

Building Capacity for Fishermen First Aid Safety Training

Project Period: 12/1/2018-11/30/2019

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REPORT NARRATIVE

Executive Summary

Our project, *Building Capacity for Fishermen First Aid and Safety Training*, originated from our engaged research project with the Dungeness crab fishing fleet. Fishermen made it clear that they wanted to be safe on the water, but that the current first aid courses available to them were not tailored to fishing. This project:

1. Demonstrated the feasibility of providing locally-based, commercial fishing-specific, austere first aid training to crews in the Dungeness crab fleet with successful FFAST courses in Oregon.
2. Documented the effectiveness and acceptability of commercial fishing-specific austere first aid training for Dungeness crab fishermen; the course was universally reported to be useful, and participants expressed greater confidence in managing emergencies.
3. Established a sustainable, scalable process for providing commercial fishing-specific austere first aid training by successfully obtaining USCG/NIOSH commercial fishing safety training grant funds to expand and deliver FFAST training to fishermen.

Activities and Accomplishments

The focus of this project was to set the stage to deliver and sustain first aid training. During the project period, we have completed the following activities:

1. Fisherman First Aid and Safety Training (FFAST) curriculum
https://www.youtube.com/playlist?list=PLDKoV89-TPSCWHAhFwASl_sT2RyYxZTGN
2. Identification and training of 2 FFAST instructors
3. Acquisition of training support materials (first aid kit supplies and manikins)
4. Providing first aid training to fishermen 4 total courses
5. Obtaining ongoing support for scaling up and sustainability

INDICATOR DATA

1. Ability to recruit appropriate and motivated first aid instructors, even beyond Oregon.
2. Acceptability and appropriateness of FFAST courses: Notably, two-thirds of participants were deckhands; often, intact vessel crews attended together. Commercial fishing experience averaged 14 years, ranging from one rookie fisherman to 40-years of experience for one skipper.
3. The courses were well received and effective: All participants rated the course as either “very useful” (76%) or “useful” (24%), and all participants reported they were either “extremely likely” (71%) or “likely” (29%) to recommend the course to others. At the close of the course, participants reported greater confidence in their ability to manage at-sea emergencies and keep their fellow crewmembers safe.
4. Ongoing external interest in commercial fishing-specific first aid.

Progress and outcomes

RELEVANCE

Despite substantial progress in reducing fatalities in US commercial fishing, non-fatal injuries have remained a challenge. Non-fatal injuries—even injuries that are not life-threatening—can lead to lost income, disability, expense, and early retirement. Our surveys in Oregon suggest that approximately 20% of fishermen suffer an injury in any given year, that half of those injuries result in lost work or modification of work tasks, that most are gear-related, and that the vast majority of injuries are first treated on board a vessel. Not all injuries can be prevented, and when injuries occur at sea, rapid and effective treatment is crucial. Land-based first aid—“stop the bleeding and call 911”—does not work at sea. First aid tailored to commercial fishing has been identified by fishermen in our earlier research as an important area for development.

RESPONSE

This program—Fishermen First Aid and Safety Training (FFAST)—has addressed the challenges of developing a first aid curriculum specifically tailored to commercial fishing, and testing a model for sustaining first aid training in coastal communities. The course covers the following topics: Assessment, wounds/burns, orthopedic injuries, head/spine injuries, environmental injuries, drowning, respiratory/cardiac, patient packaging/transport, first aid kits, and prevention.

RESULTS

1. Demonstrate feasibility. The revised FFAST curriculum was presented twice at Englund Marine in Astoria, Oregon. Fourteen fishermen took part in the 20-21 March course, and fifteen in the 14-15 November course. A Sea Grant faculty member (Amanda Gladics, Clatsop County Extension Fisheries Management) was instrumental in recruiting participants, engaging local stakeholders, identifying an appropriate local venue, and assisting with course logistics; she has become an integral part of the FFAST team, and an important liaison with fishermen and coastal communities.

As part of feasibility, we demonstrated our ability to support first aid kits as an integral element of first aid training. Our earlier work indicated that fishermen wanted information on first aid kits (e.g. what to include, how to use contents); we therefore included first aid kits as a “perk” of participating in the course, and assured that the curriculum taught fishermen when to and how to use each of the items in their kits.

2. Document effectiveness and acceptability. The courses were well-received and effective. All participants rated the course as either “very useful” (82%) or “useful” (18%), and all participants reported they were either “extremely likely” (77%) or “likely” (23%) to recommend the course to others. In open-ended comments, participants most often reported favorably about the active nature of the course: the most common responses included “drills on vessels” and “hands on training,” reflecting our intended focus for the course on skill development and training specific to commercial fishing. Fishermen appreciated that the course was specifically tailored to them. Several participants suggested that *more* time (e.g. another day) to learn and practice would improve the course; while we don’t feel it is realistic to add a day to the course, these recommendations suggest that we should find yet more time in the curriculum for hands-on training.

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3. Establish sustainable first aid training. As part of this project, we increased capacity to present first aid training to commercial fishermen. First, by working with our Sea Grant colleagues in Astoria and Newport, we established liaisons with local organizations to enhance recruitment for courses and identify venues for training. Second, we supported formal wilderness first aid training for Kevin Buch, the diving safety and small vessel safety office for OSU. By adding wilderness first aid training to his existing skills, we were able to quickly add an instructor whose existing experience with marine safety made him immediately acceptable to our course participants. During the course of this project, we identified an additional two instructors, who are going on to receive wilderness first aid and first aid/CPR instructor training. As predicted, the most promising and effective instructors were those who already had connections with commercial fishing, maritime safety, and coastal communities. Third, the promising results from this initial effort were sufficient to obtain additional support (see details below under "additional funding") to scale up the FFAST approach and expand its reach.

Broader impact

Our primary audience is commercial fishing crews, and the captains and owners of commercial fishing vessels who support the training of their crews. To date, our training has focused on crews of relatively small vessels—the original impetus for FFAST came from Dungeness crab fishermen.

Additional Resources

Brief article entitled, The safest catch: public health researchers cast a safety net for commercial fishermen, published in OSU's CPHHS publication, Synergies in October 2018. <http://synergies.oregonstate.edu/2018/the-safest-catch/>

The video, hosted by OSU's Marine Studies Initiative, describes FFAST and features Oregon Sea Grant's Amanda Gladics as well as local fishermen:

https://www.youtube.com/watch?v=4c3_x4wIYm4&feature=youtu.be