with objects and equipment is 23 percent.) These accidents involved crushing injuries, entanglements, and blunt force trauma. Other causes of death resulted from falls, exposure to harmful substances, and assaults and violent acts. *Note: Although not specified, accidental death due to animal attacks is classified as "assaults and violent acts".*

**Figure 3. Major Causes of Agriculture Fatalities in Texas, 2001**



Source: Texas Workers' Compensation Commission.

**Figure 4. Leading causes of fatal farm injuries to persons less than 20 years of age, Texas, 1982-1996**



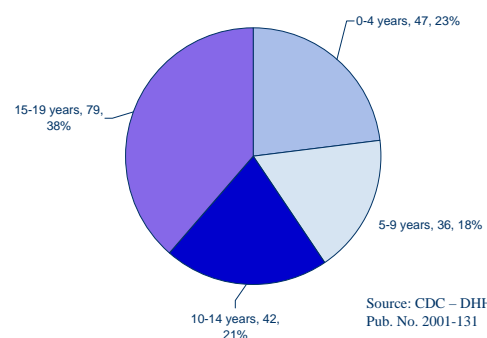
## GENDER AND AGE

According to BLS employment data, men and women account for 54 and 46 percent of the workforce, respectively. However, the majority of fatal occupational injuries occur in men. In Texas, the TWCC reported that 93 percent of all occupational fatalities in 2001 were men. In 2001, only 4 of 36 (or 11 percent) fatalities were women. The TWCC also reported that from 1996 to 2000, all agriculture industry fatalities were men.

Farming has long been considered a "way of life" for many families. Children are involved in agriculture work from an early age and continue their work for a lifetime. This fact is unique to the agriculture industry. Such a lifestyle encourages a sense of responsibility, accomplishment, and a strong work ethic. However, children are expected to perform tasks inappropriate for their level of experience, and seniors who have lost mental and physical capacity as a result of aging continue to perform hazardous activities, increasing the likelihood of accidental injury and death.

The Centers for Disease Control (CDC) reported 204 farm fatalities to persons 19 years and younger from 1982 to 1996 (Figure 4). The top two causes of death were drowning (36 percent) and machinery (22 percent). Thirty-eight percent of all fatalities involved children between 15 and 19 years of age (Figure 5). In addition, the CDC reported that children under 10 years of age are the most susceptible to injury, with the highest work-related injury rate at approximately 14 injuries per 1,000 workers. Seniors over 65 years of age are reported to be two to three times as likely to die in tractor-related accidents as persons in other age groups.

**Figure 5. Age distribution of fatal farm injuries to persons less than 20 years of age, Texas, 2002**



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