The Use of Personal Flotation Devices in the Northeast Lobster Fishing Industry: An Examination of the Decision Making Process

Julie Sorensen

The Northeast Center for Occupational Health and Safety: Agriculture, Forestry and Fishing, USA

1. Introduction

Although commercial fisheries account for a small proportion of the U.S. workforce they account for a significant proportion of U.S. occupational fatalities. The rates of occupational fatality in commercial fishing are higher than any other industry, with 33% of commercial fishing fatalities occurring on the East Coast. Although risk factors and incident types vary by region, vessel disasters and falls overboard are the most common cause of commercial fishing death on the East Coast and lobster fishermen account for the greatest number of falls overboard deaths (Lincoln and Lucas, 2010). For each of these incident types, the use of personal flotation devices (PFDs) would greatly increase the victim’s chances of survival (Lincoln and Lucas, 2010). Although fishermen are required to have PFDs onboard fishing vessels, due to US Coast Guard regulations, the frequent use of PFDs is relatively rare. The focus of this qualitative study was to understand lobster fishermen’s safety concerns, safety practices and attitudes regarding PFD use and to develop an explanatory model which would illustrate the factors that prevent or support use of PFDs amongst lobster fishermen in the Northeast.

2. Methods

Fishermen (both captains and sternmen) were recruited for the study using contact lists provided by a commercial fishing, health insurance provider and by networking with commercial fishermen at fishing association meetings and via dock-side visits. Interviews were typically under an hour long and discussions were audio-taped and transcribed. Interviews included a discussion of overall safety practices, as well as perspectives and experiences related to PFD use. A Grounded Theory analytical framework was used to review interview data, as the purpose of the study was to describe fishermen’s lived experiences with risk and safety, and to develop a theory regarding how risk is negotiated and how safety decisions are made. In this process, one research consultant assigned codes (i.e. labels which capture the main idea of a segment of transcript) and these codes were then reviewed by the principle investigator and all three interviewers. Coding and categorization continued iteratively until a theory of PFD use and risk and safety decision making processes was developed. At the conclusion of the study, 26 commercial fishermen had participated in interviews, with only one individual refusing to participate (96% response rate).

3. Results

Fishermen described themselves as being ‘safety aware’ and discussed safety activities that they regularly engage in. These included efforts to keep the boat running well, efforts to conform to US Coast Guard safety mandates and safety improvements to equipment that would also beneficially impact working conditions, such as rope lockers which reduce clutter on the deck of commercial fishing vessels. Despite these safety measures, very few fishermen indicated using PFDs on a regular or even rare basis. Primary factors for lack of PFD use were related to 1) comfort - fishermen felt PFDs were bulky, uncomfortable and made work difficult (several mentioned that PFD use could increase the risk of injury by getting entangled in equipment), 2) risk acceptance - fishermen also discussed the inherent risk of fishing and that it was necessary to accept these risk to some degree, “or you would never fish”, 3) social stigma - fishermen indicated that due to the lack of regular PFD use, wearing one appears strange or outside the norm (participants indicated that PFD use can even be construed as a sign of inexperience, or of overly cautious behavior) and 4) concerns about falling overboard with a PFD and never being found (prolonging the agony of a fall overboard).

4. Discussion

Based on these discussions with lobster fishermen working in the Northeast, increasing PFD use will require working closely with the fishing community to improve PFD designs and to trial these designs, in order to...
increase worker satisfaction. In addition to improving designs, interventional efforts will need to make PFD designs more socially desirable and address fishermen’s dismissal of falls overboard risks. Additional aspects that seem important to consider based on interviews, include the addition of location devices, such as EPIRBs as well as kill switches to stop boats in event of a fall overboard which can increase fishermen’s confidence about being rescued.

References