

## *Summary of Reportable Injuries in Oklahoma*

### *Occupational Fatalities in Oklahoma, 1998-2005*

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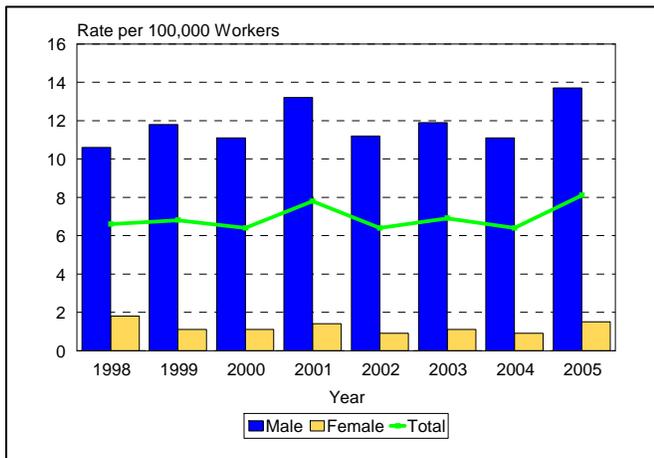
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# Occupational Fatalities in Oklahoma, 1998-2005

## Background

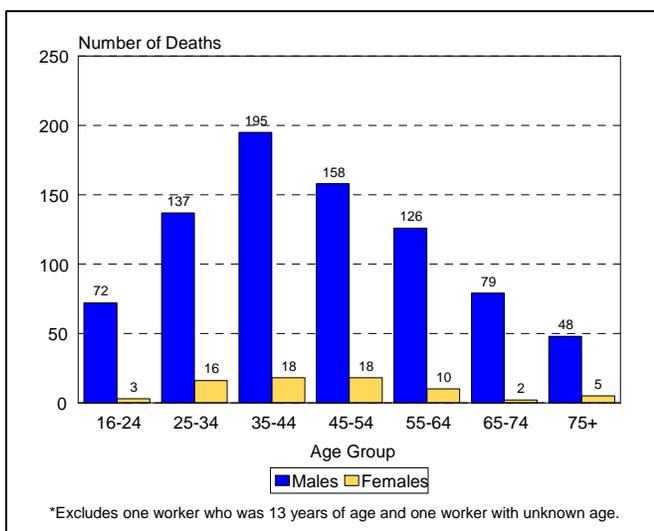
In July 1997, the Commissioner of Health declared work-related fatalities a reportable condition for special study. The Injury Prevention Service of the Oklahoma State Department of Health began collecting data on work-related injury deaths in Oklahoma through the Oklahoma Fatality Assessment Control 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 eight years of data.

**Figure 1. Rates of Work-Related Deaths by Year of Death and Gender, Oklahoma, 1998-2005**



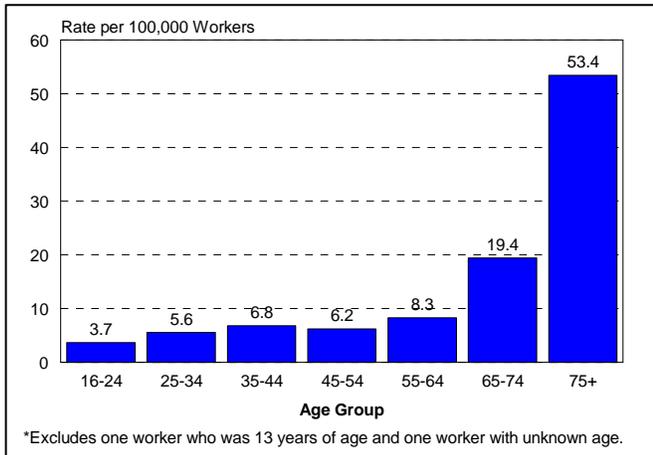
- A total of 889 work-related deaths were identified in Oklahoma during this 8-year period for an average of 111 deaths per year (rate of 6.9 deaths per 100,000 workers).
- Males outnumbered females 11 to 1, with males accounting for 92% of deaths.
  - Work-related death rates among males were nearly ten times that of females (11.8 and 1.2 deaths per 100,000 workers, respectively).

**Figure 2. Work-Related Deaths by Age Group\* and Gender, Oklahoma, 1998-2005**



- Ages of persons who died ranged from 13 to 90 years of age, with an average age of 46 years.
- The median age for female work-related deaths was 43.5 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, 1998-2005**

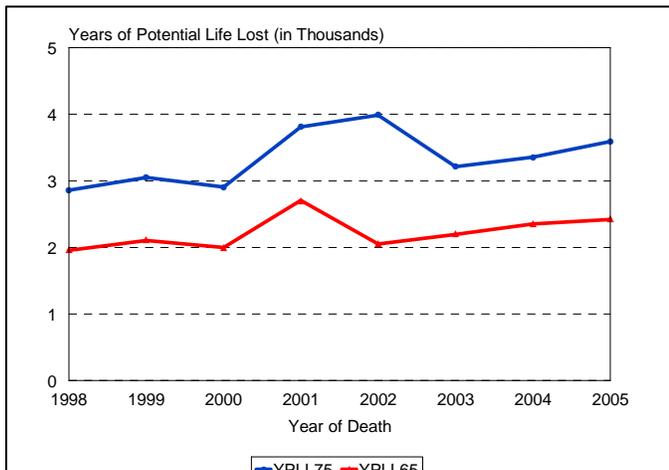


- The highest annual rate of death occurred among workers 75 years of age and older (53.4); it was nine times greater than those under 75 years of age (6.5).
- 34 of the 53 deaths (64%) among persons age 75 and older were in the agriculture industry. Of the 34 agriculture-related fatalities, 65% involved machinery.
- For males and females, the highest work-related death rates were among workers aged 75 years and older (79.9 and 12.7 deaths per 100,000 workers, respectively).
- For female workers under 75 years of age,

the rates of work-related deaths were very consistent across age groups, ranging from 1.2 to 1.3 deaths per 100,000 workers.

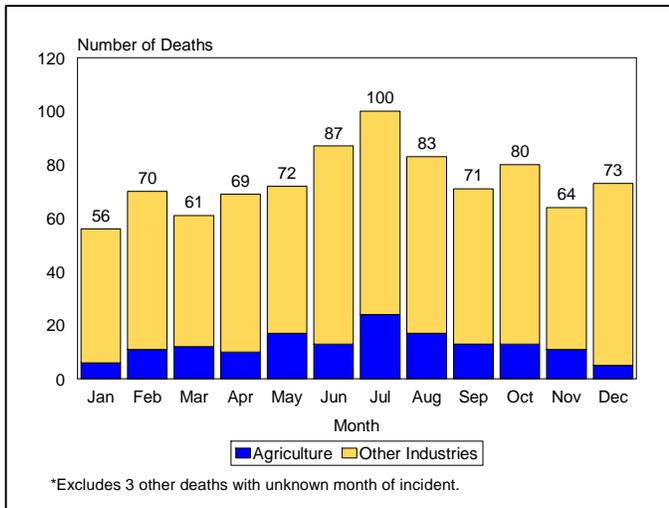
- For male workers, the rate of work-related death generally increased with age; the lowest rate was among ages 16-24 years (9.2 deaths per 100,000 workers).

**Figure 4. Total Years of Potential Life Lost (YPLL) by Year of Death, Oklahoma, 1998-2005**



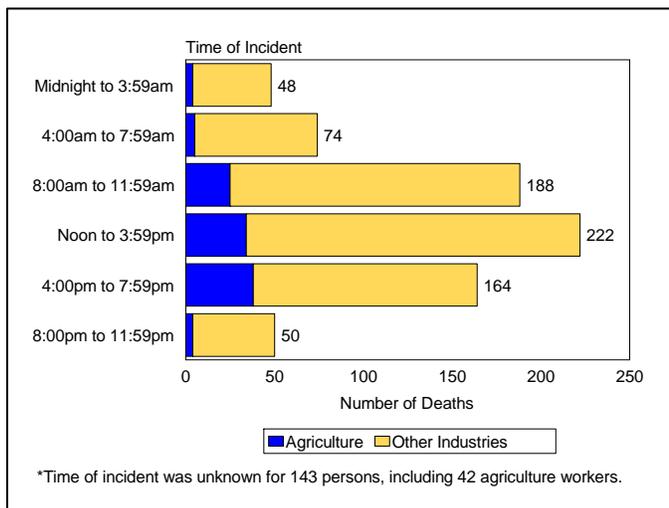
- YPLL75 was calculated as the age of the decedent subtracted from the average lifespan (75); there were 25,776 years of potential life lost before age 75 from 1998-2005.
- Since 65 is the average age of retirement, YPLL65 in this population, can also be considered as years of potential employment lost before age 65.
- There was a total of 17,781 YPLL65 during this 8-year period.

**Figure 5. Work-Related Deaths by Month of Incident,\* Oklahoma, 1998-2005**



- Work-related deaths most commonly occurred in the warmer months of the year (June-August) and peaked in July (100 deaths).
- The fewest deaths occurred in January (56 deaths) and March (61 deaths)
- Agriculture-related fatalities were highest during summer months with a peak of 24 deaths in July.
- One-quarter of deaths that occurred in July were agriculture-related.

**Figure 6. Work-Related Deaths by Time of Incident,\* Oklahoma, 1998-2005**



- 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. (31%).
- Deaths between midnight and 4:00 a.m. were most commonly due to traffic crashes (55%) and homicides (22%).
  - Workers killed during these early hours included law enforcement officers, trucking/transportation workers, club/bar workers, and cab drivers.

**Table 1. Descriptive Characteristics of Work-Related Deaths, Oklahoma, 1998-2005**

Characteristic		Number of Deaths	Percent
Total Work-Related Deaths		889	100%
Gender	Female	72	8%
	Male	817	92%
Race	African American	41	5%
	Asian/Pacific Islander	19	2%
	Native American	39	4%
	Other/Unknown	47	5%
	White	741	84%
Ethnicity	Hispanic	57	6%
	Not Hispanic	800	90%
	Unknown	32	4%
State of Residence	Oklahoma	748	84%
	Texas	48	5%
	Kansas	18	2%
	Arkansas	13	2%
	Missouri	10	1%
	Colorado	4	<1%
	Louisiana	4	<1%
	Other States	44	5%
Number of Fatalities	1	844*	98%
	2	18*	2%
	3	3*	<1%
Source of First Case Report	Department of Public Safety	29	3%
	Medical Examiner	264	30%
	Television/Newspaper	231	26%
	OSHA/PEOSH**	188	21%
	Vital Statistics	171	19%
	Other	6	1%
*Number of incidents (total incidents 1998-2005 = 865)			
**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, 1998-2005**

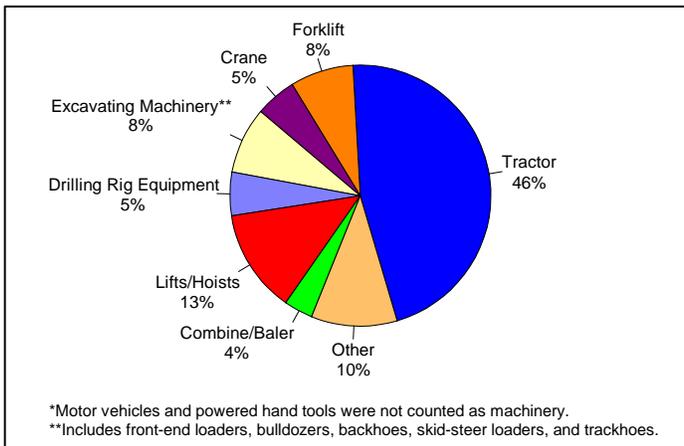
Characteristic		Number of Deaths	Percent
Total		75	100%
Gender	Female	2	3%
	Male	73	97%
Age Group*	16-24	3	4%
	25-34	1	1%
	35-44	8	11%
	45-54	9	12%
	55-64	12	16%
	65-74	21	28%
	75+	21	28%
Mechanism	Run over by tractor/attachment (not jump-starting)	17	23%
	Run over by tractor while jump-starting	5	7%
	Struck/crushed by object	9	12%
	Tractor rollover	31	41%
	Combination	2	3%
	Other/unknown	11	15%

\*Median age was 67 years

- There were 152 agriculture-related deaths during this 8-year period, accounting for 17% of all occupational fatalities.
- 59% of the agriculture-related deaths were machinery-related; of those, nearly 85% involved a tractor.
- There were an additional 14 deaths that involved a tractor, but were not agriculture-related (primarily other industries that involved mowing and clearing land).
- Over half (56%) of the agriculture-related deaths involving a tractor were among persons 65 years of age and older.
- 41% of these deaths were due to tractor rollovers.

**Figure 7. Machinery-Related Deaths\* by Type of Machinery Involved, Oklahoma, 1998-2005**

- Machinery-related deaths accounted for 22% of all occupational fatalities during this 8-year period.



- Tractors were the most common piece of equipment involved in machinery-related deaths.

Figure 8. Number of Work-Related Deaths by County of Incident,\* Oklahoma, 1998-2005

