# Long Decline in Deaths at Work

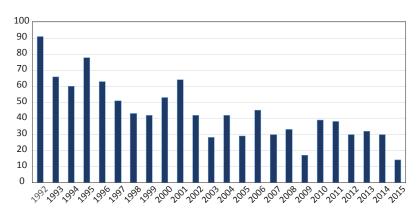
#### Alaska's rate drops near U.S. level for the first time

#### By ROB KREIGER

he number of workplace fatalities in Alaska hit a new low in 2015, a continuation of the downward trend for on-the-job deaths since statistics were first collected in 1992. (See Exhibit 1.)

In the early-to-mid-1990s, Alaska had the highest workplace fatality rate in the nation, largely driven by commercial fishing deaths, followed by flight and logging accidents. A lot has changed since then — high-fatality industries have become smaller, regulations have changed the way some indus-

# Workplace Deaths Down Considerably ALASKA, 1992 TO 2015



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

#### **About the Census of Fatal Occupational Injuries**

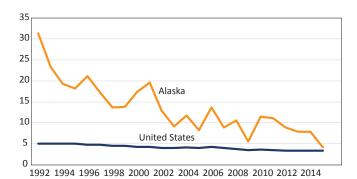
The U.S. Bureau of Labor Statistics began conducting annual surveys in 1972 to estimate injuries, illnesses, and fatalities at work. Subsequent analyses showed traumatic occupational fatalities were underreported, and widely varying estimates raised concern about using a sampled survey to estimate deaths. In response, BLS and state agencies developed the Census of Fatal Occupational Injuries, implementing it in all 50 states and the District of Columbia in 1992.

CFOI maintains a complete count of worker fatalities and analyzes them in detail. The program relies primarily on death certificates, newspaper articles, reports from federal and state agencies, and workers' compensation records. It includes employer characteristics, fatality details, and demographic information about the deceased while keeping identifying information confidential. Because these data are so specific, they're especially useful to policy makers, researchers, employers and workers, unions, trade organizations, and safety equipment manufacturers.

CFOI records any job-related death in Alaska, even if the worker was not a resident or didn't work for an Alaska company. These deaths include homicides, suicides, transportation accidents, contact with objects, falls, and exposure to harmful substances. Natural deaths that happen at work, such as heart attacks, are not part of the record. CFOI also excludes work-related illnesses.

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# Alaska Down Near U.S. Level DEATHS PER 100,000 WORKERS, 1992-2015



Note: U.S. number for 2001 does not include the fatalities resulting from the 9/11 terrorist attacks.

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

tries operate, and technology has made some dangerous activities safer.

Logging, for example, which had a large number of fatalities in the early-to-mid-'90s, barely exists in Alaska today. Other changes, such as the quota system in commercial fishing and advancements in flight technology, have made many of these jobs safer. Together, these factors brought Alaska's workplace fatality rate more in line with the nation overall.

## Work fatalities hit a low but levels remain volatile

The 14 work-related deaths recorded in Alaska in 2015 were about half the total from 2014 and down 85 percent from the high of 91 deaths in 1992. The drop is even more dramatic considering how much Alaska's total workforce had grown by 2015.

While there are clear reasons for the decline, work-place fatalities also have a random element, and the number of fatalities can be volatile from year to year. For a population as small as Alaska's, even one severe accident with multiple deaths can swing that year's rate considerably. And while the trend has been downward, certain jobs have inherent risks. Even with precautions, unforeseen situations can make a dangerous job deadly.

#### Rate similar to U.S. for first time

To compare Alaska's fatalities to other states, it's necessary to convert them to rates of death per every 100,000 workers. The nation's rate has historically ranged between 3.4 and 5.0 per 100,000. Alaska's rate

# Death Rates By State PER 100,000 WORKERS, 1992-2015

	1992 to 1996	2015
U.S. Total	5.1	3.4
Alabama	7.7	3.7
Alaska	22.9	4.1
Arizona	3.8	2.4
Arkansas	7.3	5.8
California	4.3	2.2
Colorado	5.4	2.9
Connecticut	2.1	2.6
Delaware	3.8	1.9
District of Columbia	6.6	2.4
Florida	5.5	3.1
Georgia	6.6	4.3
Hawaii	4.0	2.6
Idaho	8.9	4.8
Illinois	4.4	2.9
Indiana	5.4	3.9
lowa	5.2	3.9
Kansas	7.1	4.4
Kentucky	7.9	5.5
Louisiana	8.3	5.8
Maine	3.4	2.5
Maryland	3.3	2.4
Massachusetts	2.3	2.1
Michigan	3.5	3.1
Minnesota	3.8	2.7
Mississippi	10.2	6.8
Missouri	5.2	4.3
Montana	10.9	7.5
Nebraska	7.2	5.4
Nevada	6.2	3.5
New Hampshire	2.0	2.7
New Jersey	3.2	2.3
New Mexico	7.0	4.1
New York	4.1	2.7
New York City	5.0	2.0
North Carolina	5.3	3.4
North Dakota	7.3	12.5
Ohio	3.8	3.9
Oklahoma	7.4	5.5
Oregon	5.3	2.6
Pennsylvania	4.8	3.0
Rhode Island	2.6	1.2
South Carolina	5.6	5.6
South Dakota	7.8	4.9
		3.7
Tennessee	6.3	
Texas	5.8	4.5
Utah	6.5	3.2
Vermont	3.2	2.9
Virginia	4.4	2.8
Washington	4.0	
•	4.3	2.1
West Virginia	8.9	5.0
•	-	

Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics has swung widely, from a high of 31.4 in 1992 to the current rate of 4.1. (See Exhibit 2.)

From 1992 to 1996, Alaska had the highest average fatality rate in the country at 22.9. In contrast, by 2015, North Dakota was highest at 12.5, three times higher than Alaska, which ranked 16th. (See Exhibit 3.)

#### Most deaths transportation-related

Transportation-related accidents have always been the most common cause of workplace fatalities in Alaska, at just over two-thirds of deaths since 1992. (See Exhibit 4.)

The balance differed in 2015, though, as the lack of deaths in commercial fishing put transportation behind falls/contact with objects or equipment. (See Exhibit 5.)

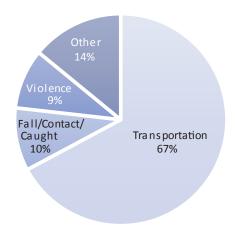
Transportation accidents are the most prevalent at the national level as well, but differ from Alaska in that most are on highways while Alaska's are associated with boats (as with commercial fishing) or aircraft.

#### Commercial fishing leads decline

The zero commercial fishing deaths reported in 2015 was a first. In 1992, 35 workers died commercial fishing in Alaska, the highest of any year available — although anecdotal figures suggest the numbers were even higher in the 1970s and '80s.

The decline in commercial fishing deaths is the main driver of Alaska's overall workplace fatality rate decline. Commercial fishing deaths began to drop in the 1990s,

## Historical Causes of Death ALASKA, 1992 TO 2015 AVERAGE



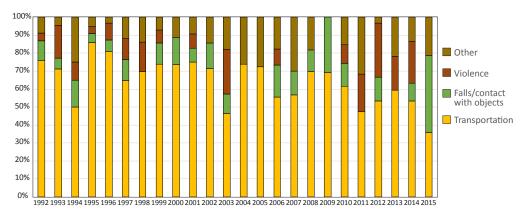
Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics

due at least partly to the individual fishing quotas implemented later in the decade.

Quotas meant fishermen no longer needed to scramble to get as many fish and crab as possible during openings that often lasted just a few days, with the combination of tight openings, high pressure, heavy competition, and unpredictable weather leading to more accidents. The reduced need to take extreme risk, fewer vessels, advancements in technology, and increased attention to safety have helped make fishing a safer way to earn a living.

### Causes of Death Shift from Year to Year

Alaska, 1992 to 2015



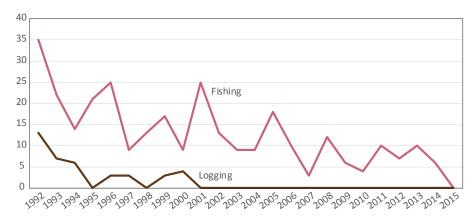
Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics

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#### No Fishing or Logging Deaths in 2015

ALASKA, 1992 TO 2015

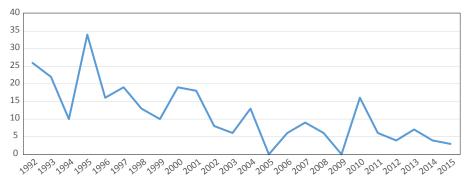


Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics



#### Airplane-Related Deaths Fluctuate

ALASKA, 1992 TO 2015



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

#### No logging deaths since 2000

At its peak, the timber industry had more than 4,000 jobs, a large slice of which were in logging, but employment has declined steadily since 1990 and so have fatalities.

In 1992, 13 logging deaths were recorded in Alaska, but with the industry decline, there were no logging deaths between 2000 and 2015. (See Exhibit 6.)

#### Plane crashes create volatility

Aircraft remain a leading cause of workplace death in Alaska. From 1992 to 2015, 26 percent of all job fatalities in Alaska were aircraft-related. In the U.S. as a

whole, it was less than 8 percent.

Exhibit 7 shows how Alaska's air fatality tallies can swing from year to year, and this volatility can be caused by a single crash. For example, in 1995, a majority of aircraft fatalities were associated with the military due to a single accident. A United States Air Force Boeing E-3 Sentry airborne early warning aircraft crashed out of Elmendorf Air Force Base, killing 24 resident military personnel. (This bump is also visible in Exhibit 2, the graph of total yearly fatalities.) Then in 2010, several planes crashed while transporting passengers on business.

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