

# Preventing commercial fishing deaths in the United States

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## Background/Introduction

In the United States, as in other countries, commercial fishing has the highest fatality rate of any occupation. Most of these fatalities are due to drowning. During 1992–2008, an annual average of 58 reported deaths occurred (128 deaths/100,000), compared with an average of 5,894 deaths (four/100,000) among all U.S. workers.

## Aims/Objectives

The purpose of this report is to identify the drowning hazards and risk factors for all causes of occupational mortality in the U.S. commercial fishing industry, and to explore how those hazards and risk factors differ among fisheries and locations.

## Methods/Implementation

The National Institute for Occupational Safety and Health (NIOSH) developed the Commercial Fishing Incident Database (CFID) to collect data on hazards and risk factors for drowning mortality in the U.S. commercial fishing industry, and to explore how hazards and risk factors differ among fisheries and locations. Data were collected and analyzed on each fatality during 2000–2009 from multiple sources in each state, including reports from the U.S. Coast Guard (USCG), local law enforcement agencies, and media; death certificates; and state-based occupational fatality surveillance programs. Causes of death are collected from either death certificates or from investigative reports.

## Results/Evaluation

From 2000–2009, there were 504 U.S. commercial fishing deaths. Most were caused by drowning (431, 86%), blunt force trauma (39, 8%), poisoning (12, 2%), and other causes (22, 4%). The majority of these fatalities occurred following a vessel disaster (capsize, fire, or sinking resulting in the crew abandoning the vessel) (261, 52%) or a fall overboard (155, 31%). By region, 133 (26%) deaths occurred off the coast of Alaska, 124 (25%) in the Northeast, 116 (23%) in the Gulf of Mexico, 83 (16%) off the West Coast, and 41 (8%) in the Mid and South Atlantic. By type of fishing, deaths most commonly occurred while fishing for shellfish (226, 45%), groundfish (144, 29%), or pelagic fish (97, 19%).

## Discussion

Drownings due to vessel disasters and falls overboard were the main incidents leading to fatalities. Current safety regulations require that vessels carry various pieces of emergency equipment depending on vessel size and the operating area. This equipment has been shown to save lives by keeping crew warm and afloat until rescued, thus focusing on survival rather than prevention of vessel disasters, falls overboard, or deck injuries. In addition, crew members are not required by law to wear a personal flotation device (PFD) while working on deck.

None of the 155 workers who died from falls overboard during 2000–2009 were wearing PFDs. Increasing industry awareness and use of PFDs (including new styles that are integrated into work clothes) and fall overboard alarms likely would reduce the risk for death. Persons fishing alone should use safety devices that can stop the engine if they fall overboard and all vessel operators and crew should have a plan that will allow them to reenter the vessel. PFD use also would increase survival rates in incidents in which the vessel rapidly capsizes or where immersion suits are not accessible (i.e., when in a skiff).

To reduce drowning fatalities in this industry, additional drowning prevention measures tailored to specific high-risk fisheries and focusing on prevention of vessel disasters and falls overboard are needed. Safety improvements in the commercial fishing industry in Alaska occurred as a result of several interventions, including safety regulations, marine safety training, and fishery-specific interventions focusing on unique hazards of those particular fisheries. Additional efforts also are needed to help prevent falls overboard and increase PFD usage among crew members.

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