

Injury Risk Perception of Commercial Dungeness Crab Fishermen

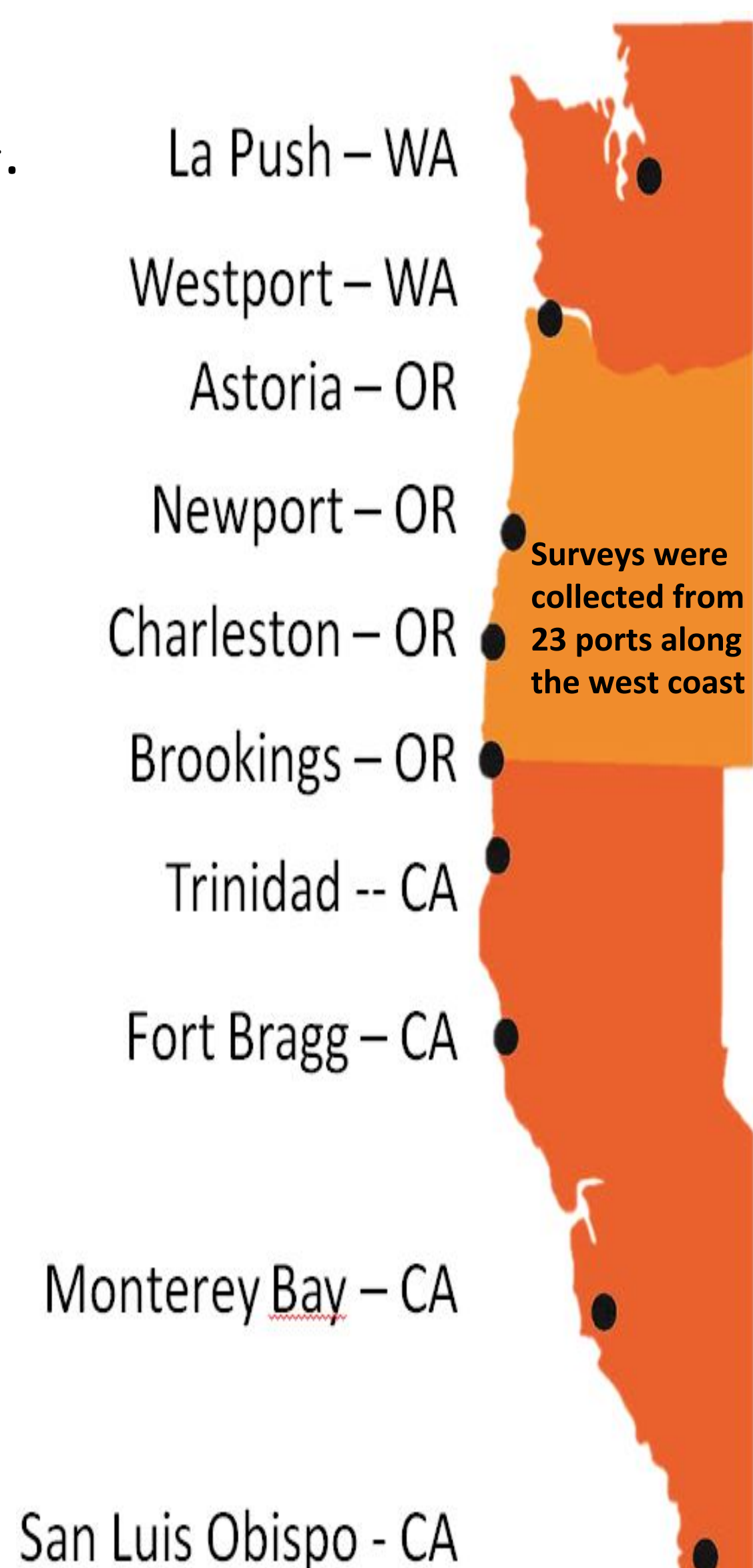
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Introduction

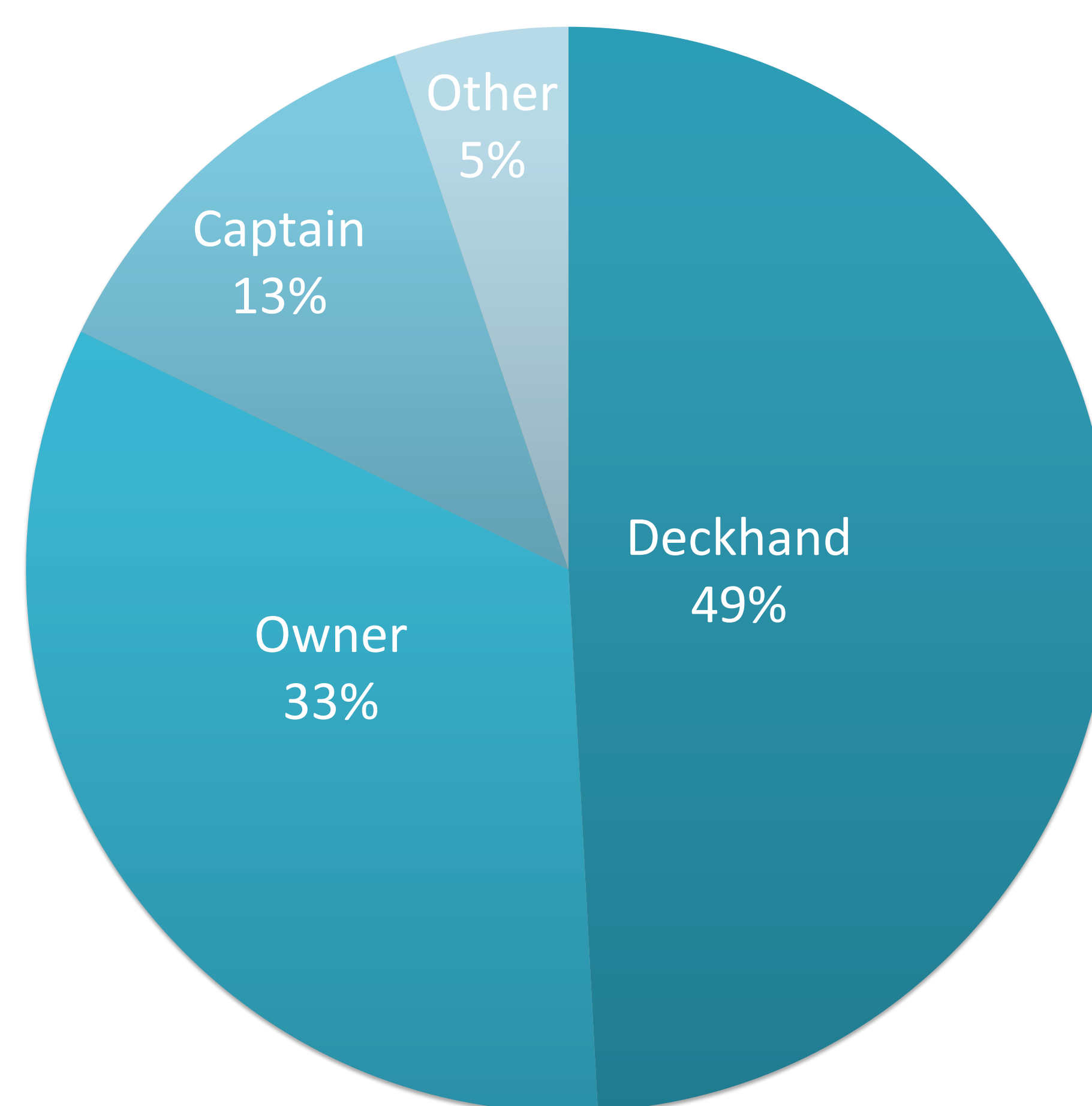
- Commercial fishing is one of the most dangerous professions in the United States¹.
- Between 2002-2014 Dungeness crab fishermen had 209 fatalities per 100,000 full-time equivalent workers².
- 405 surveys were collected by community researchers before the 2015-2016 Dungeness crab season.
- We examine here the association of injury and risk perception.

Methods

- Injury was asked for the past year (**InjuryYear**) (yes/no), and for their fishing career (**InjuryCareer**) which were divided into four equal categories (0, 1, 2-8, 10-30).
- Risk perception is based on two questions marked on a visual analog scale (100mm) and analyzed with 3 equal categories:
 - “How much do you worry about getting injured while fishing?” (**InjuryWorry**) (0-16, 17-51, 52-100 mm)
 - 0 = Not at all, 100 = A lot
 - “What are your chances of being injured while fishing?” (**InjuryChances**) (0-46, 47-71, 72-100mm)
 - 0 = No possibility, 100 = It will definitely happen
- Chi-Square tests were calculated to determine the association of injury and risk perception.
- The data was analyzed using IBM SPSS



Position of fishermen surveyed



Demographics of fishermen surveyed

	Mean±SD/%	Range
Age	39.9 ± 14.8	17-92
Yrs. Fishing	17.8 ± 14.2	0-60
Yrs. Crab Fishing	12.0 ± 11.3	0-55
% InjuryYear	19.8%	0-6
% InjuryCareer	51.5%	0-30
% Male	95.0%	

Results Summary

- 19.8% of respondents reported at least one injury in last year.
- 51.5% respondents reported at least one injury in their career.
- There is a statistical significance between career injuries and perceived chance of injury, ($X^2=27.5$; $p<.001$), and no statistical significance between career injuries and perceived worry of injury ($X^2= 11.3$; $p=.079$).
- There is a statistical significance between injuries in past year and perceived chance of injury ($X^2 = 26.0$; $p<.001$), however there is no statistical significance between injuries in past year and perceived worry of injury ($X^2 = .61$; $p=.737$).

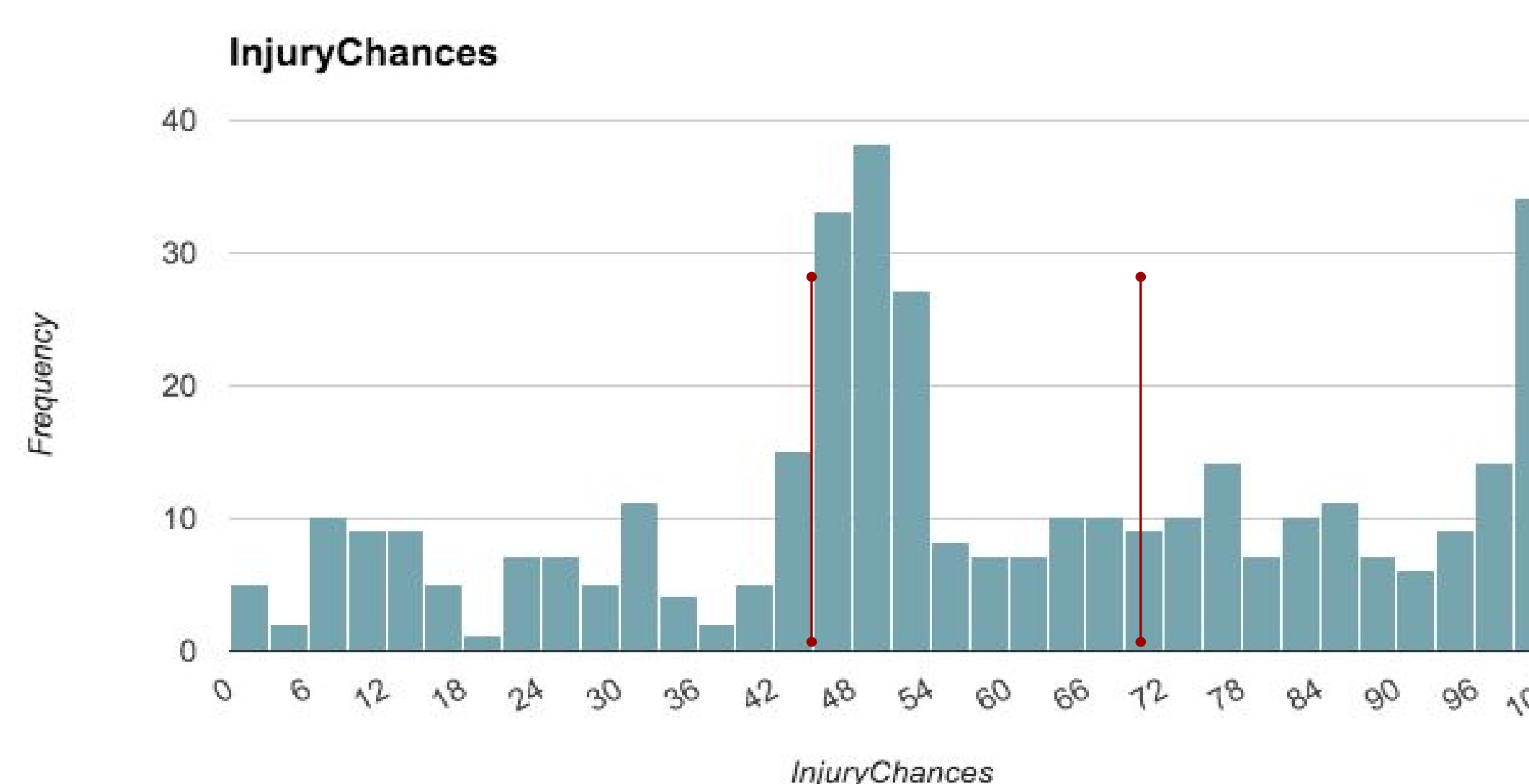
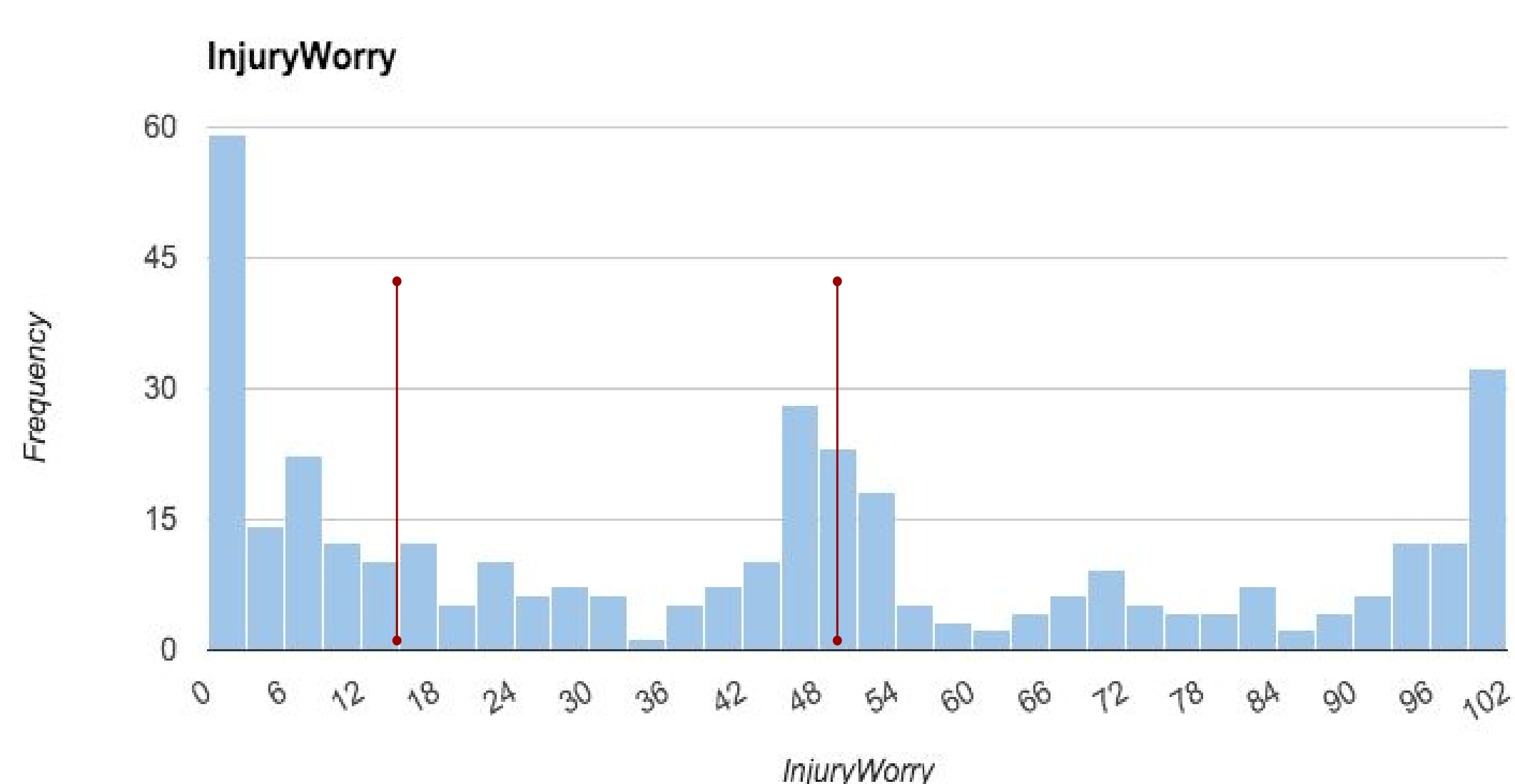
Discussion

- The Fishermen Led Injury Prevention Program is the first and only research focused on non-fatal injury prevention among commercial fishermen.
- No fishermen reported that they had zero chance of injury, regardless of injuries sustained in career and/or in the past year.
- Fishermen who have sustained an injury in their career and/or in the past year, have a higher perception of injury risk.
- There is no connection between a fisherman’s history with injury and the amount they worry about sustaining an injury.

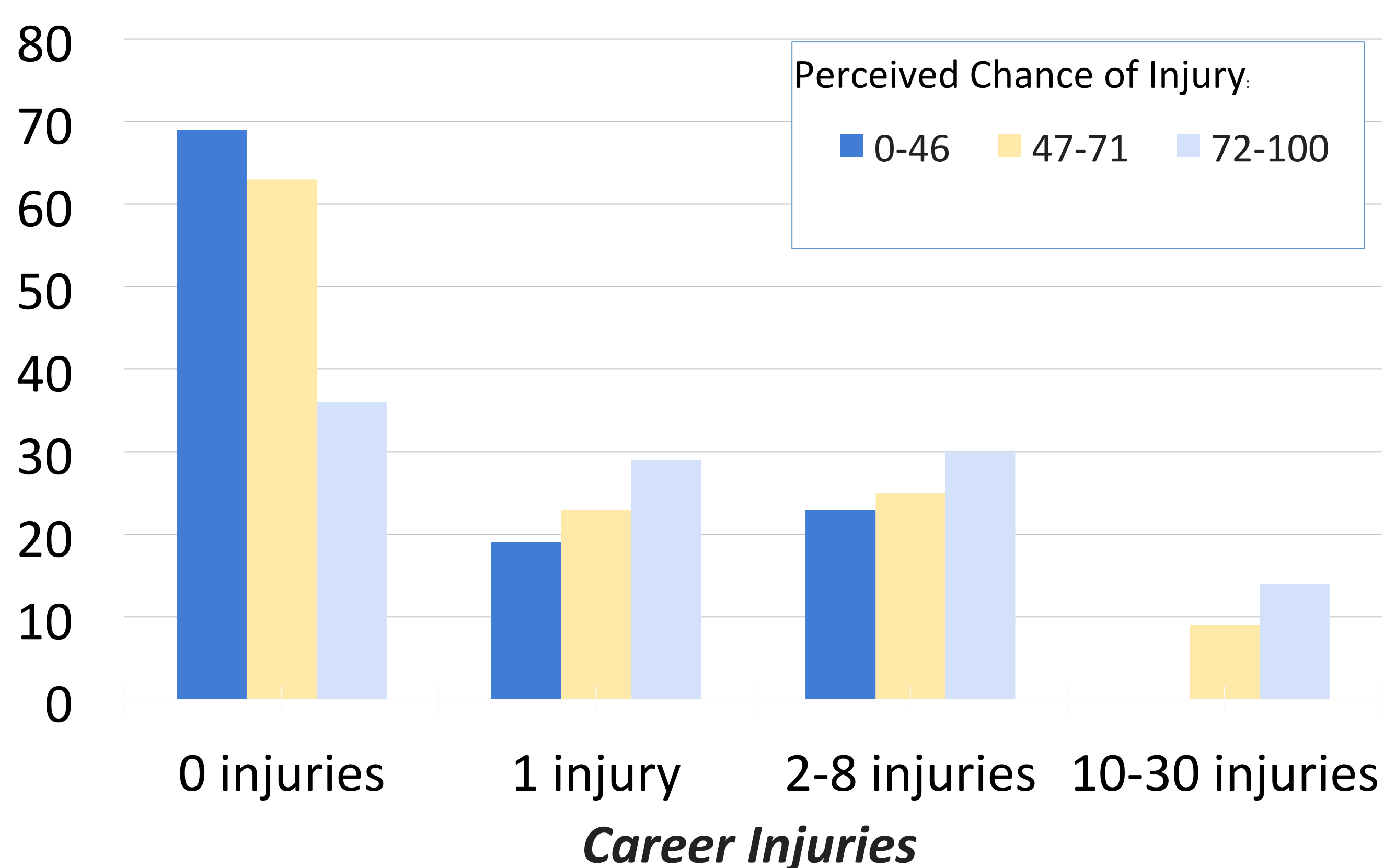
References

- National Institute for Occupational Safety and Health. (2014). Commercial Fishing Safety. Center for Disease Control. Retrieved from <http://www.cdc.gov/niosh/topics/fishing/>.
- Case S, Bovbjerg VE, Lucas DL, Syron LB, Kincl LD. “Reported Traumatic Injuries Among West Coast Dungeness Crab Fishermen, 2002-2014.” *Int J Mar Heal*. 2015. 66(4):207-210.

Frequencies



Perceived chance of injury by number of injuries in career



Chi-Square Test	Injury Worry		
	Low	Moderate	High
Career Injuries			
0	52	60	58
1	27	22	23
2-8	22	28	29
9-30	14	4	4

Chi-Square Test	Injury Worry		
	Low	Moderate	High
Injuries in Past Year			
Not Injured-Past Year	94	95	99
Injured-Past Year	27	22	23



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