

Oregon Crab Fishing Safety Evaluation

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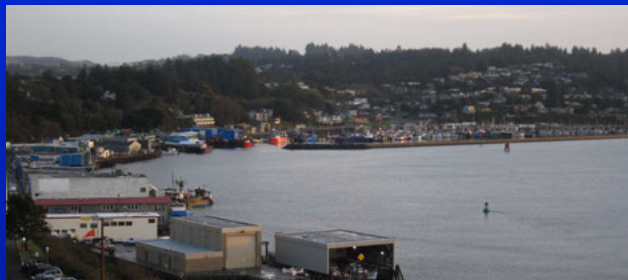
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Background

- Dungeness crab commercial fishing fatality rate: 463 deaths/100,000 full time workers
- Rate is 4X commercial fishing national average
- Oregon 2003-09: 14 fatalities (8 incidents)
- 3 man overboard, 5 capsizings (bar crossing)
- **None of the victims were wearing a PFD**

Newport, OR Harbor



Study Objectives

1. Identify experiences and views regarding critical safety issues:
 - Falling overboard & capsizing experience/concerns
 - PFD use
 - Vessel stability reports
 - USCG dockside safety inspections
 - Safety training and readiness
2. Evaluate selected PFDs for use in Dungeness crab fishery



Study Approach

1. **Dockside survey**
 - Newport, OR
 - Prior to season start
 - ~15 minutes to complete
 - Additional questions for ship captain
 - Recruit crewmembers for PFD assessment
2. **PFD Assessment**
 - 50 PFDs (5 types x 10) randomly distributed
 - Complete survey after 1 & 30 days of PFD use
 - Survey: PFD use, comfort, affect on work



Similar study design and approach as work conducted by Jennifer Lincoln in Alaska



Survey Participant Demographic Summary

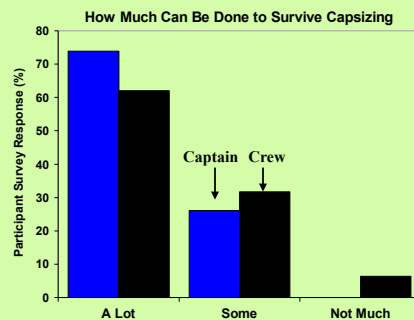
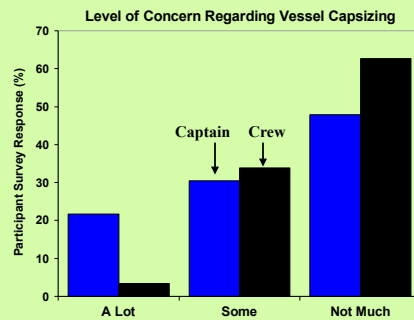
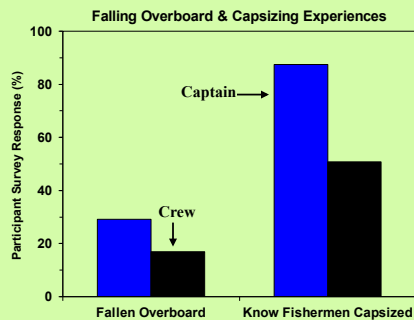
	<u>Captain (n = 24)</u>			<u>Crew (n = 59)</u>		
	Mean	SD	Range	Mean	SD	Range
Age	48.3	13.9	19-66	33.1	10.9	19-61
Years crab fishing	24.2	12.2	2-42	7.2	6.5	0-28
Residence (%)						
- Oregon	86.2			87.0		
- Alaska	4.4			6.2		



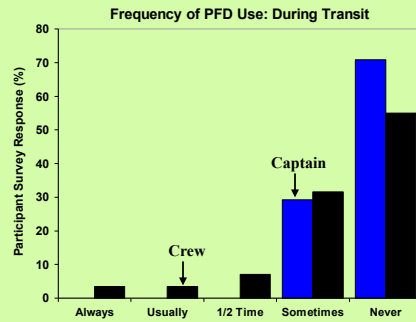
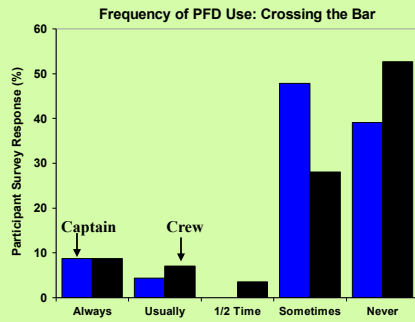
Newport, OR Crab Fishery

	Mean (range)
Vessel length (feet)	33.9 (36 – 85)
Crewmembers	3.5 (2 – 5)
Crab pots carried	200 (30 – 500)
Homeport: Newport, OR	82.6%
Months/year crab fishing	4.8 (1-12)
Times/week crab fishing	
- First 2 months of season	3.3 (1-7)
- After first 2 months	2.3 (1-7)
Fishing trip duration (days)	3.2 (1-11)

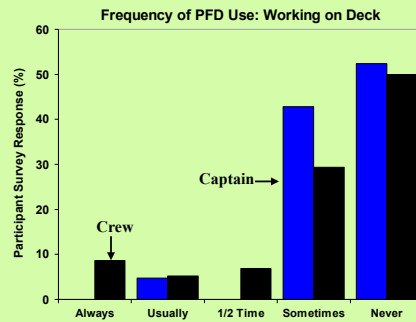
Falling Overboard & Capsizing: Experiences & Perceptions



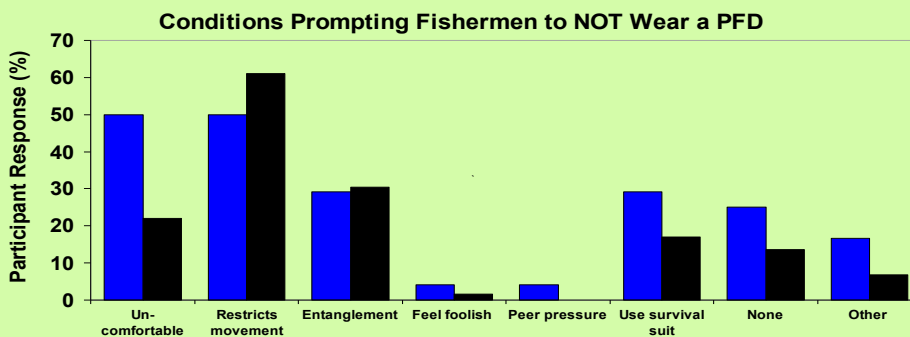
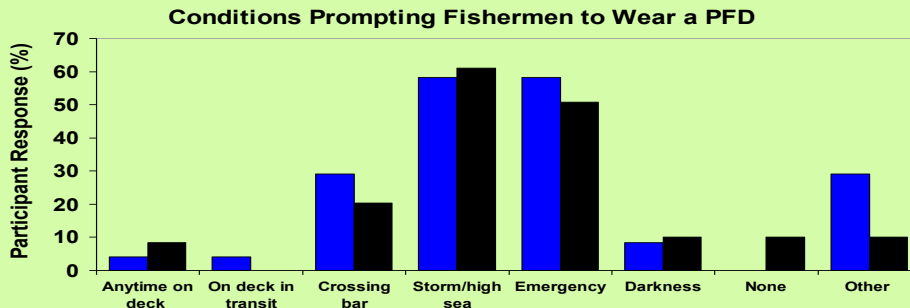
Crab Fishermen Frequency of PFD Use



Plaques commemorating fallen fishermen on sidewalk at Newport Harbor



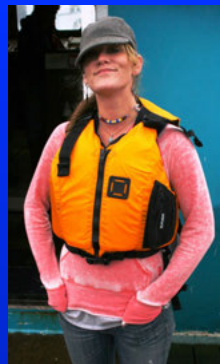
Conditions Prompting Whether PFDs Are Worn



Crab Fishermen PFD Assessment

- 50 PFDs distributed
- Received 5 surveys after one day of PFD use
- Received 16 surveys through US Mail
- Additional 17 surveys completed by phone
- Also emailed and mailed surveys to participants
- Total of 33 surveys completed (66%)

Newport, OR Bar



← Kokatat Kayak Vest (6)

Mustang Vest (8) →



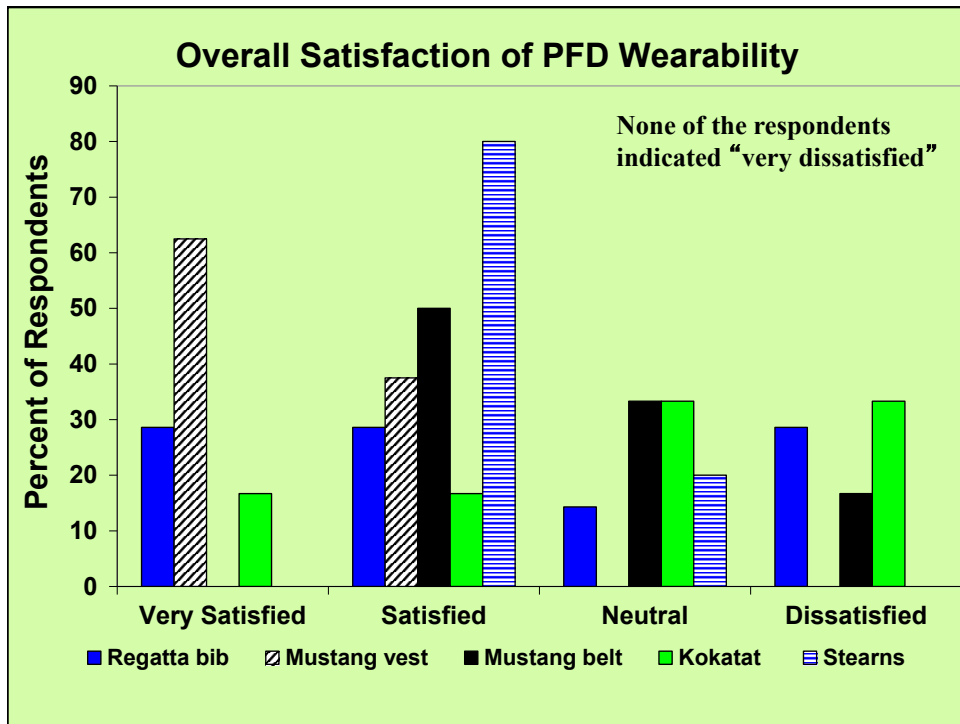
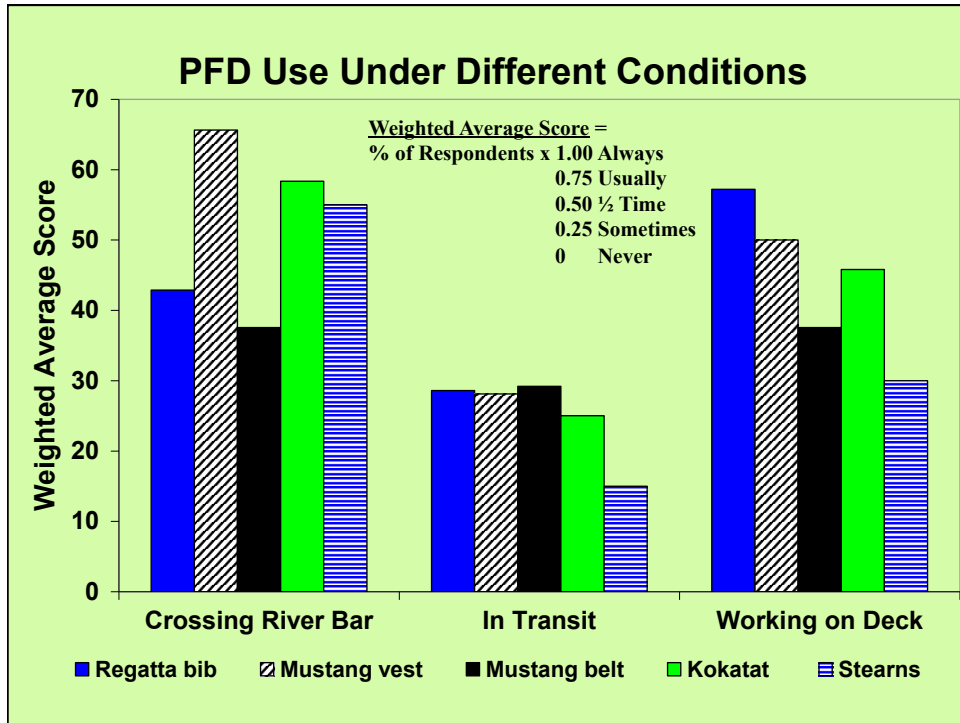
Mustang Belt Pack (6)

Regatta Bib (7) →

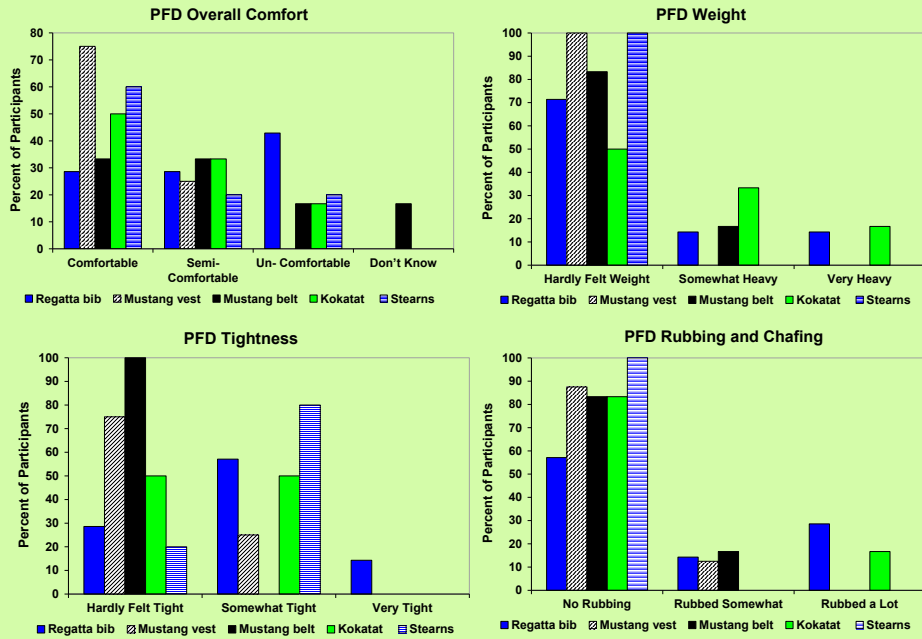


← Stearns Life Vest (5)

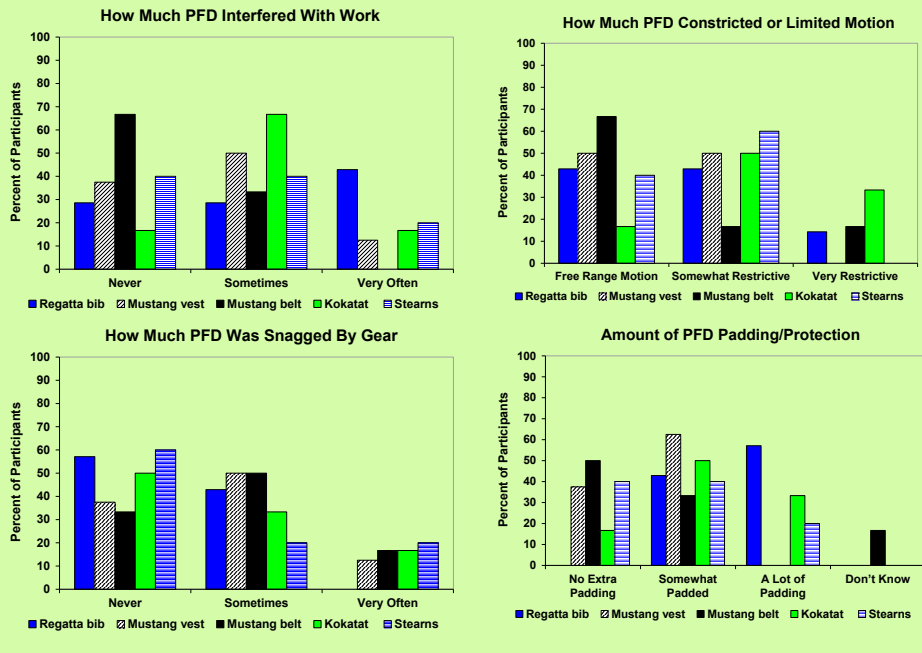




PFD Assessment: Comfort Characteristics



PFD Assessment: Ability to Work Characteristics



Summary & Conclusions

- OR crab fishermen aware of hazard
- Hazard concern and PFD use vary considerably
- PFD use corresponds with relative hazard
- PFDs not used because of:
comfort, entanglement, constricted movement
- “New” PFD designs may encourage increased use

*For, though from out our bourne of time and place
The flood may bear me far,
I hope NOT to see my Pilot face to face
FOR I HAVE WORN A PFD, when I crossed the bar.*

Crossing the Bar, Alfred Lord Tennyson
(Emphasis on modifications)