



Summary of Reportable Injuries in Oklahoma

Occupational Fatalities in Oklahoma, 1998-2006

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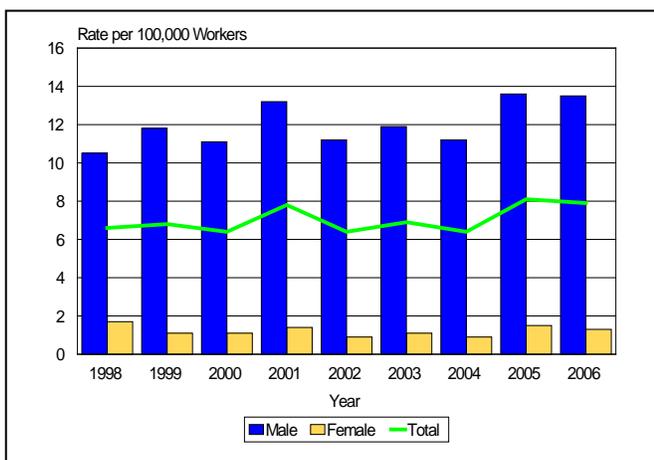
November 2007

Occupational Fatalities in Oklahoma, 1998-2006

Background

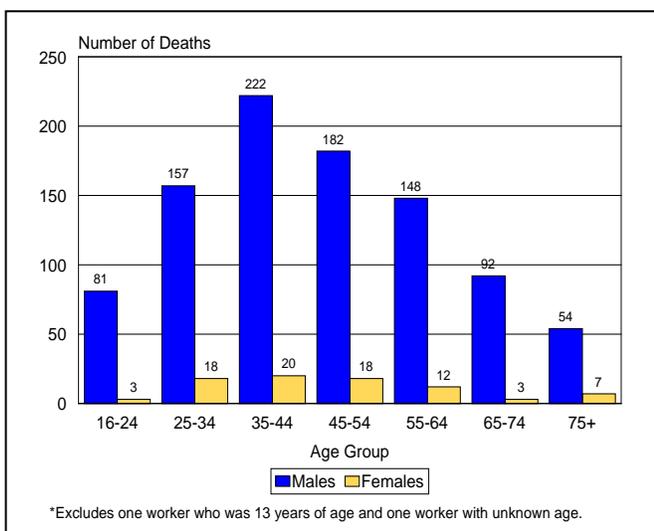
In July 1997, the Commissioner of Health declared work-related fatalities a reportable condition for special study. The Injury Prevention Service of the Oklahoma State Department of Health began collecting data on work-related injury deaths in Oklahoma through the Oklahoma Fatality Assessment Control and Evaluation (OKFACE) project. Both intentional and unintentional work-related injury deaths were included. Persons working in the public and private sector were included as were family businesses (e.g., farms) and volunteer workers (e.g., firefighters). Data were collected from Vital Statistics, the Office of the Chief Medical Examiner, the Occupational Safety and Health Administration, the Public Employees Occupational Safety and Health Program, the Department of Public Safety, Workers' Compensation Court, and newspapers. Hospital medical records and law enforcement reports were also used to provide supplemental information. Rates were calculated using Current Population Survey data summed for all nine years of data.

Figure 1. Rates of Work-Related Deaths by Year of Death and Gender, Oklahoma, 1998-2006



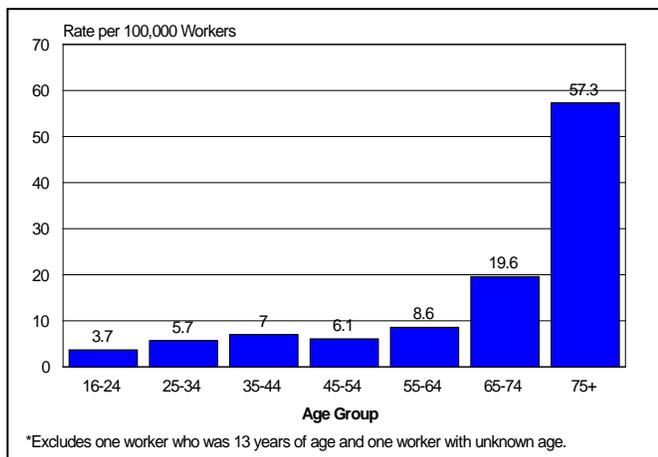
- A total of 1,018 work-related deaths were identified in Oklahoma during this 9-year period for an average of 113 deaths per year (rate of 7.0 deaths per 100,000 workers).
- Males outnumbered females 12 to 1, with males accounting for 92% of deaths.
 - Work-related death rates among males were ten times that of females (12.0 and 1.2 deaths per 100,000 workers, respectively).

Figure 2. Work-Related Deaths by Age Group* and Gender, Oklahoma, 1998-2006



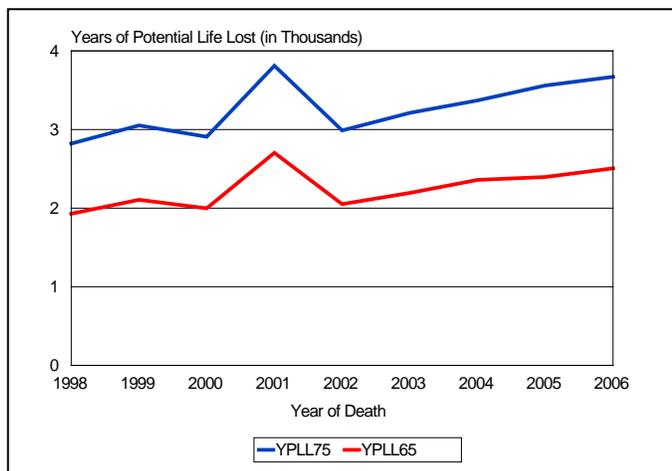
- Ages of persons who died ranged from 13 to 91 years of age, with an average age of 46 years.
- The median age for female work-related deaths was 44 years, while it was 45 years for males.
- Over 40% of deaths occurred among workers 35-54 years of age.

Figure 3. Rates of Work-Related Deaths by Age Group,* Oklahoma, 1998-2006



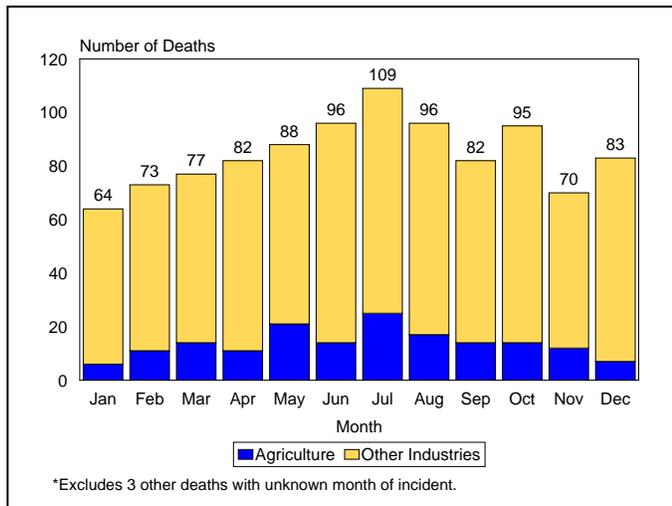
- The highest annual rate of death occurred among workers 75 years of age and older (57.3); it was almost nine times greater than those under 75 years of age (6.6).
- 40 of the 61 deaths (66%) among persons age 75 and older were in the agriculture industry. Of the 40 agriculture-related fatalities, 68% involved machinery.
- For males and females, the highest work-related death rates were among workers aged 75 years and older (81.8 and 17.3 deaths per 100,000 workers, respectively).

Figure 4. Total Years of Potential Life Lost (YPLL) by Year of Death, Oklahoma, 1998-2006



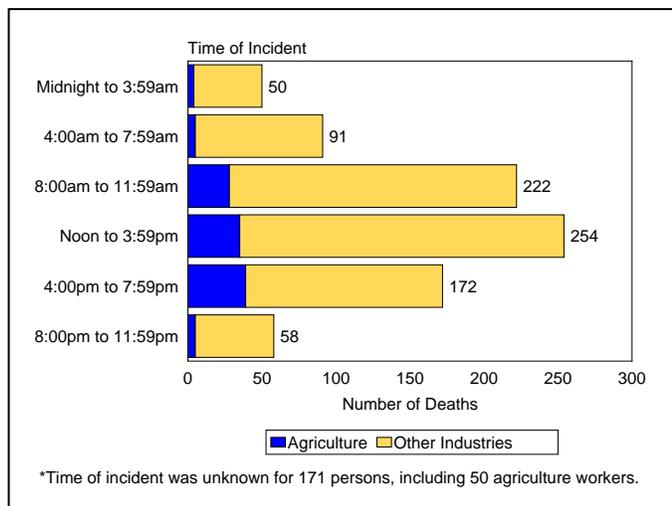
- YPLL75 was calculated as the age of the decedent subtracted from the average lifespan (75); there were 29,392 years of potential life lost before age 75 from 1998-2006.
- Since 65 is the average age of retirement, YPLL65 in this population, can also be considered as years of potential employment lost before age 65.
- There was a total of 20,243 YPLL65 during this 9-year period.

Figure 5. Work-Related Deaths by Month of Incident,* Oklahoma, 1998-2006



- Work-related deaths most commonly occurred in the warmer months of the year (June-August) and peaked in July (109 deaths).
- The fewest deaths occurred in January (64 deaths) and November (70 deaths)
- Agriculture-related fatalities were highest during summer months with a peak of 25 deaths in July.
- Almost one-quarter of deaths that occurred in July were agriculture-related.

Figure 6. Work-Related Deaths by Time of Incident,* Oklahoma, 1998-2006



- 63% of work-related incidents, with a known time of incident, occurred between 8:00 a.m. and 5:00 p.m.
- The highest frequency of incidents occurred between noon and 4:00 p.m. (30%).
- Deaths between midnight and 4:00 a.m. were most commonly due to traffic crashes (48%) and homicides (22%).
 - Workers killed during these early hours included trucking/ transportation workers, law enforcement officers, club/bar workers, and cab drivers.

Table 1. Descriptive Characteristics of Work-Related Deaths, Oklahoma, 1998-2006

Characteristic		Number of Deaths	Percent
Total Work-Related Deaths		1,018	100%
Gender	Female	81	8%
	Male	937	92%
Race	African American	47	5%
	Asian/Pacific Islander	20	2%
	Native American	51	5%
	Other/Unknown	50	5%
	White	850	84%
Ethnicity	Hispanic	68	7%
	Not Hispanic	917	90%
	Unknown	33	3%
State of Residence	Oklahoma	848	83%
	Texas	54	5%
	Kansas	21	2%
	Arkansas	15	1%
	California	13	1%
	Missouri	12	1%
	Ohio	6	1%
	Colorado	4	<1%
	Louisiana	4	<1%
	Other/Unknown	41	4%
Number of Fatalities	1	957*	97%
	2	21*	2%
	3	4*	<1%
	4	2*	<1%
Source of First Case Report	Department of Public Safety	42	4%
	Medical Examiner	308	30%
	Television/Newspaper	272	27%
	OSHA/PEOSH**	207	20%
	Vital Statistics	182	18%
	Other	7	1%
*Number of incidents (total incidents 1998-2006 = 984)			
**Occupational Safety and Health Administration/Public Employees Occupational Safety and Health Program			

- The majority of work-related deaths in Oklahoma involved white, non-Hispanic male Oklahoma residents killed in single fatality incidents.
- Deaths were reported by a variety of sources with the most common sources of first case report being the Office of the Chief Medical Examiner and the media.

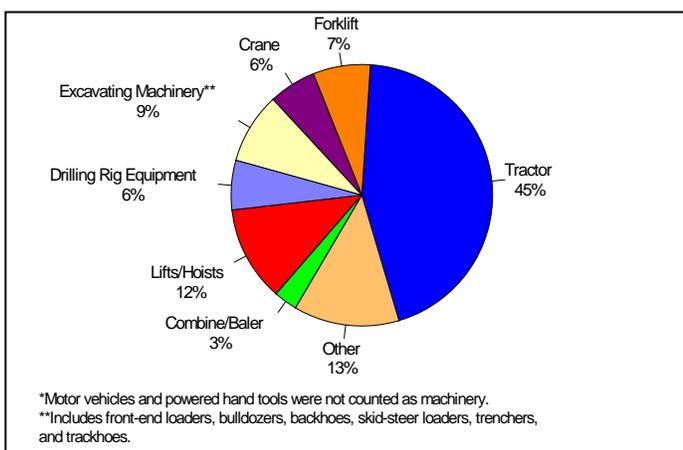
Table 2. Characteristics of Agriculture-Related Deaths Involving Tractors, Oklahoma, 1998-2006

Characteristic		Number of Deaths	Percent
Total		85	100%
Gender	Female	2	2%
	Male	83	98%
Age Group*	16-24	3	4%
	25-34	1	1%
	35-44	8	9%
	45-54	10	12%
	55-64	14	16%
	65-74	23	27%
	75+	26	31%
Mechanism	Run over by tractor/attachment (not jump-starting)	19	22%
	Run over by tractor while jump-starting	7	8%
	Struck/crushed by object	11	13%
	Tractor rollover	35	41%
	Combination	2	2%
	Other/unknown	11	13%

*Median age was 64 years

- There were 166 agriculture-related deaths during this 9-year period, accounting for 16% of all occupational fatalities.
- 60% of the agriculture-related deaths were machinery-related; of those, nearly 85% involved a tractor.
- 41% of tractor-related agriculture deaths were due to tractor rollovers.
- Over half (58%) of the agriculture-related deaths involving a tractor were among persons 65 years of age and older.
- There were an additional 15 deaths that involved a tractor, but were not agriculture-related (primarily other industries that involved mowing and clearing land).

Figure 7. Machinery-Related Deaths* by Type of Machinery Involved, Oklahoma, 1998-2006



- Machinery-related deaths accounted for 21% of all occupational fatalities during this 9-year period.
- Tractors were the most common piece of equipment involved in machinery-related deaths.

