

Commercial Fishing Safety Research Updates from NIOSH

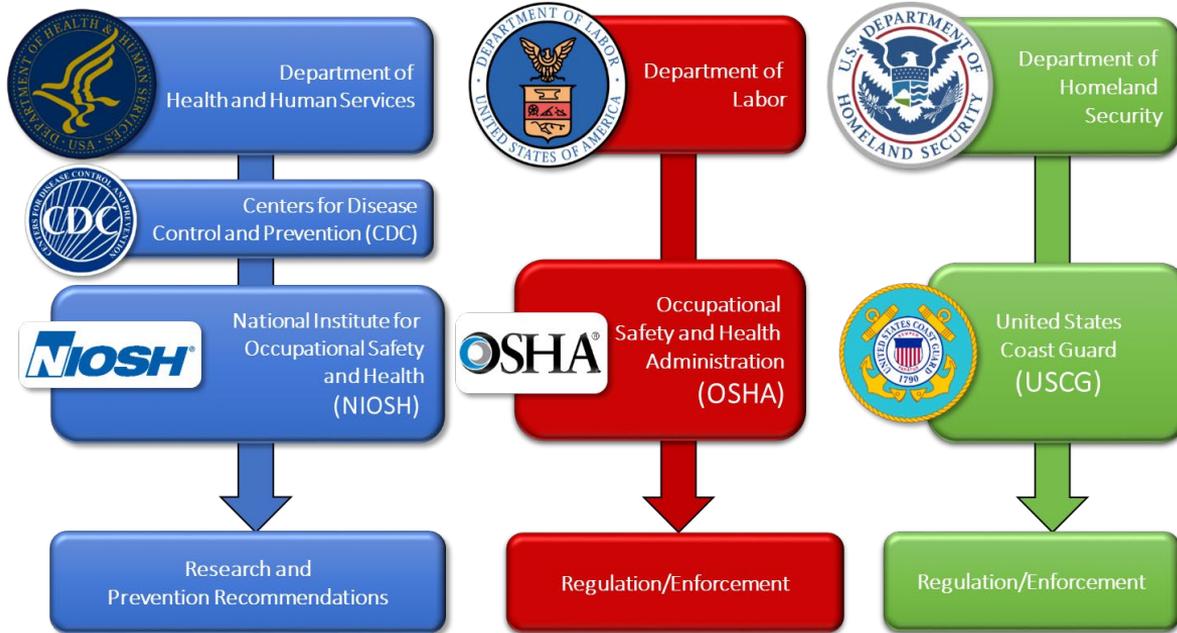
North Pacific Fishery Management Council Meeting | April 2024

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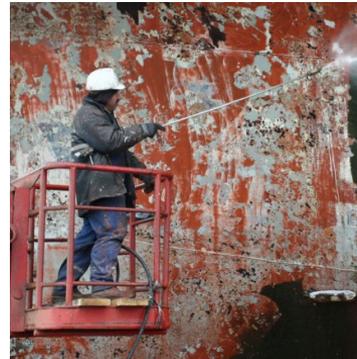
About NIOSH



- The National Institute for Occupational Safety and Health (NIOSH) is the federal institute responsible for conducting research and making recommendations to prevent work-related illness, injury, and death.
- NIOSH is not a regulatory or enforcement agency.

NIOSH Center for Maritime Safety and Health Studies (CMSHS)

- CMSHS promotes collaborative research to identify practical solutions that reduce the unique hazards within the maritime industries, including:
 - **Commercial fishing**
 - **Seafood processing**
 - Aquaculture
 - Marine terminals
 - Shipyards
 - Marine transportation
- CMSHS is managed by the NIOSH Western States Division.



Photos: NIOSH; Getty Images; Thinkstock

Outline

- Recent Activities
- Current and Future Activities
- Commercial Fishing Fatality Update

Recent Activities

Recent Publication: *Commercial Fishing Fatalities and Injuries Described by Linked Vessel Incidents*

- In 2017, NIOSH and Oregon State University collaborated to develop a comprehensive system to gather information on injuries, fatalities, and vessel casualties in the Pacific Northwest fishing fleet, called the [Risk Information System for Commercial \(RISC\) Fishing](#).
- Data from the RISC Fishing database were analyzed to understand the circumstances of incidents and identify opportunities for injury prevention.
- Vessel-level and work task-specific prevention strategies were suggested, including:
 - Ensuring vessel stability
 - Improving navigation/operation decisions
 - Enacting lifejacket policies

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Commercial Fishing Fatalities and Injuries Described by Linked Vessel Incidents

Laurel Kincl , Solaiman Doza , Jasmine Nahorniak², Samantha Case², Amelia Vaughan², and Viktor Bovbjerg²

Recent Publication: *Relationship of Personal, Situational, and Environmental Factors to Injury Experience in Commercial Fishing*

B7 NOISH Report
APRIL 2024

- This study, in collaboration with researchers from Oregon State University, sought to determine if fishing experience is associated with injury risk and explore common work activities resulting in injuries.
- Key informant interviews were conducted, and a survey was administered among fishermen in Washington, Oregon, and Northern California.
- Findings showed that years of fishing experience, by itself, is not associated with injury experience; rather, the type of work typically performed by deckhands is related to injury risk.
- This study was part of the [Fishermen Led Injury Prevention Program \(FLIPP\)](#).

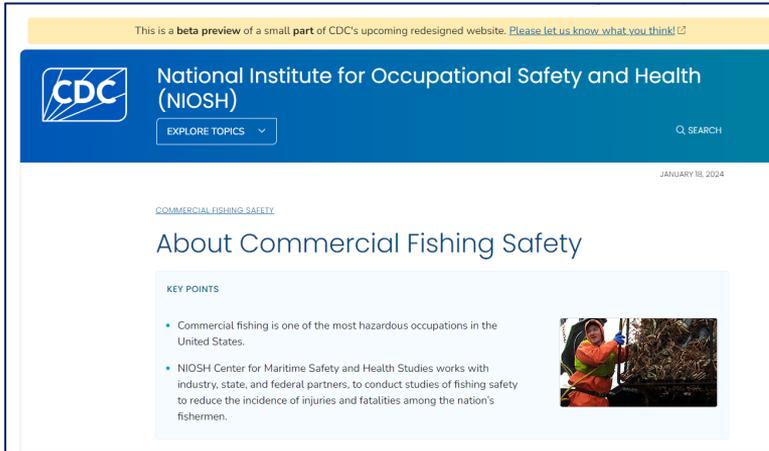


Sixth International Fishing Industry Safety and Health Conference (IFISH 6)

- IFISH 6 was held January 8-12, 2024, in Rome, Italy and co-hosted by NIOSH, the Northeast Center for Occupational Health and Safety, and the Food and Agriculture Organization.
- The conference hosted 180 attendees representing 55 countries to discuss safety, health, and wellbeing among workers in commercial fishing, seafood processing, and aquaculture.
- Sessions covered a wide range of topics, including climate change, decent work, safety training, fisheries management, and international conventions.
- Presentation slides will be added to the [IFISH 6 website](#).



Preview the New CDC.gov!



- Clean Slate, part of [CDC Moving Forward](#), was launched to overhaul the CDC.gov website and streamline content by more than 60%.
- Some CDC/NIOSH topics are available to preview in beta:
 - [Commercial Fishing Safety](#)
 - [Maritime Safety and Health](#)
- We invite you to explore the beta pages and provide feedback.

Current and Future Activities

In-Progress Study: *Examination of Dive-Related Fatalities in the Commercial Fishing Industry*

- Commercial fishermen may dive to harvest species from the sea floor or to conduct maintenance or repairs.
- Fatalities during these operations occur with regularity (~2 deaths per year)*, but little is known about the circumstances surrounding these deaths.
- By analyzing data from the NIOSH Commercial Fishing Incident Database (CFID), we will provide in-depth information about these fatalities, including safety and health risk-factors, and suggest relevant prevention strategies.

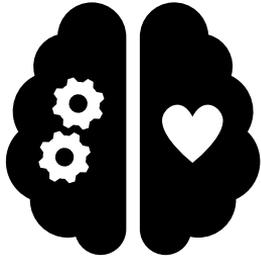


Photo: Southeast Alaska Regional Dive Fisheries Association (SARDF)

*Source: Lucas DL & Case SL. (2018). Work-related mortality in the US fishing industry during 2000-2014: New findings based on improved workforce exposure estimates. Am J Ind Med; 61(1): 21-31.

In-Progress Study: *Workplace Fatalities Due to Suicide, Unintentional Drug Overdose, and Alcohol Poisoning in the Commercial Fishing Industry*

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- While fatalities in the commercial fishing industry have steadily declined since the 1990s, deaths due to suicide, drug overdose, and alcohol poisonings have increased*.
- The aim of this study is to describe the trends, patterns, and characteristics of these fatalities by analyzing data from CFID.
- We will explore behavioral health risk factors identified in death investigations and bring attention to important issues faced by fishermen.

*Source: Lucas DL & Case SL. (2018). Work-related mortality in the US fishing industry during 2000-2014: New findings based on improved workforce exposure estimates. Am J Ind Med; 61(1): 21-31.

In-Progress Study: *COVID-19 Prevention Among Seafood Processors: Workplace and Social Factors*

- Seafood processing workers, a part of the essential food supply chain workforce, may be at higher risk of COVID-19 due to occupational and social factors.
- This qualitative study, involving participant interviews in the Gulf of Mexico, explores the occupational, social, economic, and mental health factors that contribute to worker health and wellbeing.
- This study is a collaboration between NIOSH and the University of Texas.



Photo: Thinkstock

Newly Funded Project: *Testing the Integrity of Immersion Suits to Determine Service Life*



Photo: US Coast Guard

- Immersion suits may pass a visual exam but could have unseen leaks and tears, reducing buoyancy and thermal protection needed in an emergency.
- Currently, there is no age-based guidance for immersion suit replacement.
- Over the next four years, NIOSH and the U.S. Coast Guard (USCG) will collect 400 used immersion suits from commercial fishing vessels in Alaska.
- The suits will undergo pressure testing at a USCG-accredited facility to find and classify leaks.
- We will measure immersion suit failure rates by age and other factors to provide practical suggestions on suit replacement.
- Estimated start date: Spring 2024.

Newly Funded Project: *Personal Flotation Device (PFD) Use Among Women in the Commercial Fishing Industry*

- NIOSH previously worked with fishermen across Alaska to evaluate a variety of PFD styles and identify which were most comfortable to wear while working. However, few women participated in the study.
- Women may have unique concerns regarding the sizing, fit, and comfort of PFDs.
- We will examine women's PFD use and opinions through a survey and PFD wear trial.
- This pilot project will be part of a larger effort by NIOSH to understand safety and health needs of women working in maritime industries.
- Estimated start date: Summer 2025, pending necessary approvals.



Photo: Loren Holmes

Upcoming Webinar: *Protecting the Mental Health of Offshore Workers*

- The NIOSH Office of Research Integration hosts the [Expanding Research Partnerships Webinar Series](#).
- This series is designed to promote the work of innovative and impactful research and expand intramural and extramural partnerships in occupational safety and health.
- Researchers, practitioners, and interest groups engage in discussion of pressing issues and opportunities for collaboration.
- The next webinar will be held Wednesday, August 14th, 2024 and is entitled, “Protecting the Mental Health of Offshore Workers.”
- Registration will open in June 2024.



**Expanding Research
Partnerships
Webinar Series**

NIOSH Extramural Research and Training Programs: Grants for Commercial Fishing Safety Research and Training



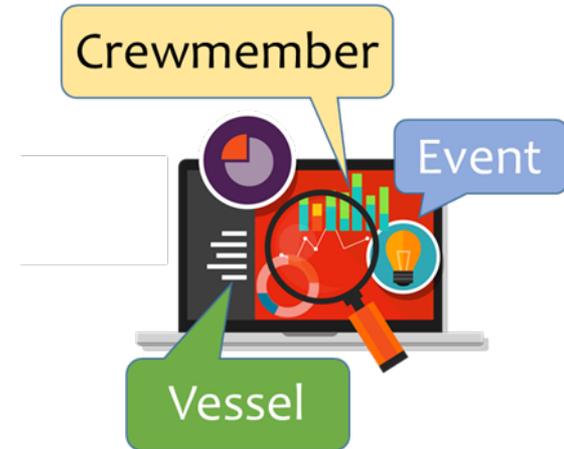
Photo: NIOSH

- The NIOSH Office of Extramural Programs and U.S. Coast Guard work together to provide funding for fishing safety research and training through grants and cooperative agreements.
- This funding opportunity was created to provide extramural funding to advance fishing safety research and provide focused, regionally appropriate training for the nation's commercial fishermen.
- The next deadline to apply for funding is August 27, 2024.
- Individuals from academia, non-profit organizations, municipalities, and businesses are encouraged to apply.
- For more information, including descriptions of current grantee projects, FAQs, and contact information, [visit this link](#).

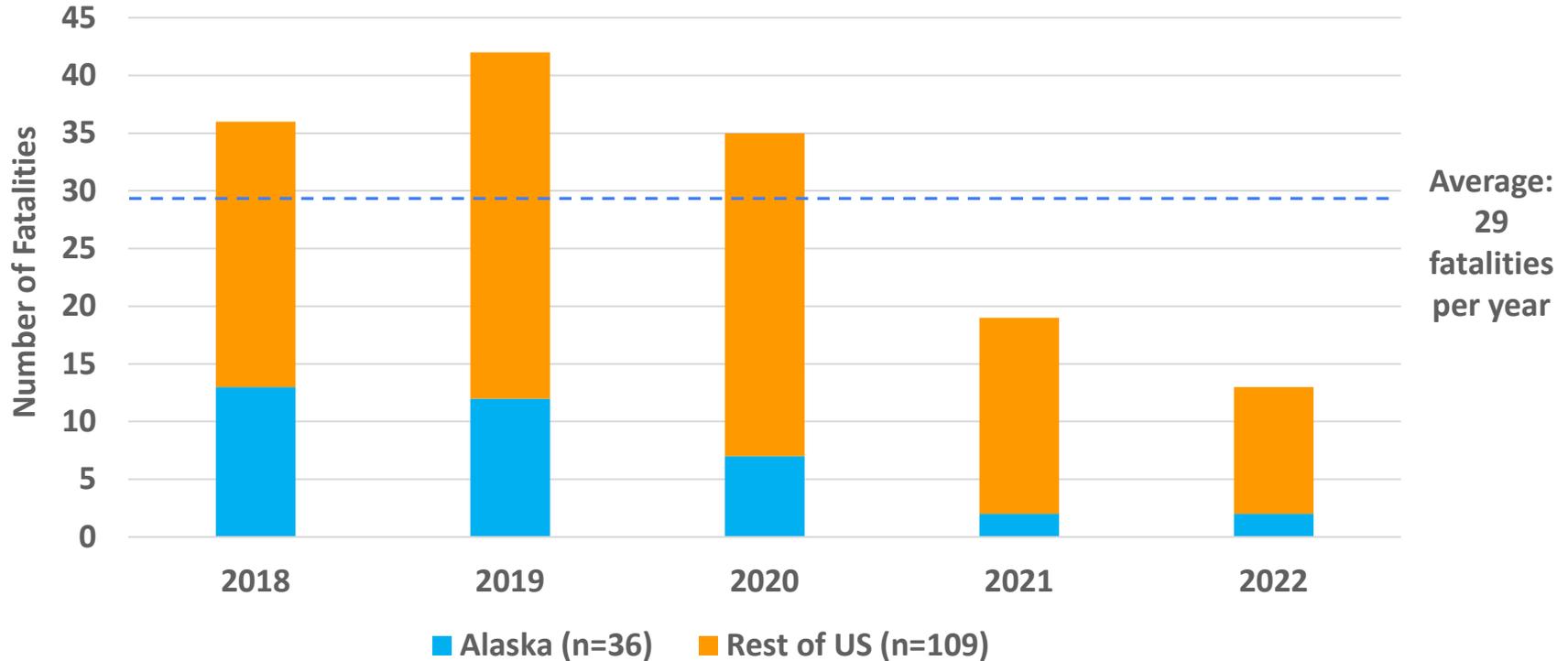
Commercial Fishing Fatality Update

Commercial Fishing Incident Database (CFID)

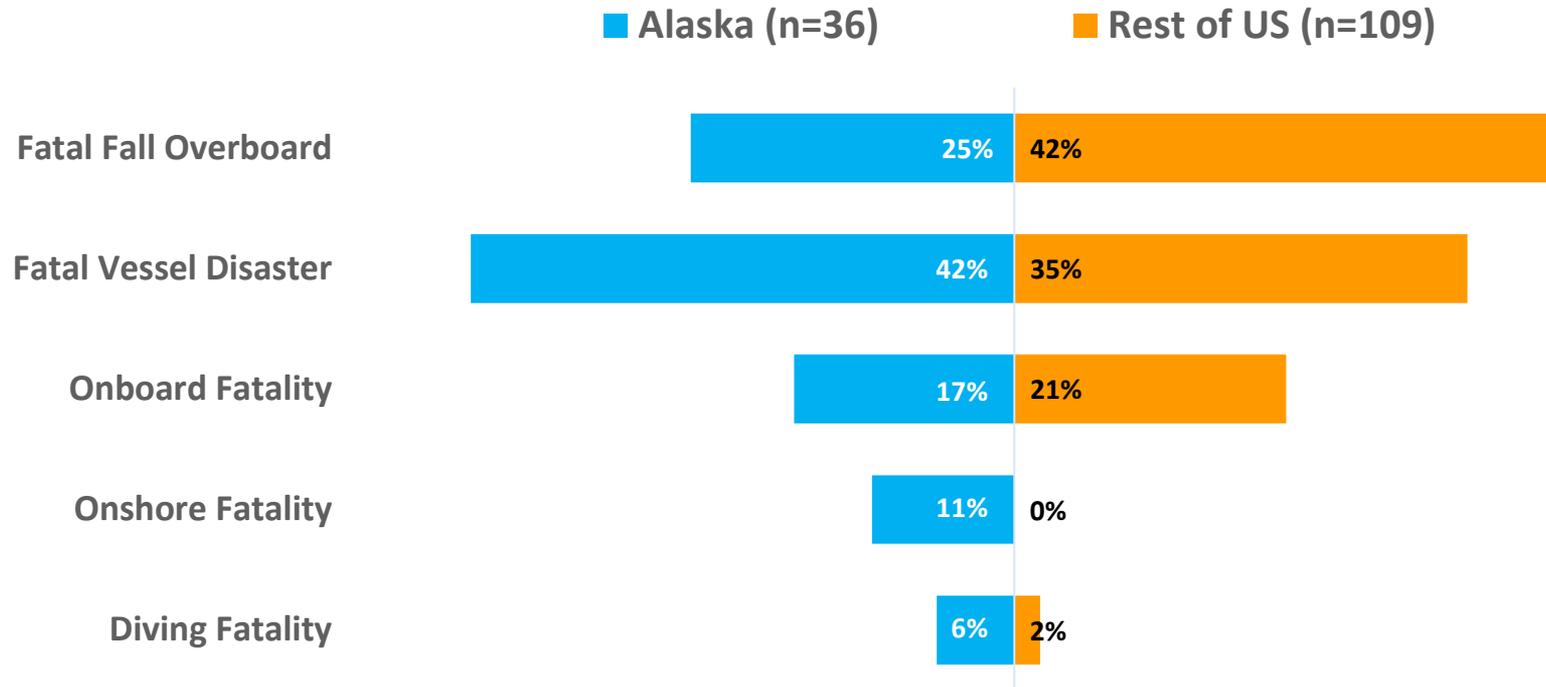
- NIOSH developed CFID to track fatalities in the U.S. commercial fishing industry.
- Data are abstracted from U.S. Coast Guard investigation reports, local law enforcement reports, news media, and other sources.
- Analyses are used to identify fishery- and region-specific risks and develop relevant prevention strategies.



Commercial Fishing Fatalities, United States, 2018-2022 (n=145)

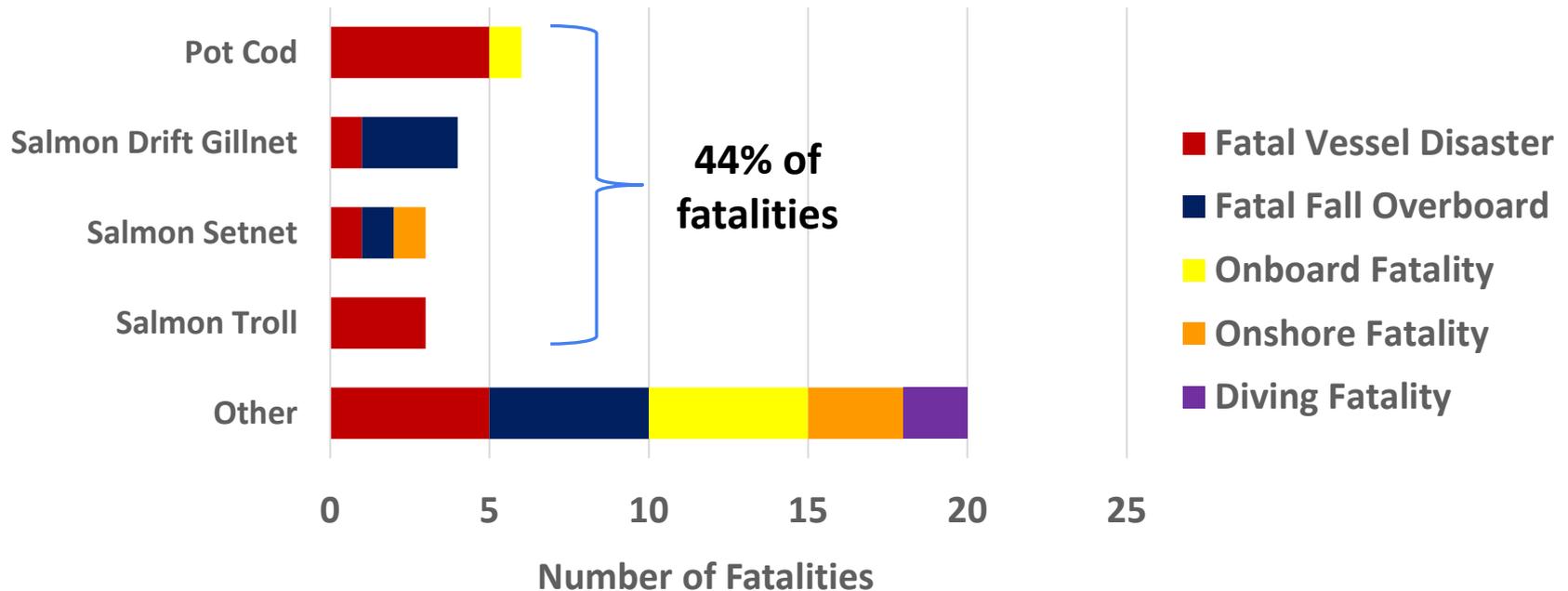


Comparing Commercial Fishing Fatalities by Incident Type, Alaska vs. Rest of US, 2018-2022 (n=145)



Commercial Fishing Fatalities by Fishery* and Incident Type, Alaska, 2018-2022 (n=36)

*Fisheries with < 3 fatalities are included in the "Other" category.



Commercial Fishing Fatalities, Alaska, 2023*

Incident Type	Number of Fatalities
Fatal Vessel Disaster	0
Fatal Fall Overboard	1
Onboard Fatality	2
Onshore Fatality	0
Diving Fatality	0

*Note: Fatality data for 2023 are preliminary, pending validation with state and federal partners.

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www.cdc.gov/niosh/topics/fishing/
www.cdc.gov/niosh/topics/maritime/

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

