



**NIOSH**  
**ALASKA PACIFIC**  
REGIONAL OFFICE

**20**  
**YEARS**  
1991  
2011

The logo is an oval-shaped emblem. The top half has a blue background with the 'NIOSH' logo in white. Below it, 'ALASKA PACIFIC' is written in a white serif font, with 'REGIONAL OFFICE' in a smaller sans-serif font underneath. The bottom half has an orange-to-yellow gradient background. It features the number '20' in a large, dark blue, stylized font. A white mountain range silhouette is positioned behind the word 'YEARS', which is in a bold, dark blue, sans-serif font. Below 'YEARS', the years '1991' and '2011' are listed in white, separated by a thin white horizontal line.



# Commercial Fishing Safety Research & Design Program Update



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# Overview

- NIOSH fishing program
- 2010 commercial fishing fatalities
- Current NIOSH projects:
  - Surveillance
  - PFD Study
  - Safety engineering





# The Mission of NIOSH

**“To provide leadership  
in research to prevent  
work-related illness,  
injury, disability and  
death.”**





**Department of  
Labor**



**Occupational  
Safety and Health  
Administration  
OSHA**

**Department of  
Health and Human Services**



**Centers for Disease  
Control and Prevention  
(CDC)**



**National Institute for  
Occupational  
Safety and Health  
NIOSH**

**Regulation/Enforcement**

**Research, Training, and  
Prevention Recommendations**







# A Catalyst for Change

- Provide scientific assessment
- Identify
  - workers at risk
  - high priority problems
- Support the development of interventions
- Evaluate interventions





# 2010 Commercial Fishing Fatalities

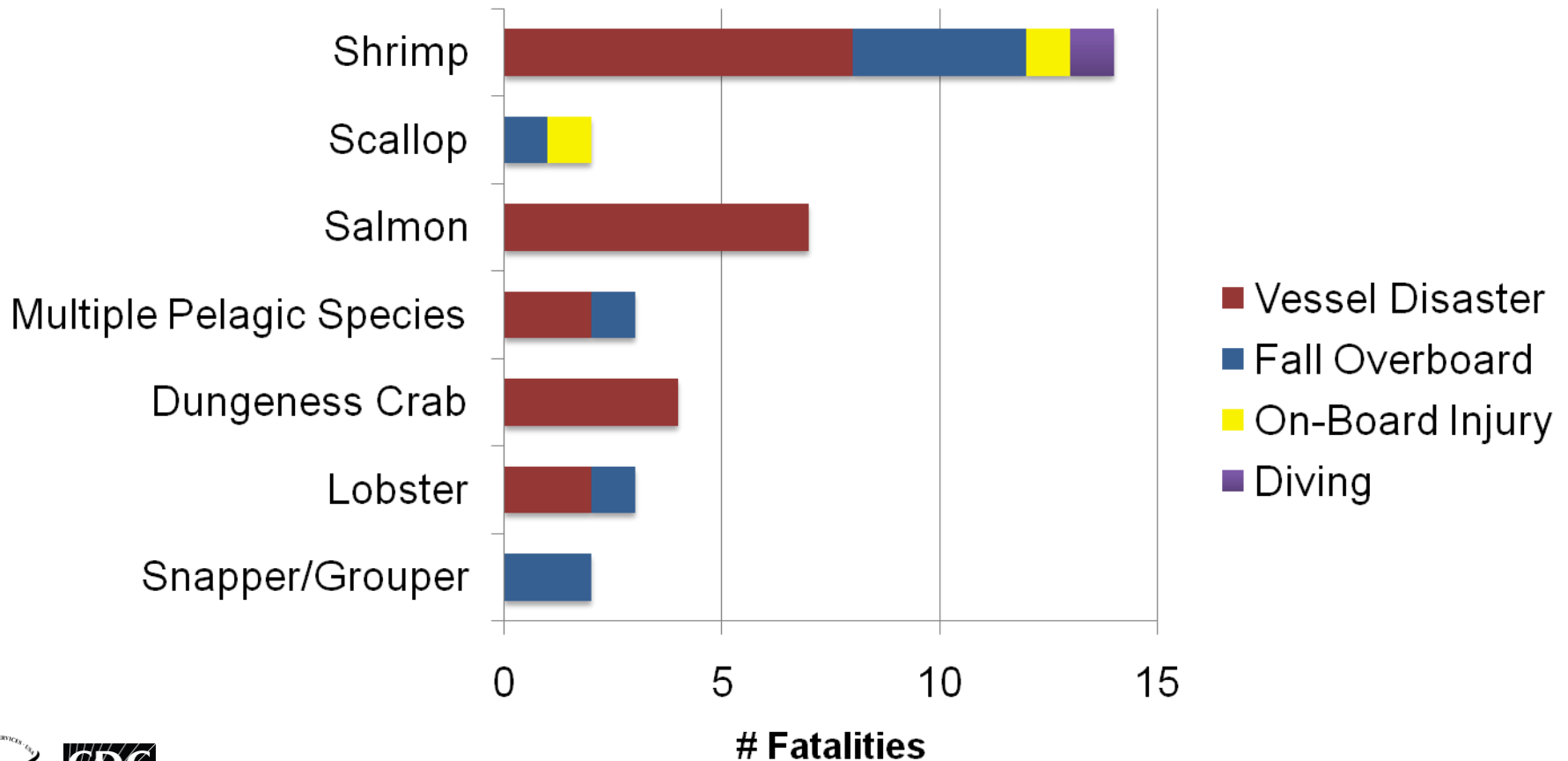
- 38 fatalities
- Average of 49 fatalities, 2000-2010
- Lower than average but no overall increase/decrease



- Year to year fluctuations are expected
  - AK as case in point: Only 3 fatalities in 2010



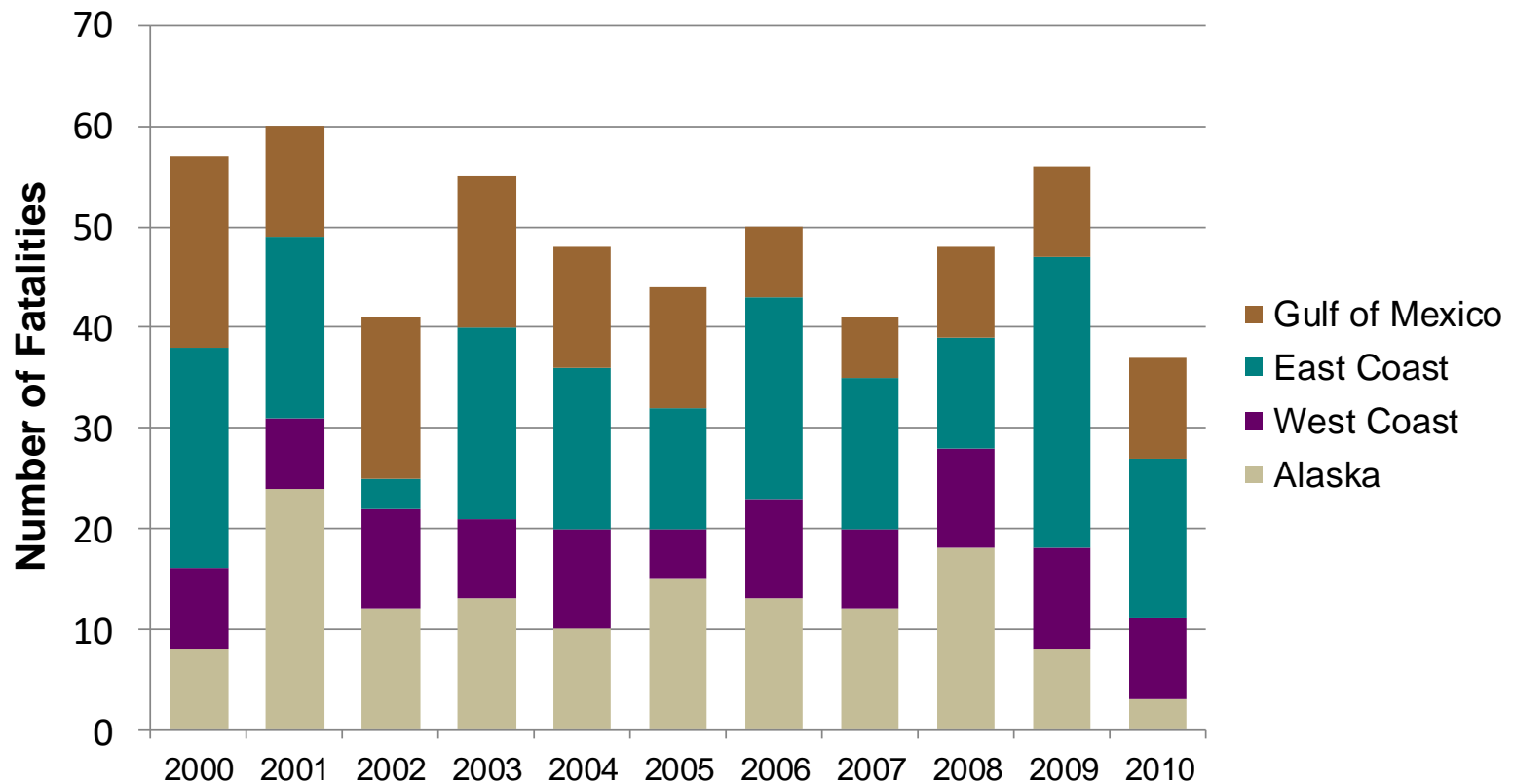
# 2010 US Commercial Fishing Fatalities, by Fishery with >2 Fatalities (n=38\*)







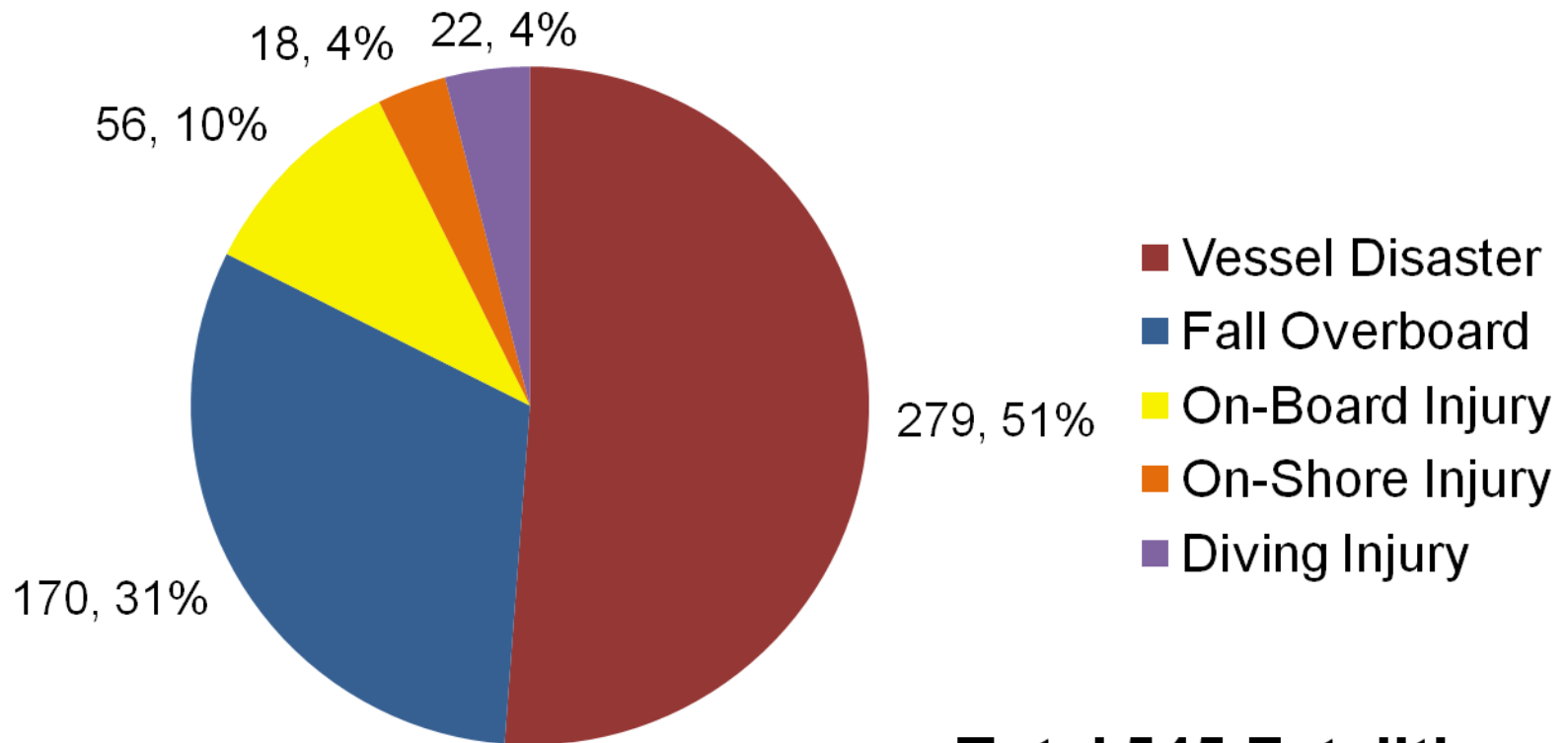
# U.S. Commercial Fishing Fatalities by Year and Region, 2000-2010 (545\* total)





## Fatality Types (2000-2010)

- Vessel disasters and falls overboard continue to be the leading cause of death



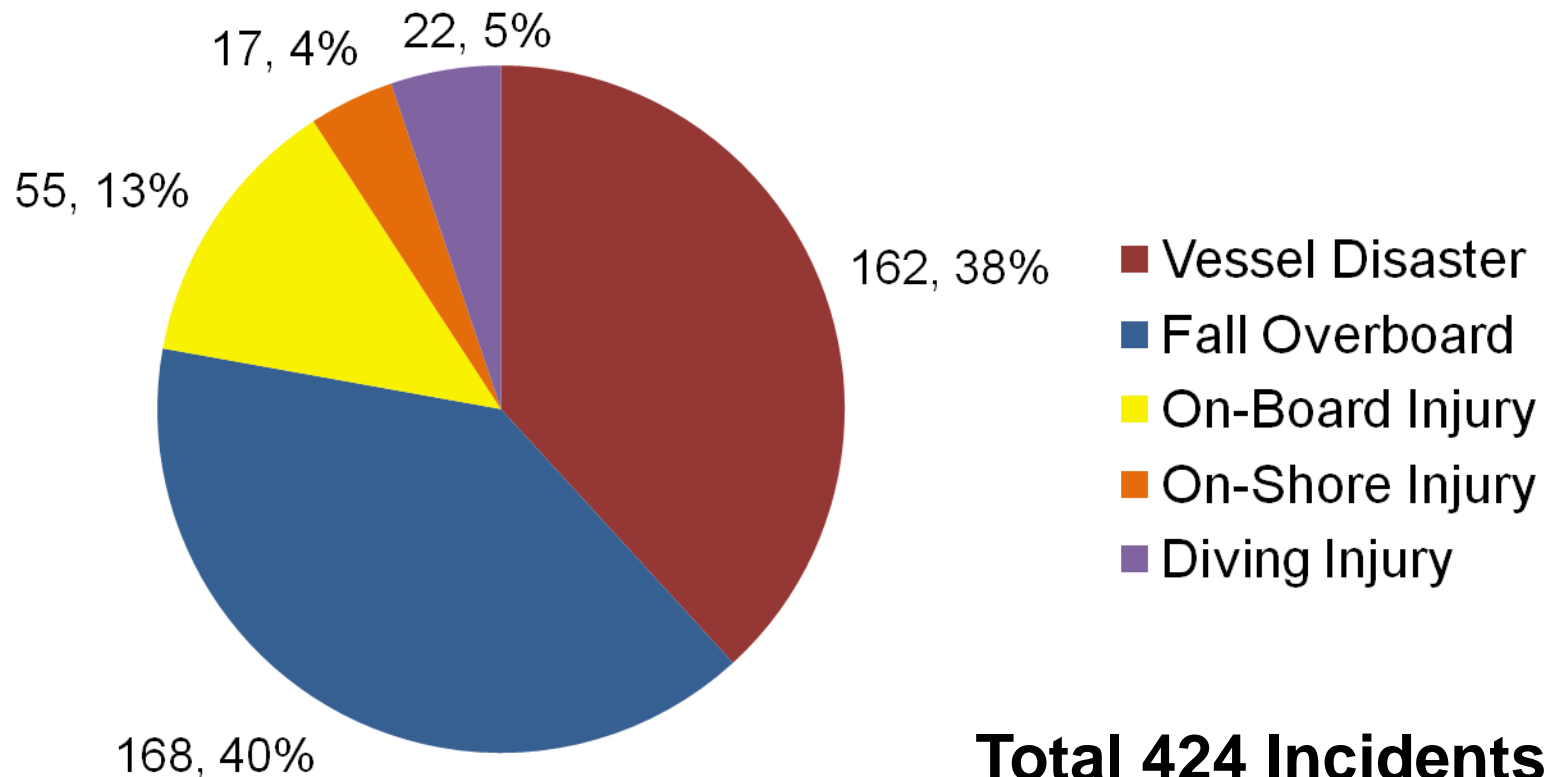
**Total 545 Fatalities**





## Incident Types (2000-2010)

- Fall Overboard Events are more frequent than fatal vessel disasters







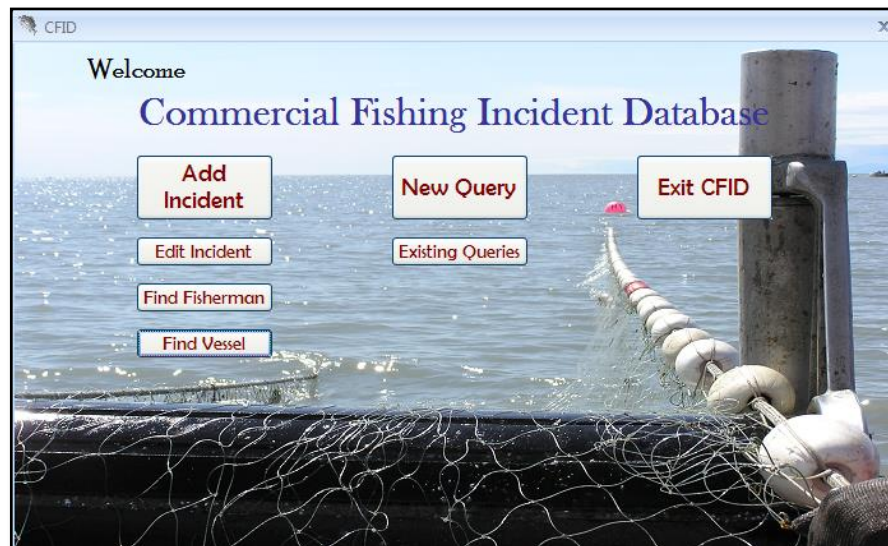
# Most Hazardous Fisheries & Events





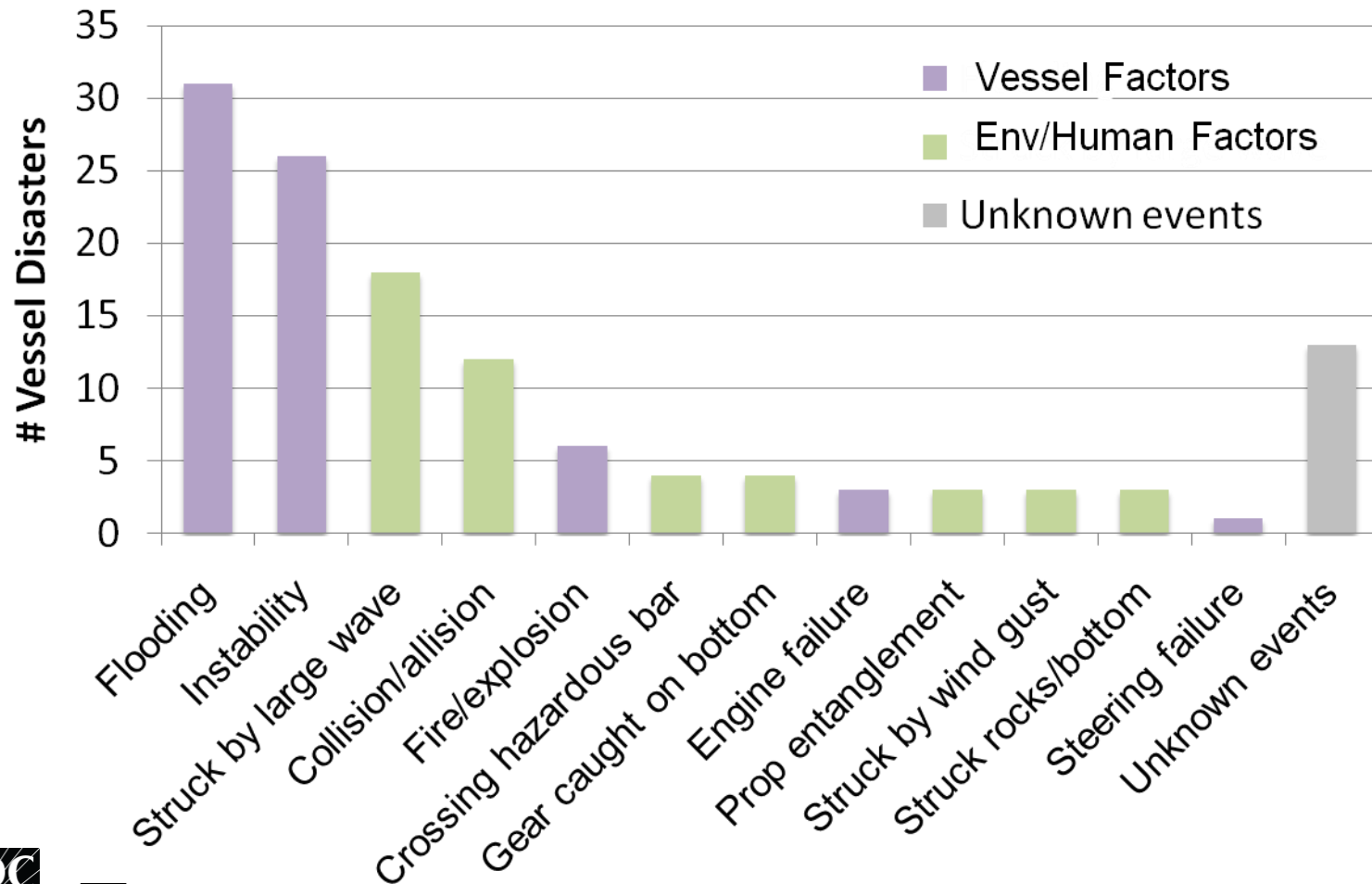
# Surveillance

- Surveillance continues to be the cornerstone
- NIOSH thanks the USCG and their collaboration to collect and improve data in MISLE
- NIOSH maintains the Commercial Fishing Incident Database (CFID) and responds to numerous data requests from stakeholders





# Initiating Events in Fatal Vessel Losses, 2000-2010



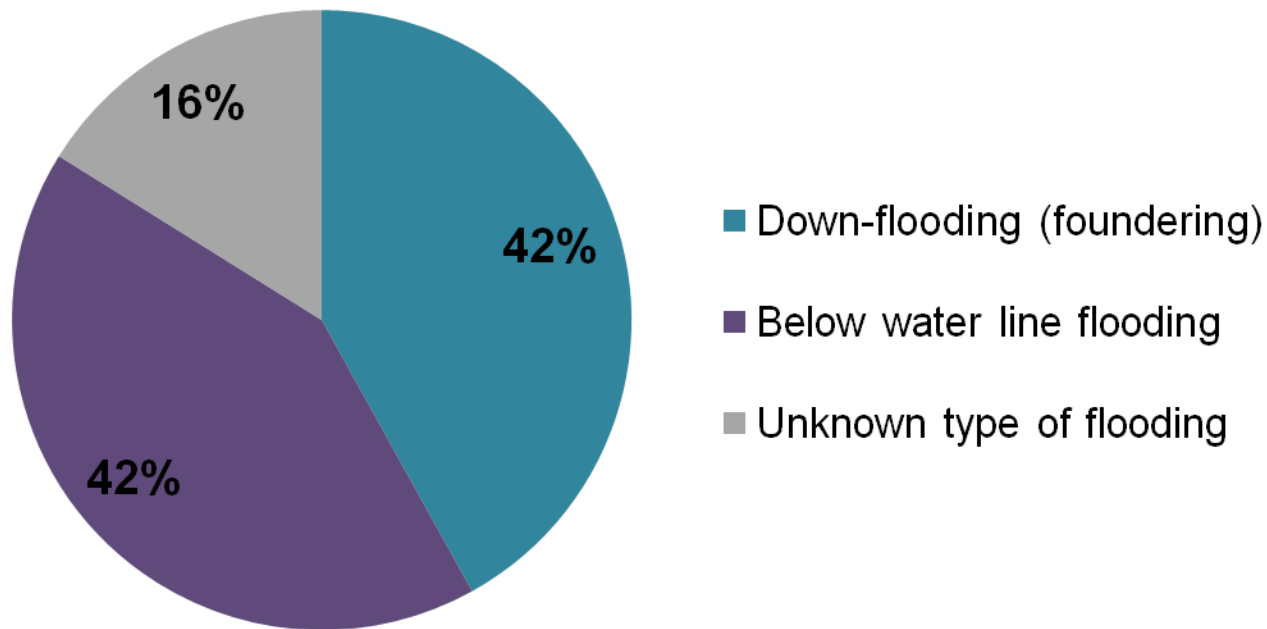




# Flooding as Initiating Event

- Flooding was the initiating event in 31 (24%) of fatal vessel disasters

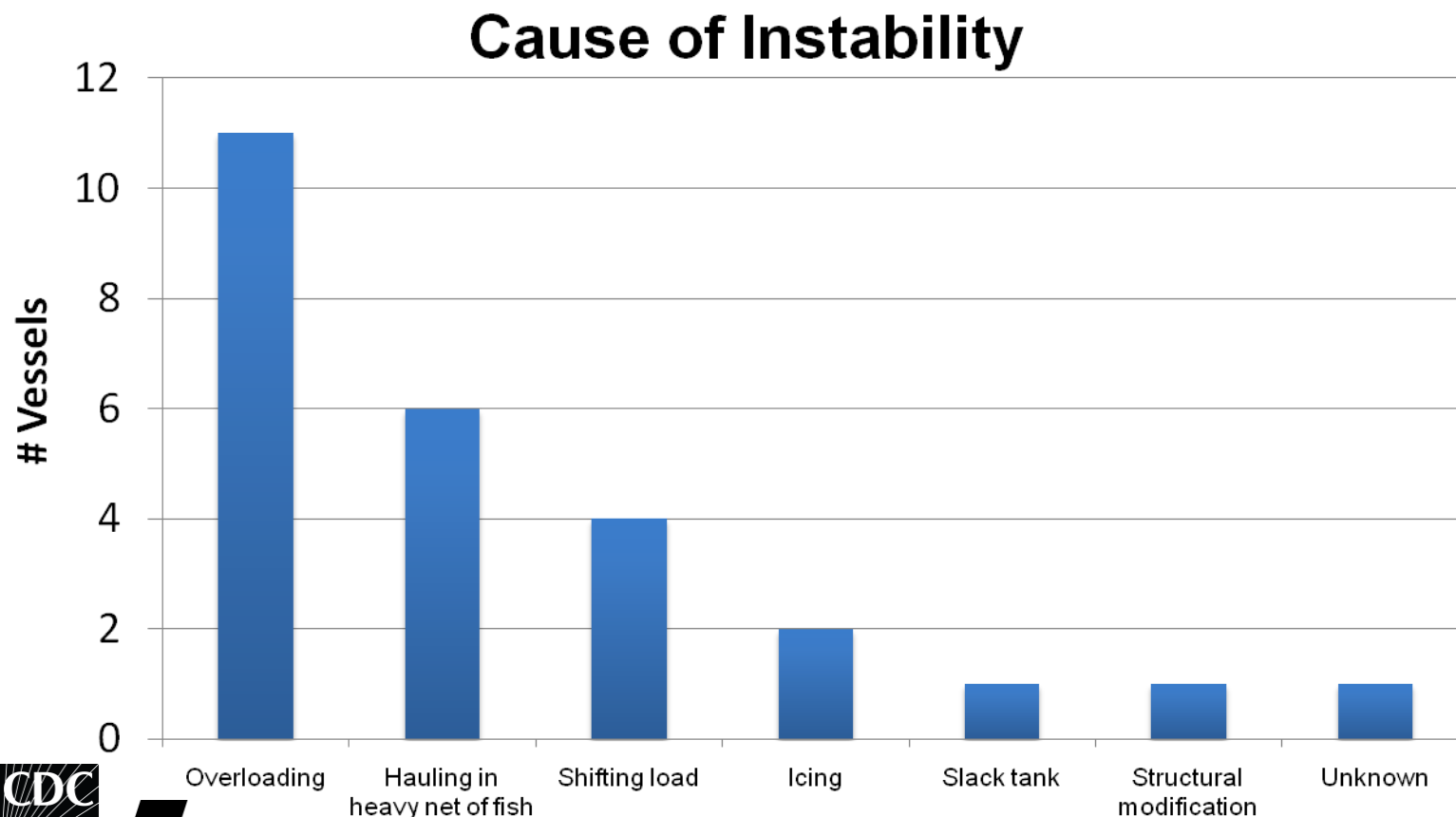
## Type of Initiating Flooding





# Instability as Initiating Event

- Instability was the initiating event in 26 (20%) vessel disasters





# USCG Personnel at NIOSH

- NIOSH hosted LT Laura Springer, USCG
  - 6 week placement, basic epi training
- Non-fatal injury research project
- Development of a non-fatal incident surveillance database
- Take-away message
  - IO's and proper MISLE entry
  - Continue work with NIOSH
  - Input to HQ for MISLE 5.0
  - The importance of concise and accurate investigations







# NIOSH PFD Study Update



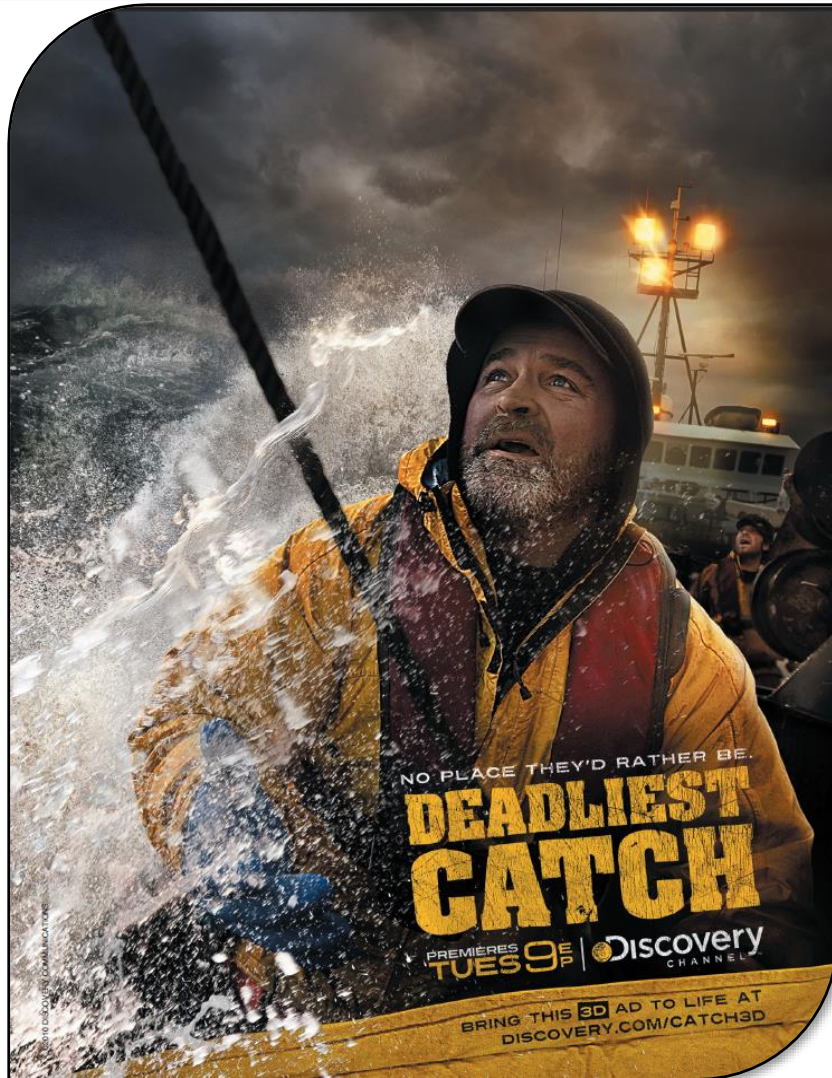


The F/V Bristol Mariner and F/V Aleutian Mariner participated in the NIOSH PFD study.



The Mariner fleet of crab fishing vessels (8 vessels in total) has instituted a PFD policy and purchased PFDs for all crewmembers to wear while working on deck.





The F/V Wizard, from the *Deadliest Catch*, participated in the NIOSH PFD study.

The F/V Wizard has instituted a 100% mandatory PFD requirement while on deck.







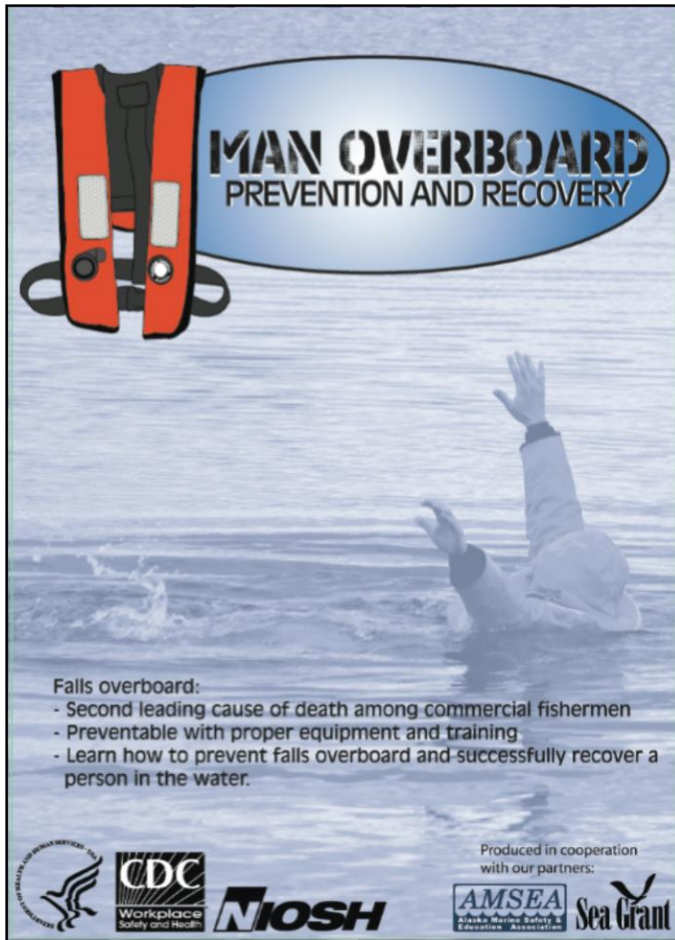
# Publications and More Evaluations

- Research findings are being published in *Applied Ergonomics* scientific journal
- The research study was replicated on the West Coast with Dungeness Crab fishermen





# Man Overboard DVD



Focus this year is on preventing fatalities due to falls overboard

*What is your PFD Policy?*

*Have you found a PFD that works for you?*

*Do you have a MOB Alarm?*





The Alaska Scallop Association has established a 100% PFD policy for its member boats

Seeing more PFDs in use!



Photograph by M. Melford, National Geographic



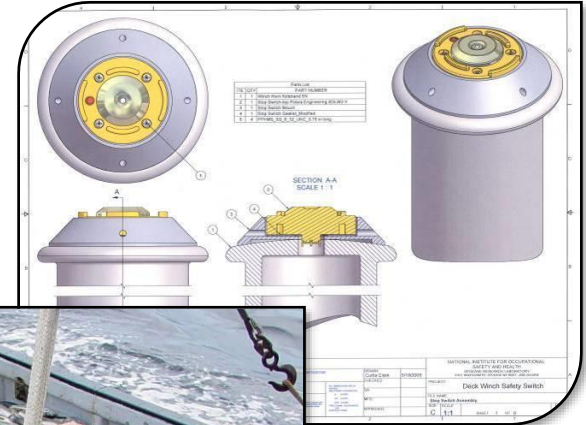


# NIOSH Safety Engineering Design

- E-stop
- Hatch & Door Monitoring System
- Tank Monitor
- Flood Rate Monitor System



**NIOSH @ Booth 810**







# Hatch and Door Monitoring System

- Monitor variety of hatches and doors
- “Green Board” open, closed, locked
- New Licensing agreement with manufacturer







# Tank Monitor & Flood Rate Monitor

- Installed 2 systems in 2011
- Monitor status of tanks
- Slack or pressed
- Can eventually lead to a flood rate monitor
- Measure rate of flooding





# Quick Review

- NIOSH fishing program
- 2010 commercial fishing fatalities
- Current NIOSH projects:
  - Surveillance
  - PFD Study
  - Safety engineering





## Contact Information

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