

Occupational Safety and Compliance in the Maine Commercial Fishing Industry: Status Report and Policy Recommendations

Ann Backus¹ and Mary E Davis¹⁻⁴

¹ Department of Environmental Health, Harvard School of Public Health, Boston, MA

² Department of Urban and Environmental Policy and Planning, Tufts University, Medford, MA

³ Marine Policy Center, Woods Hole Oceanographic Institution, Woods Hole, MA

⁴ School of Economics, University of Maine, Orono, ME

Abstract

This report presents the results of the Maine Sea Grant funded study ‘Safety and Compliance in the Maine Commercial Fishing Industry’. During a two year period, data were collected on safety equipment and training, captain sociodemographic characteristics, and fishermen risk preferences from a representative sample of inshore fishermen along the coast of the state of Maine. This report explores trends in safety and regulatory compliance and links this information to sociodemographic and risk preferences of the sampled commercial fishing vessel captains. More than 40% of vessels were found to be non-compliant with applicable vessel-specific safety regulations, and that rate was higher among vessels subjected by federal law to more stringent and costly safety requirements. The vast majority of fishermen were not safety trained, and many were not familiar with the proper use and maintenance of life-saving equipment. Fishermen had a tendency to minimize the risks, and for this reason would be unlikely to participate in non-mandated safety training. It is clear that more stringent safety regulations will require a strong education and enforcement effort on the part of regulators to ensure that fishermen comply with the new stronger regulations that were passed at the federal level in October 2010.

Level of Captain Safety Training

Table 1:

Safety Training	Received training within the last 5 years	Received training more than 5 years ago	Never trained
First Aid	24%	42%	34%
CPR	24%	50%	26%
Drill Conductor Course	13%	9%	78%
Life Raft Training	17%	17%	66%
Survival Suit Training	19%	22%	59%
Cold Water Training	11% 76%	11%	76%

Safety Equipment on Surveyed Vessels

Table 2:

Safety Equipment	Approximate Cost of Equipment (Routine Servicing Costs)	Percentage of Vessels with Equipment
Survival Craft ¹	\$3,060 (annual service cost \$650-\$950)	36%
EPIRB \$650	(2-year service cost \$150; 5-year service cost \$200)	54%
First Aid Kit ²	\$78	89%
Survival Suits	\$318	75%
Horn	\$20-\$238	90%
Working Navigation Lights	\$180-\$412	90%
USCG Safety Decal ⁴	Free	24%
Vessel-specific non-compliance rate		42.4%

The following safety equipment was on 95% or more of the surveyed vessels:

Personal Flotation Device (PFD); Radio, Compass, Anchor, Ring Buoy, Flares (replaced every 3 years)
Fire Extinguisher, Bilge Pump, and GPS.

Risk Attitudes

The Maine captains surveyed generally reported being risk-loving rather than risk-averse in their daily lives.

- Approximately 30% smoked tobacco compared to 22% of men more generally in Maine in 2008 (ME CDC 2010).
- Nearly half of all captains reported wearing seatbelts while driving a car, an average that is substantially lower than the national rate of 81% for US males (NHTSA 2009).
- Many fishermen reported second jobs in other well-known risky occupations, such as logging, trucking, and firefighting.
- A surprising 12% of fishermen reported being unable to swim and 17% of fishermen were observed fishing alone, both of which represent important occupational risk factors for fishing.