

# Workplace Fatalities in Alaska

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**A**laska had 40 workplace fatalities – injuries that resulted in deaths – in 2004. That is the second-lowest number of workplace fatalities in the state since the fatality census began in 1992. Between 1992 and 2004,<sup>1</sup> 721 workers died in Alaska’s workplaces, an average of about one every seven days. (See Exhibit 1.)

Alaska’s average annual number of workplace fatalities has decreased in the last 10 years, even though the number of workers has increased 10 percent, or 28,000. An average of 55 workers a year died while working between 1995 and

1999. In the following five years, 2000 to 2004, the average declined to 45, an 18-percent decrease.

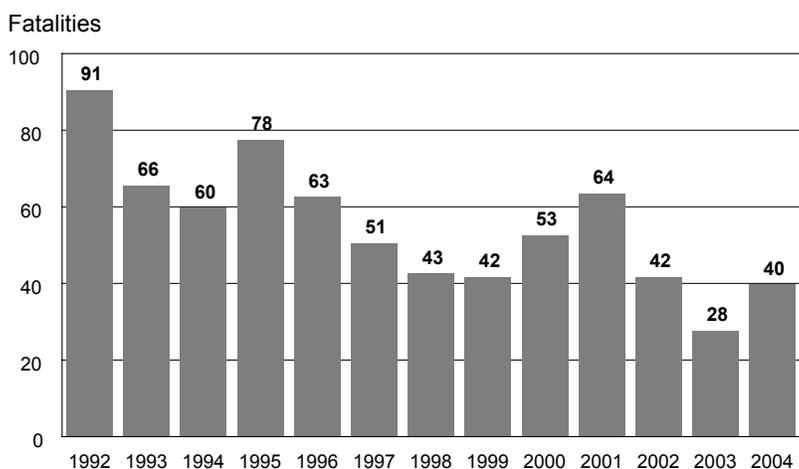
Nationally, job-related fatalities totaled 5,703 in 2004, a 2.3-percent increase from the 5,575 fatalities<sup>2</sup> reported for 2003. Despite the increase, the total number of fatal workplace injuries for 2004 in the U.S. was the third-lowest recorded by the fatality census. (See Exhibit 2.)

The data presented in this report are derived from the annual Census of Fatal Occupational Injuries program,<sup>3</sup> which began in 1992. The national program provides a methodological framework for all states to collect reliable and consistent information on private- and public-sector wage and salary workers and the self-employed.

## Fatality rates are higher in Alaska than U.S. overall

The number of annual workplace fatalities in Alaska is small when compared to the national total, but Alaska’s fatality rate – the number of workplace deaths per 100,000 workers – is among the highest. For instance, in 2003<sup>4</sup> Alaska had the second-highest fatality rate among all the states and the District of Columbia, with 9.2 deaths per 100,000 workers. Nationally, the rate was 4.0 that year, not quite half of Alaska’s. (See Exhibit 3.)

## 1 Alaska Workplace Fatalities, 1992-2004 From the Census of Fatal Occupational Injuries



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics

<sup>1</sup> Workplace fatalities that occurred in 2005 are not contained in this report because the Census of Fatal Occupational Injuries (CFOI) for 2005 will not be released until August 2006.

<sup>2</sup> A revised total

<sup>3</sup> The Census of Fatal Occupational Injuries compiles a count of all fatal work injuries occurring in the U.S. every calendar year. The census uses diverse state and federal data sources to identify, verify and profile fatal work injuries. It is a federal/state cooperative program meaning that work in gathering and analyzing data as well as program costs are shared equally between states and the federal government. The Alaska Department of Labor and Workforce Development’s Research and Analysis Section works with the U.S. Bureau of Labor Statistics to conduct the Alaska fatality census.

<sup>4</sup> The 2004 fatality rates for each state are not currently available. The U.S. Bureau of Labor Statistics is scheduled to release them in late January 2006.

Although Alaska’s workplace fatality rate is high, it has been decreasing in the 13 years since the fatality census began. The U.S. fatality rate, on the other hand, has been stable since 1992, usually in the range of four or five deaths per 100,000 workers. (See Exhibit 4.)

### The importance of studying workplace fatalities and how the census works

There are myriad ways a fatal work injury can happen – drowning, electrocution, vehicle accident and airplane crash are just a few. Victims can be male or female, young or old, and of any race or ethnic background. Workplace fatalities can occur across all industry sectors and in all occupations. In theory all workplace fatalities are preventable; however, the reality is that workplace accidents do happen and, tragically, some are fatal.

Tracking workplace fatalities is important. Safety and health officials, employers and researchers make extensive use of fatality data to identify potential risks to workers and work toward preventing future fatalities.

Federal and state fatality reports, such as the fatality census, and programs such as the one from the Alaska Department of Labor and Workforce Development’s Occupational Safety and Health Section (see sidebar on Page 11) inform workers of potential life-threatening hazards associated with various jobs.

Fatality census findings can also be used to assess and improve workplace safety standards and identify new areas of safety research. Information gathered can be particularly useful to individual states in gauging progress over time toward the goal of reducing workplace fatalities within industry sectors. Insurance carriers and government agencies use data to evaluate the cost and impact of work-related fatalities in

specific industries and occupations to determine where stronger safety standards and practices should be applied.

The fatality census relies primarily on information from death certificates, newspaper articles, reports from federal and state agencies, as well as workers’ compensation records. The objective is to gather information about the specifics of job-related fatalities – such as falls from ladders, vehicle rollovers and exposure to poisonous gases – that result in workplace fatalities.

The census includes any job-related death that occurred in Alaska, even if the individual involved was not a state resident or working for an Alaska company. All identifiable information such as the name and social security number of the deceased, the employer’s name and other individual case identifiers are confidential and are not available for public access. Natural deaths that occur at work are not reported in the fatality census.

## Fatal Work Injury Counts Alaska and the U.S., 1992-2004 **2**

Year	Alaska	U.S.
2004	40	5,703
2003	28	5,575
2002	42	5,524
2001	64	5,915 <sup>1</sup>
2000	53	5,920
1999	42	6,054
1998	43	6,055
1997	51	6,238
1996	63	6,202
1995	78	6,275
1994	60	6,632
1993	66	6,331
1992	91	6,217

<sup>1</sup> This number does not include the fatalities resulting from the 9/11 terrorist attacks.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics

# 3 Work Injury Fatality Rates by State

## Number of deaths per 100,000 employed

State	2003 <sup>1</sup>	1998-2002
Delaware	1.5	2.9
Connecticut	2.1	2.7
Massachusetts	2.4	1.8
New Jersey	2.5	2.9
New York	2.5	2.7
Minnesota	2.6	2.9
California	2.7	3.3
New Hampshire	2.8	2.4
Washington	2.8	3.2
Arizona	3.0	3.6
Michigan	3.2	3.4
Maryland	3.3	3.0
Rhode Island	3.3	2.2
Illinois	3.4	3.5
Wisconsin	3.4	3.5
Hawaii	3.5	4.0
Maine	3.5	4.2
Pennsylvania	3.5	3.7
Ohio	3.7	3.7
<b>U.S. Average</b>	<b>4.0</b>	<b>4.3</b>
Vermont	4.2	3.8
Virginia	4.2	4.3
Colorado	4.3	5.0
Indiana	4.4	5.1
Oregon	4.4	3.5
Florida	4.5	4.8
North Carolina	4.5	5.4
Georgia	4.7	5.1
Nevada	4.7	4.9
Texas	4.7	5.0
Utah	4.7	5.5
Iowa	4.9	4.3
Tennessee	4.9	5.5
Louisiana	5.0	6.8
Nebraska	5.1	7.1
Missouri	5.4	5.5
New Mexico	5.4	6.0
Kansas	5.7	6.7
Alabama	6.0	5.9
South Carolina	6.0	6.0
Oklahoma	6.2	5.7
Idaho	6.4	6.6
South Dakota	6.6	8.8
District of Columbia	6.8	4.4
West Virginia	6.9	6.8
Arkansas	7.2	7.0
North Dakota	7.5	7.8
Kentucky	7.7	6.4
Mississippi	8.1	9.3
Montana	8.6	11.3
<b>Alaska</b>	<b>9.2</b>	<b>15.7</b>
Wyoming	13.9	13.3

The data in this article may not represent final counts of all 2004 occupational fatalities due to a lag between the fatal event and the receipt of required source documents of an event or death. A revision to this report may become necessary.

### Profile of fatal work injuries by worker characteristics

The fatality census shows that far more males die while working in Alaska than females (see Exhibit 5), even though they make up 51 percent of the state's population ages 16 and older, according to 2004 population estimates. This is largely because more males work in the state's more-dangerous industries, such as construction, fishing and aviation.

Males were the victims in 95.4 percent of Alaska's occupational fatalities from 1992 to 2004. In 2004 alone, males accounted for 90 percent of the fatalities. An analysis of Alaska's 2004 wage records shows that males account for 86 percent of the employment in the construction industry, 85 percent in the natural resources and mining sector, and nearly 60 percent in the trade, transportation and utilities sector, which includes aviation. All are areas where fatality rates tend to be higher.

The fatality census provides information by the status of the deceased worker, whether he or she was self-employed or a wage and salary worker. Self-employed workers work for themselves in their own businesses. Wage and salary workers are employed for pay or other compensation.

Self-employed workers experience higher fatality rates in proportion to the work force than their wage and salary counterparts. Much of that is because many people working in commercial fishing – a particularly hazardous industry – are self-employed.

The 2000 U.S. Census shows that self-employed workers and unpaid family workers make up 8.3 percent of Alaska's work force, yet they represented 19 percent of the state's fatalities

<sup>1</sup> The 2004 fatality rates for each state are not currently available. The U.S. Bureau of Labor Statistics is scheduled to release them in late January 2006.

Source: U.S. Bureau of Labor Statistics, *Census of Fatal Occupational Injuries*, in cooperation with state and federal agencies

during the 1992-2004 period, as shown by the fatality census. Conversely, wage and salary workers, including government workers, make up 91.7 percent of the work force, yet they accounted for 81 percent of the fatalities during 1992-2004. (See Exhibit 6.)

Nearly three-fourths, 73 percent, of the people who died in Alaska's workplaces in 2004 were in their prime working years of 25 to 54. That's consistent with the 78 percent in that age group who died while working during the 1992-2004 period.

As far as race, two of the categories – white/non-Hispanic and Asian – made up 85 percent of the Alaska workplace deaths in 2004.

Whites died in 81 percent of the state's workplace fatalities during the 1992-2004 period, yet they make up 71 percent of the population overall or 74 percent of those 16 years or older, according to Alaska's 2004 population estimates.

The American Indian and Alaska Native racial group accounted for 8.7 percent of the workplace fatalities over the 13-year period. This group makes up about 16 percent of the state's total population and about 15 percent of those 16 years and older.

Asian and Pacific Islanders made up 4.2 percent of fatalities during the same 13-year period, nearly the same proportion as in the total population and the population 16 years and older (4.6 and 4.7 percent respectively).

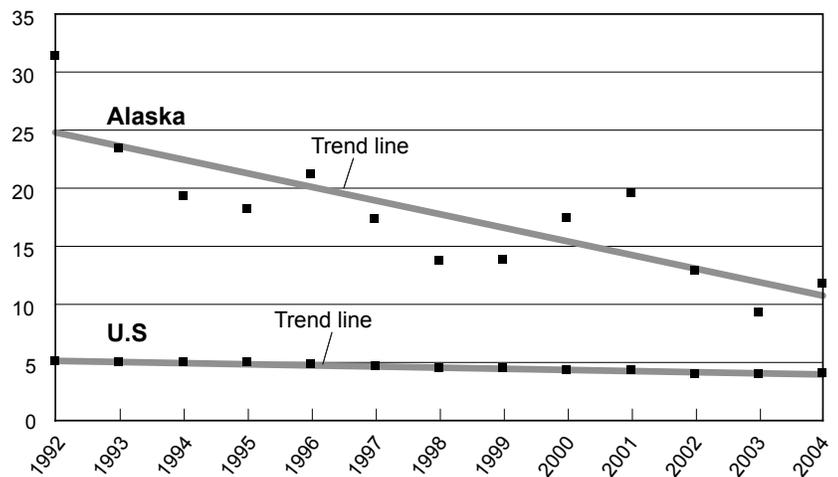
### Profile by type of incident or event and mode of travel

Transportation incidents were the leading type of "event" – the manner in which the fatal work injury occurred – in both Alaska and the U.S. in 2004 and for the history of the census.

The transportation event category includes accidents that involve any mode of transportation, ranging from cars and trucks

## The Trend in Workplace Fatality Rates<sup>1</sup> Fatalities per 100,000 workers **4**

Number of fatalities per 100,000 workers



<sup>1</sup> The 1992-2004 period was chosen because it is the length of time the Census of Occupational Injuries has been in existence.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

to fishing boats, barges and aircraft. It also includes all-terrain vehicles, or ATVs, as well as powered industrial vehicles and equipment such as forklifts, motorized hand trucks and other mobile equipment powered by electric motors or internal combustion engines. (See Exhibits 7 and 8.)

When looking at transportation it is important to note that the modes of transportation in which workplace fatalities occur in Alaska and the U.S. are very different. Alaska's workers travel by boat and airplane more frequently than the work force nationally. (See Exhibit 7.)

Overall, transportation events accounted for 73 percent of Alaska's workplace fatalities in 2004. (See Exhibit 8.) Between 1992 and 2004, they accounted for 72 percent, or 517 of the state's 721 fatalities, ranging from 46 percent in 2003 to a high of 86 percent in 1995.

Aircraft incidents accounted for a third of Alaska's fatalities in 2004, the most of any transportation category. Three out of every 10 Alaska fatalities from 1992 to 2004 involved aircraft.

# 5 Fatal Occupational Injuries Alaska, 1992-2004

Worker Characteristics	Total Fatalities 1992-2004		Total Fatalities 2004	
	Fatalities	Percent	Fatalities	Percent
Total	721	100.0%	40	100.0%
<b>Employee Status</b>				
Wage and Salary Workers <sup>1</sup>	584	81.0%	36	90.0%
Self-employed <sup>2</sup>	137	19.0%	4	10.0%
<b>Sex</b>				
Men	688	95.4%	36	90.0%
Women	33	4.6%	4	10.0%
<b>Age</b>				
Under 16 years	3	0.4%	--	--
16 to 17 years	4	0.6%	--	--
18 to 19 years	14	1.9%	--	--
20 to 24 years	69	9.6%	5	12.5%
25 to 34 years	205	28.4%	10	25.0%
35 to 44 years	210	29.1%	9	22.5%
45 to 54 years	151	20.9%	10	25.0%
55 to 64 years	49	6.8%	6	15.0%
65 years and over	14	1.9%	--	--
<b>Race or Ethnic Origin</b>				
White	411	57.0%	--	--
White, non-Hispanic <sup>3</sup>	170	23.6%	27	67.5%
Black	5	0.7%	--	--
Black, non-Hispanic <sup>3</sup>	--	--	--	--
Hispanic or Latino <sup>3</sup>	22	3.1%	--	--
American Indian or Alaska Native	63	8.7%	--	--
Asian or Pacific Islander	30	4.2%	--	--
Asian	8	1.1%	7	17.5%
Native Hawaiian or Pacific Islander	--	--	--	--

<sup>1</sup> May include volunteers and other workers receiving compensation.

<sup>2</sup> Includes self-employed workers, owners of unincorporated businesses and farms, paid and unpaid family workers, and may include some owners of incorporated businesses and members of partnerships.

<sup>3</sup> For the years before 2000, the race categories white and black include Hispanic workers. For 2000 and later, race categories white and black exclude Hispanic workers.

Notes: Totals for major categories may include subcategories not shown separately.

Percentages may not add to totals due to rounding.

Dashes indicate no data were reported or the data did not meet the U.S. Bureau of Labor Statistics' publication criteria.

Source: U.S. Bureau of Labor Statistics, *Census of Fatal Occupational Injuries*, in cooperation with state and federal agencies

Water vessels, such as skiffs, fishing boats, ships and barges, accounted for 18 percent of Alaska's fatal work injuries in 2004. The vessel-related events category includes fatal injuries that occur on boats, ranging from falling overboard, capsizing and sinking to deck injuries such as being crushed by a crab pot or getting entangled in a winch. In the 1992-2004 period, nearly one of three workplace fatalities in Alaska was associated with some type of maritime mishap.

For the U.S. as a whole, transportation incidents were the largest type of workplace fatality event in 2004 – 43 percent, or 2,460 of the 5,703 total fatalities. Nearly a quarter of the overall fatalities occurred on the nation's highways, a number that was up slightly after declining the two previous years. Although non-highway incidents, such as those that occurred on farms or at industrial sites, dropped slightly, other kinds of transportation incidents increased. The highest increase was with incidents where workers were struck by vehicles or mobile equipment. In 2004, 377 people died that way, a number that was up nearly 12 percent from the 337 in 2003.

In the fatal assaults category, which includes suicides, animal attacks and other violent acts that resulted in fatalities in the workplace, 795 people were killed or killed themselves on the job in the U.S. in 2004, a number that is down 12 percent from the 902 that were reported in 2003. Overall, the nation's 2004 fatal assaults by people in the workplace were down 49 percent from a high of 1,080 in 1994, excluding the 2,886 work-related homicides in the 9/11 terrorist attacks.

Workplace fatal assaults in Alaska are less common. The exact number of Alaska's fatal assaults in 2004 is not available due to U.S. Bureau of Labor Statistics' publication criteria. Seven people were fatally assaulted in Alaska's workplaces in 2003.

## Profile of fatal work injuries by industry

In 2004 and throughout the 1992-2004 period<sup>5</sup> covered by the fatality census, some of Alaska's highest fatality counts have been in air transportation and commercial fishing.<sup>6</sup> (See Exhibit 9.) Both, however, have made positive strides since the early 1990s in increasing safety.

The Alaska air transportation industry saw its highest level of fatalities in 1997 when work-related deaths spiked at 24 percent of total statewide occupational fatalities. There were 12 air transportation deaths that year. Since then, the number of fatalities in air transportation decreased steadily to four in 2003.<sup>7</sup> (See Exhibit 10.)

Much of the decrease in work fatalities can be attributed to the efforts of the Federal Aviation Administration, the National Transportation Safety Board and Alaska's aviation community. The FAA and NTSB, in cooperation with two other federal agencies, developed the Capstone Program, which was initially brought to areas such as the Yukon-Kuskokwim Delta where flying conditions are particularly difficult. The program, which is now being implemented statewide, utilizes cutting-edge technology to improve instrumentation on aircraft and on the ground.

Other air safety programs include the FAA's Medallion Foundation Five Star Shield Program, which works with aviation companies to incorporate safety management principles and concepts, and the FAA's Circle of Safety Program, which educates rural citizens about flight safety so they can, as passengers, ensure stricter standards are met.

Alaska's commercial fishing industry has also seen a general decline in the number of fatalities since

<sup>5</sup> The U.S. Bureau of Labor Statistics in 2003 changed its industry classification system from the standard Industry Classification system to the North American Industry Classification System.

<sup>6</sup> Air transportation falls into the transportation and warehousing sector and commercial fishing falls into the agriculture, forestry, fishing and hunting sector.

<sup>7</sup> The number of air transportation fatalities for 2004 is not available, due to U.S. Bureau of Labor Statistics' publication criteria.

## The Makeup of Alaska's Work Force

### Types of employment, 2000

# 6

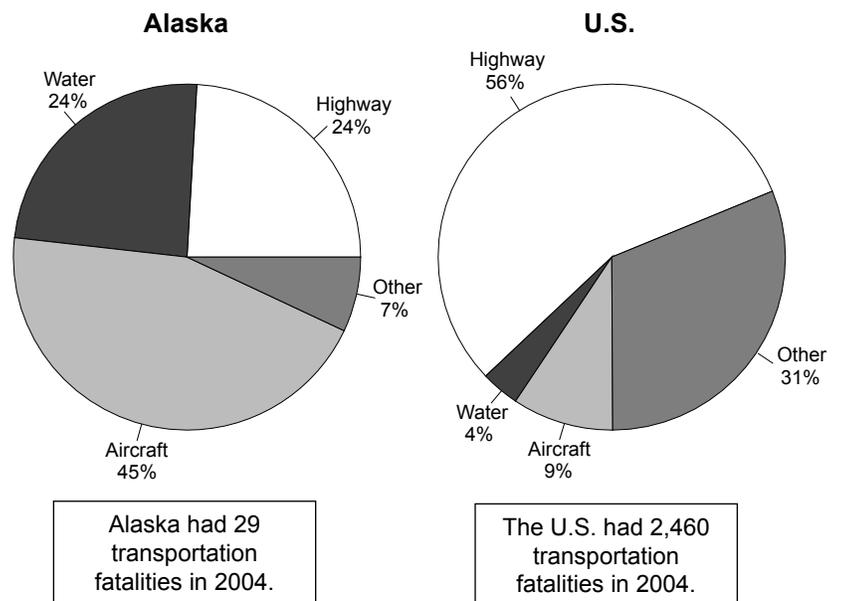


Source: U.S. Census Bureau, 2000 Census

## Fatalities by Mode of Travel

### Transportation incidents by event,<sup>1</sup> 2004

# 7



<sup>1</sup> These transportation incidents occurred across all industries.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics

1992. Thirty-eight percent of all workplace fatalities in 1992 had to do with commercial fishing; in 2004, it was 20 percent. (See Exhibit 11.)

Alaska commercial fishing fatalities make up nearly a quarter of the total number of U.S. commercial fishing fatalities. Even though this figure seems high, it is a significant reduction from 1992 when Alaska fatalities were 44 percent of all U.S. commercial fishing fatalities.

Both government and industry have worked together to lower the number of commercial fishing fatalities. For instance, Congress enacted the Commercial Fishing Vessel Safety Act of 1988. The Act required fishing vessels, beginning in the 1990-1995 period, to carry specific safety, survival and fire fighting equipment. It also required crew members to train in first aid and perform emergency drills.

Industry groups such as the Alaska Marine Safety Education Association provide programs that educate commercial fishermen about safety, including the causes of fishing-related injuries and deaths. The AMSEA program emphasizes hands-on survival skills and practices actual procedures with fishermen using equipment that would be used in a real emergency.

Many agree that one of the biggest impacts on commercial fishing safety has been the adoption of individual fishing quotas for the halibut, black cod and some pollock fisheries – and soon for crab. Before the halibut and black cod fisheries converted to the IFQ system in 1995 and most of the pollock fishery converted to an IFQ-type system<sup>8</sup> in 1998, fishing in those fisheries was literally a race to get as many fish as possible during short, several-day openings often in the middle of winter, no matter what

<sup>8</sup> Most of the pollock fishery, when considering volume, was the Bering Sea-Aleutian Island fishery. The fishery's at-sea processors formed a private voluntary cooperative called the Pollock Conservation Cooperative.

## 8 Fatalities by Type of Event<sup>1,2</sup> Census of Fatal Occupational Injuries, Alaska and the U.S.

	Alaska													Alaska		U.S.	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2004	2004	2004	
<b>Total Workplace Fatalities</b>	<b>91</b>	<b>66</b>	<b>60</b>	<b>78</b>	<b>63</b>	<b>51</b>	<b>43</b>	<b>42</b>	<b>53</b>	<b>64</b>	<b>42</b>	<b>28</b>	<b>40</b>	<b>100%</b>	<b>5,703</b>	<b>100%</b>	
<b>Transportation incidents</b>	<b>69</b>	<b>47</b>	<b>30</b>	<b>67</b>	<b>51</b>	<b>33</b>	<b>30</b>	<b>31</b>	<b>39</b>	<b>48</b>	<b>30</b>	<b>13</b>	<b>29</b>	<b>72.5%</b>	<b>2,460</b>	<b>43.1%</b>	
Highway incident	--	--	--	6	--	4	--	3	6	4	3	--	7	17.5% <sup>3</sup>	1,374	24.1%	
Water vehicle incidents	39	21	14	22	29	8	14	16	12	25	18	6	7	17.5%	90	1.6%	
Fall from ship, boat, other	9	7	6	4	7	3	3	3	5	5	6	--	3	7.5%	32	0.6%	
Sinking, capsized water vehicle	29	13	3	11	13	--	10	13	4	19	5	4	--	0.0%	21	0.4%	
Aircraft incidents	26	22	10	34	16	19	13	10	19	18	8	6	13	32.5%	230	4.0%	
During takeoff or landing	7	4	--	24	6	7	4	3	8	10	--	--	4	10.0%	63	1.1%	
Other aircraft incidents	--	9	3	9	7	7	8	5	10	8	--	--	7	17.5%	147	2.6%	
<b>Assaults and violent acts, including suicides and animal attacks</b>	<b>4</b>	<b>12</b>	<b>6</b>	<b>3</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>3</b>	<b>--</b>	<b>5</b>	<b>--</b>	<b>7</b>	<b>--</b>	<b>0.0%</b>	<b>795</b>	<b>13.9%</b>	
<b>Contact with objects and equipment</b>	<b>10</b>	<b>4</b>	<b>9</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>--</b>	<b>5</b>	<b>8</b>	<b>5</b>	<b>6</b>	<b>3</b>	<b>--</b>	<b>0.0%</b>	<b>1,004</b>	<b>17.6%</b>	
Struck by object	6	3	3	3	--	5	--	4	5	5	6	--	--	0.0%	596	10.5%	
<b>Exposure to harmful substances or environments</b>	<b>5</b>	<b>--</b>	<b>10</b>	<b>--</b>	<b>--</b>	<b>4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4</b>	<b>--</b>	<b>3</b>	<b>3</b>	<b>7.5%</b>	<b>459</b>	<b>8.0%</b>	

<sup>1</sup> Event grouping is coded using the U.S. Bureau of Labor Statistics' occupational injury classification structure.

<sup>2</sup> This is a select list of events for analysis; the parts will not add to the total.

<sup>3</sup> The percentages for the subsets of each category are percentages of the total fatalities in Alaska or the U.S.

Note: A dash indicates no data were reported or the data do not meet the U.S. Bureau of Labor Statistics' publication criteria.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics

## Alaska Occupational Safety and Health's 2003-2004 Fatal Accident Investigations

The Alaska Department of Labor and Workforce Development's Occupational Safety and Health Section, which is within the department's Labor Standards and Safety Division, is charged with protecting Alaska workers from industrial accidents and job-related illnesses by enforcing state and federal standards, and by training employers and employees to follow safe and healthful work practices.

AKOSH officials investigate workplace injuries that result in overnight hospitalization or death in those cases where other government agencies, such as the federal National Transportation Safety Board, are not investigating them.<sup>1</sup>

The following are the five fatality investigations that AKOSH conducted in 2003 and 2004:

### **Construction worker fell 21 feet**

While installing corrugated steel decking at a construction site, a construction worker tried to drag a piece of decking across a joist and an 8-inch-thick wall. He lost his balance and fell 21 feet to the first floor. He died during surgery as a result of his injuries from the fall. He was not wearing fall-protection equipment.

### **Truck driver fell from the top of a tractor-trailer**

A truck driver fell from the top of a tractor-trailer and died during surgery as a result of complications from the fall. The exact cause or causes of the incident are still unknown because he was working unsupervised and there were no witnesses when he fell. He was not wearing fall-protection equipment.

### **Old fuel tank explodes**

A man was in the process of cutting the top off of an empty 500-gallon drum with an oxygen/acetylene torch when leftover

hydrocarbon fumes – it was an old fuel storage tank – exploded, peeling the top of the drum over and engulfing him in flames. The man died from the burns.

### **Apprentice killed while mounting dump truck wheel rims**

An apprentice mechanic was killed instantly when he was struck by several pieces of a multi-piece demountable rim wheel he was mounting onto a dump truck. The rim's three pieces were designed to interlink and stay together from the air pressure once the tire was inflated.

AKOSH investigators determined the cause was threefold: The mechanic, his supervisor and the employer failed to recognize the rim components were severely corroded and deformed; the mechanic failed to follow the published procedures for tightening lug nuts on that type of rim; and the employer lacked a viable training program on the maintenance and mounting of split-rim wheels.

### **Man dies when his ladder slips**

A construction worker, using a stepladder to span a three-foot gap between two buildings, was killed when the base of his stepladder slipped and he fell 20 feet.

The worker had placed the base of the ladder on the floor of one building and leaned the top of the ladder against the vertical wall of the second building. He had just moved the ladder over several feet and was climbing up the ladder when one foot of the ladder slipped. He fell to the ground below.

AKOSH officials determined the death was caused by the worker's improper use of a stepladder, his failure to secure the ladder to prevent slippage and his failure to wear fall-protection gear.

<sup>1</sup> AKOSH does not investigate workplace injuries or fatalities where other agencies have jurisdiction, such as those that occur on public roads, on open water or that have to do with the operation of aircraft. Employers are required to notify AKOSH of fatalities and injuries requiring overnight hospitalization within eight hours of when the incident occurred. They can call AKOSH at (800) 770-4940 or the federal Occupational Safety & Health Administration 24 hours a day at (800) 321-6742 to report such incidents.

Source: Alaska Department of Labor and Workforce Development, Occupational Safety and Health Section

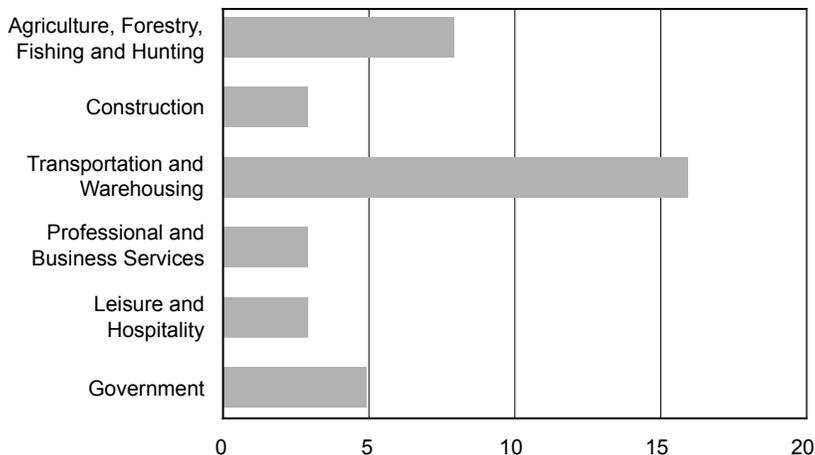
the weather was like. The short openings and heavy competition, coupled with short daylight hours and often vicious winter weather – heavy storms, little or no visibility, ice-covered decks and high seas – meant people died.

The IFQ system, in contrast, allows fishermen more flexibility in choosing when they want to fish. The fishermen can wait for windows of better weather and they have some eight months instead of several days to catch their individual quota of fish.

The salmon fisheries still use a non-IFQ system, but those fisheries generally have openings in the spring, summer and fall when the weather is better. Their openings can range from three hours to six months.

As noted earlier, self-employed workers – of whom commercial fishermen are a big group – are covered by the fatality census. However, they are not covered under state unemployment insurance so their employment is not represented in Research and Analysis' standard employment data series. CFOI analysts assign industry coding

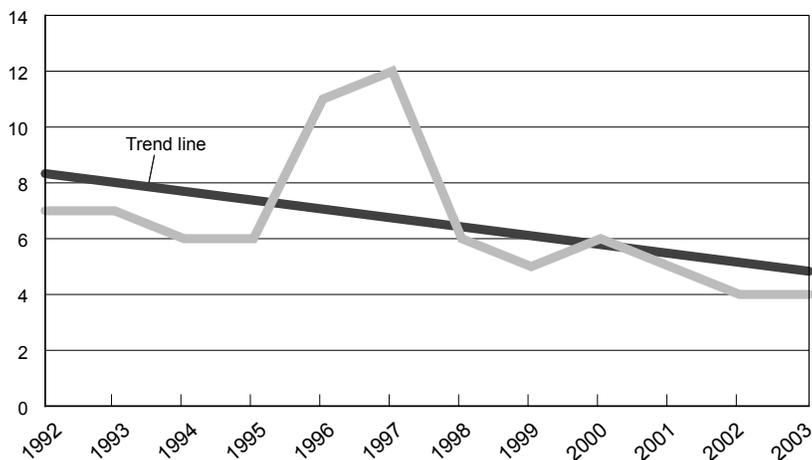
## 9 Fatalities by Industry Sector Workplace fatalities in Alaska, 2004



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics

## 10 Air Transportation Fatalities Alaska's trend is declining<sup>1</sup>

Number of Fatalities



<sup>1</sup> The number of fatalities for 2004 is not available due to U.S. Bureau of Labor Statistics' publication criteria.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics

to self-employed fatalities to reflect as close as possible the primary activity of the worker. For example, in the instance of a self-employed fisherman who was fatally injured while fishing or while doing an activity directly related to fishing, the fatality would be recorded in fishing, a subcategory of the broad industry group of agriculture, forestry, fishing and hunting.

### Fatalities by occupation

Twenty percent of Alaska's workplace fatalities in 2004, eight out of 40, were fishermen.<sup>9</sup> The other occupations that had fatalities in 2004 include vehicle operators, sailors and marine oilers, and aircraft pilots. (See Exhibit 12.)

Fishermen have made up a significant share of the total number of fatalities each year since the census began – 211 of Alaska's work-related fatalities, or nearly 30 percent, in the years from 1992 to 2004 – but the number has decreased overall since then. They averaged 22 work-related deaths from 1992 to 1996. The average dropped to 14 from 1997 to 2001 and decreased again to 10 from 2002 to 2004.

The average number of yearly fatalities for aircraft pilots<sup>10</sup> has also decreased. They averaged nine fatalities per year from 1992 to 1996, then seven a year from 1997 to 2001. The average decreased to four a year from 2002 to 2004.

When comparing the overall occupational mix of the total fatalities in Alaska and the U.S. from 1992-2004, the share represented by fishermen and aircraft pilots varies a great deal. In Alaska, fishermen and aircraft pilots accounted for 41 percent of all occupational fatalities while nationally the share was 3 percent. (See Exhibit 13.)

<sup>9</sup> CFOI refers to this occupation as "fishers, including vessel captains and officers" for the 1992-2002 period and "fishers and related workers" for the 2003-2004 period.

<sup>10</sup> CFOI refers to this occupation as "airplane pilots and navigators" for the 1992-2002 period and "aircraft pilots and flight engineers" for the 2003-2004 period.

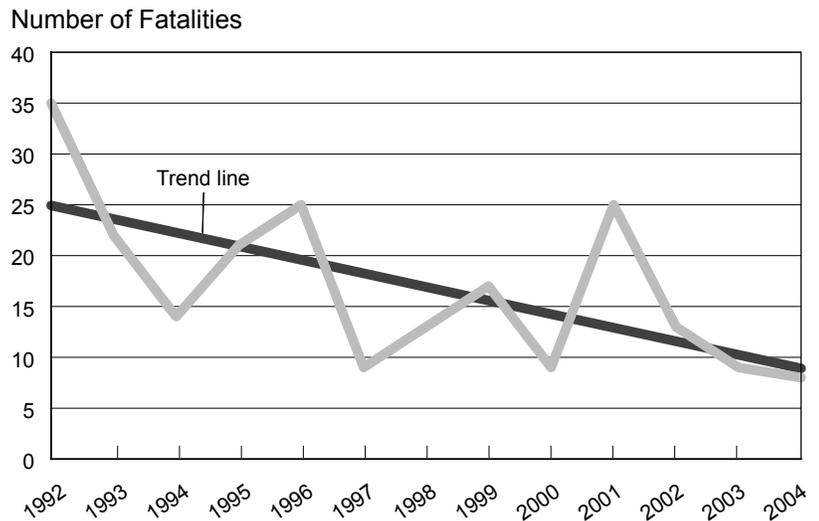
The census fatality program changed its occupational classification systems in 2003. It used the U.S. Bureau of the Census classification system until 2002, then adopted the Standard Occupational Classification system. The change in classification systems creates a number of difficulties when trying to compare data within different systems, because many occupations do not easily transfer from one system to the next. (See Exhibit 14.)

Even though it is difficult to perform a comparative analysis across multiple years for many occupations, there are certain occupations that relate directly between both systems. Two of those are the fishermen and aircraft pilot occupations, which are particularly relevant in Alaska and are detailed above.



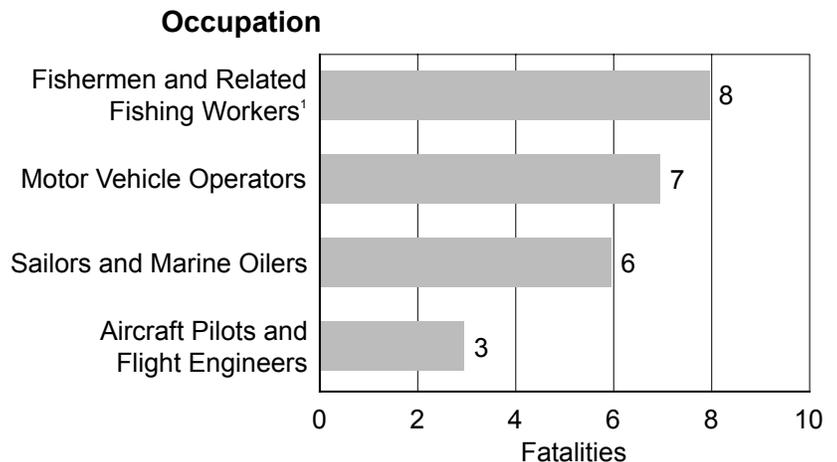
The Alaska Department of Labor and Workforce Development's Research and Analysis Section publishes both fatal and non-fatal workplace injury and illness information and data tables for readers to download on its "Workforce Info" Web site at <http://almis.labor.state.ak.us>. Click on "Occupational Information" on the blue menu bar on the left, then "Injury, Illness & Fatalities." National data as well as information for all 50 states and the District of Columbia are available from the U.S. Bureau of Labor Statistics at <http://www.bls.gov/iif/home.htm>.

## Commercial Fishing Fatalities in Alaska **11** Alaska's trend is declining



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics

## Workplace Fatalities by Occupation **12** Alaska, 2004

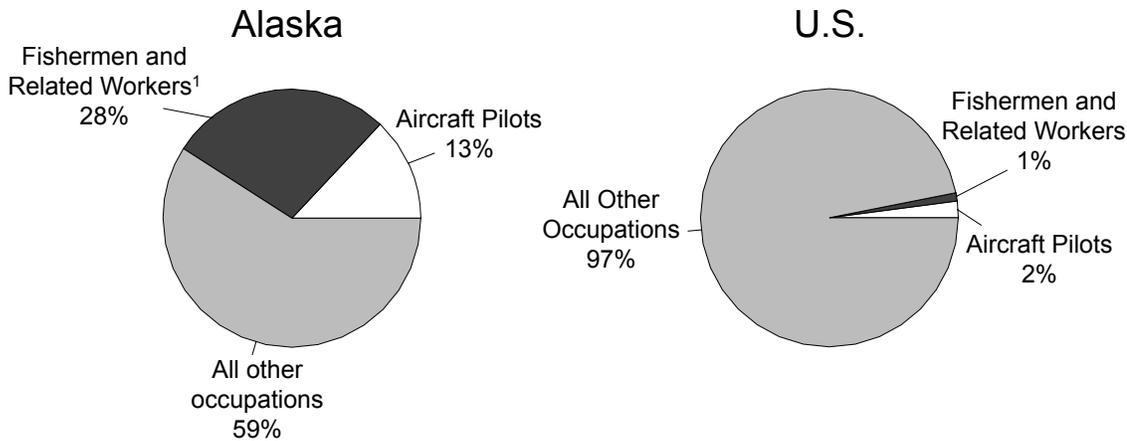


<sup>1</sup> The Census of Fatal Occupational Injuries refers to this category as "fishers and related workers."

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics

# 13 Fishermen and Aircraft Pilots

## Percent of all occupational fatalities, 1992-2004

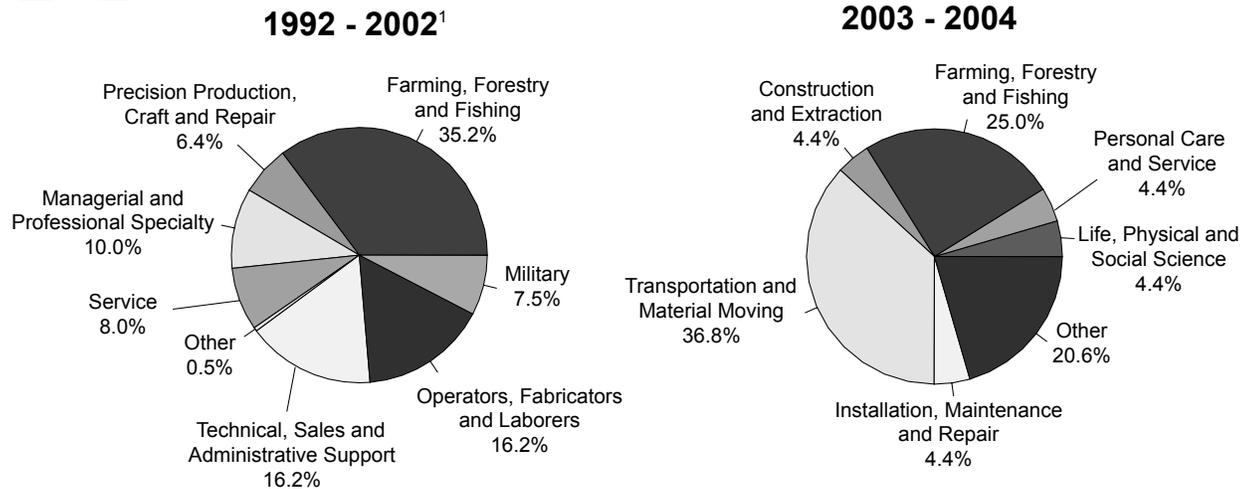


<sup>1</sup> The Census of Fatal Occupational Injuries refers to this category as “fishers and related workers.”

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics

# 14 Percentage of Fatalities by Occupational Categories

## Alaska



<sup>1</sup> The Census of Fatal Occupational Injuries used the U.S. Bureau of Census classification system for the 1992-2002 period. It has used the Standard Occupational Classification System since 2003.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Bureau of Labor Statistics