Deaths in Alaska's Commercial Fisheries

The most dangerous job in Alaska is commercial fishing. Nearly half of all those who died on the job in the state from 1981 through 1984 were commercial fishermen. During that time, an average of nearly 26 commercial fishermen died each year, as compared with about 29 persons in all other industries combined.

Even more sobering is the rate of fatalities among commercial fishermen. Just looking at the actual numbers of deaths in different industries doesn't take into account that more or fewer people work in various industries. Fatality rates assess the relative dangers of each kind of job by measuring deaths against some standard base—here, deaths per 100,000 worker years.

1"Worker years" is a measure of full-time, year-round workers. For instance, if four persons each fish one-quarter of the year, together they account for one worker year. Using worker years lets us make comparisons between seasonal and year-round industries.

The average fatality rate for Alaska commercial fishermen between 1981 and 1984 was 320 per 100,000 worker years, as compared with an average of 15 per 100,000 for other occupations. (Figure 1 and Table 1.) So the death rate among commercial fishermen in Alaska was 20 times higher than the average for all

![Figure 1. Average Death Rates, Alaska Industries 1981-84](image)

![Figure 2. Average Annual Employment* and On-the-Job Deaths, by Alaska Industry, 1981-84](image)

*Excludes federal civilian and military employment.

**Construction includes special trades and heavy construction contractors.
other industries. That rate was also twice as high as that for the next most dangerous occupation—logging and related work in the lumber and wood products industry, which had an average fatality rate of 141 per 100,000 worker years in the early 1980s.

These are among the findings of a report the Institute of Social and Economic Research recently prepared for the Alaska Sea Grant College Program.

Alaska commercial fishing has always been known as a risky occupation, but this report marks one of the first attempts to calculate just how risky. The main problem in determining fatality rates for commercial fishermen is that it is difficult to find out just how many fishermen there are. Most commercial fishermen are considered self-employed, so they aren’t included in government statistics on wage and salary employment. However, through 1984 the Alaska Department of Labor and the Commercial Fisheries Entry Commission did estimate commercial fishing employment. ISER researchers used these estimates and the U.S. Coast Guard’s marine accident reports to calculate death rates for Alaska commercial fishermen in the early 1980s.

Most on-the-job deaths happen in a handful of occupations that make up a relatively small part of all jobs in Alaska. The most dangerous occupations—as measured both by numbers of deaths and death rates—are commercial fishing; logging and related work in the lumber industry; residential and heavy construction; and piloting or other work in air transportation. All those occupations had fatality rates at least three times higher than the average for all industries, and together they accounted for 72 percent of on-the-job deaths between 1981 and 1984. Yet those occupations accounted for just 14 percent of average annual employment in Alaska during that period. (Figure 2 and Table 1.)

Of the fishermen who died in Alaska waters in the early 1980s, half were killed when their boats sank or capsized and one-quarter died when they fell overboard. (Figure 3.)

The state government has not made those estimates since 1984.

![Causess of Death in Fishing Accidents Cumulative Deaths, 1981-85](chart)

Editor’s note: This summary is based on Fatality Rates in the Alaska Commercial Fishing Industry by Gunnar Knapp and Nick Ronan. Copies are available for $1.00 from ISER, 3211 Providence Drive, Anchorage, AK 99508 (phone 786-7710).

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<thead>
<tr>
<th>Table 1. Average Annual Employment, Deaths, and Death Rates, Selected Alaska Industries 1981-84</th>
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<tbody>
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<td>Average Annual Employment (worker years)</td>
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<td>----------------------------------------</td>
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<tr>
<td>Commercial Fishing</td>
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<tr>
<td>All industries, excluding commercial fishing</td>
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<tr>
<td>Lumber &amp; Wood Products</td>
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<tr>
<td>Transportation by air</td>
</tr>
<tr>
<td>Special trade &amp; heavy construction contractors</td>
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</tbody>
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