

Fishing deaths continue to decline

Commercial fatalities down 50+ percent over 3 decades

By TRACY ERICKSON

The seafood industry in Alaska generates billions of dollars each year, but the substantial economic benefits of commercial fishing come with physical risks. Seafood harvesters face a range of hazards, including extreme weather, unpredictable ocean swells, heavy gear, frigid ocean temperatures, and grueling work.

While it remains a dangerous profession, fishing has gotten steadily safer over the last three decades. The total number of commercial fishing fatalities in Alaska fell 50.6 percent from the 1990s to the 2010s. (See the graph on the right.)

The percentage of total workplace deaths in Alaska that came from fishing also decreased, from 32 percent from 1992-1999 to 22 percent in 2020-2021. (For more on the Census for Fatalities and Occupational Injuries, see the sidebar on page 12.)

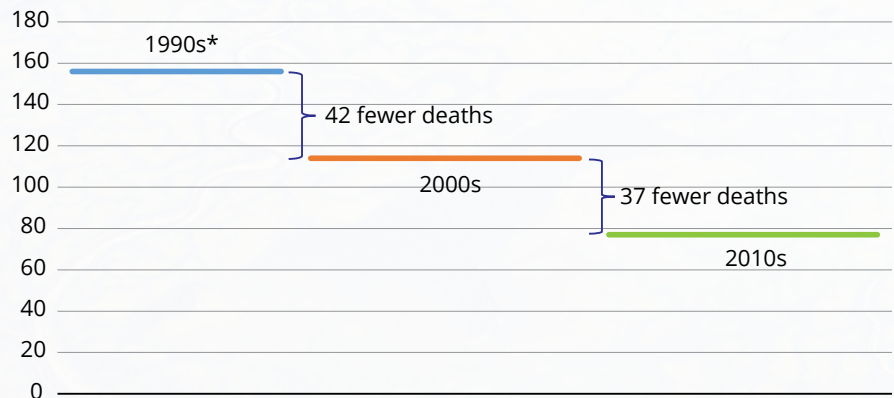
Decreases in fishing deaths and share of total workplace deaths

During the 1990s, commercial fishing's average fatality rate was 20 per year, accounting for 32 percent of all Alaska workplace deaths.

The number of fishing deaths fell in the decade that followed, to an average of 11 per year. Seafood harvesting still represented 30 percent of all deaths at work during the 2000s, but Alaska's total had also dropped from the previous decade, from an average of 62 per year to 38.

The average fell again from 2010-2019, to eight

Alaska's total fish harvesting deaths decrease



*This data set began in 1992.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section and Bureau of Labor Statistics, Census of Fatal Occupational Injuries

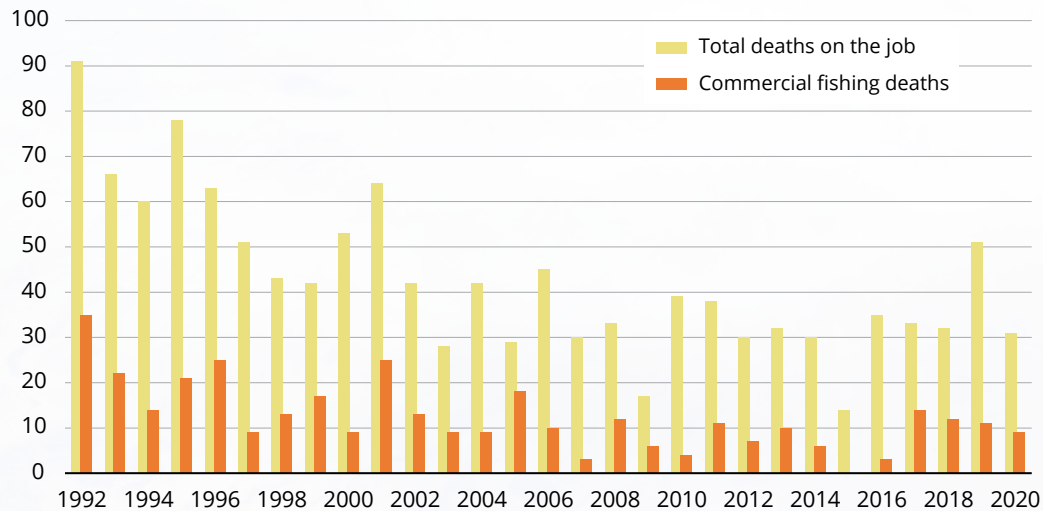
commercial fishing deaths annually, making up 23 percent of all Alaska workplace fatalities. While that's still a significant share for a single industry, commercial fishing is no longer the biggest contributor. In most years since 2015, the largest percentage of Alaska workplace deaths has come from transportation.

Over the last three decades, 1992 had the highest number of fishing deaths at 35. The lowest was zero in 2015, the only year in that span with no harvesting fatalities.

Measures that have reduced fishing fatality rates over time

Multiple regulatory bodies oversee every aspect of commercial fishing, from harvests and openings to the safety of harvesters and vessels. Over the last few decades, several new safety regulations and interventions for specific fisheries have promoted a steady decline in seafood harvesting deaths.

Fishing and total workplace deaths in Alaska since 1992



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section and Bureau of Labor Statistics, Census of Fatal Occupational Injuries

The Magnuson-Stevens Act

The Magnuson-Stevens Fishery Conservation and Management Act is the primary law that governs marine fisheries management in federal waters. The act was first passed in 1976, and in 1996, it added National Standard 10, to which all fisheries management plans conform, with the intent to promote the safety of life at sea "to the extent practicable."

The North Pacific Fishery Management Council oversees Alaska and develops these fisheries management plans in consultation with the Coast Guard, with specific requirements for each region's fishery that are subject to approval by the U.S. Secretary of Commerce.

The National Marine Fisheries Service, part of the National Oceanic and Atmospheric Administration, oversees enforcement.

The Commercial Fishing Vessel Safety Act

The Commercial Fishing Industry Vessel Safety Act of 1988 requires the U.S. Coast Guard to inspect all commercial fishing vessels once every five years, although the Coast Guard recommends once every

two years. Safety requirements vary by vessel size, proximity to the coastline, and water temperatures, and include personal and throwable flotation devices, survival crafts and their stowage, markings, running lights, distress signals, fire suppression equipment, emergency position-indicating radio beacons, waste management plans,

Coast Guard placards on injury and spill reporting, communication and navigation equipment, vessel alarms, and first aid supplies.

Quota systems for crab, sablefish

In 1995, the Alaska halibut and sablefish fisheries implemented an individual fishing quota

management regime, as recommended by the North Pacific Fishery Management Council, which shifted them away from derby-style openings.

While the main purpose for the change was conservation, a quota system sets an allowed amount of fish per season and gives fishermen more time to harvest their catch as opposed to a derby, where they try to catch as much as possible during an opening.

Some fishing fleets have reduced their size because of the quota system. A decrease in halibut

Salmon fisheries have the lowest harvesting death rates. By salmon species, the highest rate is for drift gillnetters, followed by set gillnetters and commercial trollers.

About the occupational fatalities data

The 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 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 any identifying information confidential. Because the data are so specific, they're especially useful to policymakers, researchers, concerned 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-based 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.

fishing deaths also followed this change, although a direct cause and effect couldn't be determined.

Bering Sea/Aleutians crab fleet checks

One of the more notable policies that improved seafood harvesting safety was created for the Bering Sea/Aleutian Islands crab fleet.

In 1999, a federal safety report determined the main cause of death in the fleet was drowning, as the vessels would become overloaded with crab pots and ice and then capsize.

The fishery began preseason dockside stability and safety checks, a program that assessed vessel pot load before departure. The fleet's death rate fell from eight per year to less than one.

The Bering Sea crab fishery also changed from derby-style openings to a quota system in 2005, which extended the season, consolidated the fleet, and allowed for smaller pot loads as well as more experienced and less fatigued crew members.

Permit holders with quota shares can pool the harvest on fewer vessels, allowing more experienced workers to be out on the boats crabbing. The quota system's extended openings also give deckhands more time at sea.

Agreement for freezer trawlers, longliners

The Alternate Compliance Safety Agreement was created in 2006 to address the additional dangers of working on freezer trawlers and freezer

longliners. This Coast Guard initiative addressed multiple issues, but the most prominent was the overall condition of vessels' hulls and their stability.

While other trawlers and longline vessels deliver their catches to a tender or processing plant, freezer trawlers and longliners have factories aboard to process and store the fish. They have larger crews and remain at sea longer, operating in remote areas of the Bering Sea where rescues are difficult. Freezers come with the additional risks of fires and explosions as well as exposure to toxic gases such as anhydrous ammonia or Freon.

Both types of vessels' death rates fell after compliance, and a federal longitudinal study found that all types of accidents had also declined on these boats.

Multiple layers of Fish and Game measures

The Alaska Department of Fish and Game's multiple safety measures include daytime-only openings, delays in openings when weather is dangerous, limits on salmon net lengths and size, and sharing of information with Alaska State Wildlife Troopers and the Coast Guard to ensure their presence in areas where fishing fleets are concentrated.

Fish and Game also partners with the National Marine Fisheries Service, the North Pacific Fishery Management Council, and other stakeholders to reduce duplicate efforts and regulations.

Tracy Erickson is a research analyst in Juneau. Reach her at (907) 465-6042 or tracy.erickson@alaska.gov.