Using Surveillance to Identify High-Risk Industries and Occupations in Alaska

Alaska Occupational Injury Surveillance System (AOISS)

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The findings and conclusions in this presentation have not been formally disseminated by CDC/NIOSH and should not be construed to represent any agency determination or policy.
Occupational Fatality Rates for the U.S. vs Alaska in 1980s
(per 100,000 workers)

7.0
34.8

5x Greater

CDC
NIOSH
Alaska Ranks 3rd Highest In Occupational Fatality Rates
Alaska has Unique Hazards
Epidemiologists

What my friends think I do
What my parents think I do
What society thinks I do
What the government thinks I do
What I think I do
What I really do
What I really do
Collaborative Partners

- State of Alaska Department of Health and Social Services
- OSHA (Occupational Safety and Health Administration)
- National Transportation Safety Board
- Federal Aviation Administration
- United States Coast Guard
- Alaska State Troopers
- CDC
- NIOSH
Alaska Dispatch News

NTSB: Plane in Birchwood crash that killed 4 was struck by bald eagle

Author: Chris Klint  Updated: May 18  Published May 4

Crime & Justice

Kodiak murder suspect claimed self-defense, police say

Author: Chris Klint  Updated: May 17  Published February 8

Alaska News

Troopers retrieve body from fatal Kodiak Island lodge fire

Author: Jerzy Shedlock  Updated: 6 days ago  Published 6 days ago
Information Collected in AOISS

**Incident Details**
- Unique ID
- Date
- Location
- Event summary

**Victim Details**
- Unique ID
- Demographics
- Industry (NAICS)
- Occupation (SOC)
WSD-Alaska

Flexible Data Entry Categories

Industry Specific

Aviation Incidents
- CFIT
- Aircraft Type

Commercial Fishing Incidents
- CFID ID #
- Incident Type
- Vessel Name
- # Onboard
- Species
- Vessel Activity

Event Specific

PFD Worn
ImSuit Worn
Safety Belt

CDC
NIOSH
Percent of Total Employment by Major Industry, Alaska vs United States, 2015

Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section and U.S. Department of Labor, Bureau of Labor Statistics; Alaska Economic Trends, April 2016 and January 2016
Top Percentages of Occupational Fatalities by Industry Total in 2014

**United States**
- Construction: 20%
- Transportation & Warehousing: 15%
- Agriculture, forestry, fishing, and hunting: 10%

**Alaska**
- Fishing: 35%
- Transportation: 10%
- Construction: 5%

Top Percentages of Occupational Fatalities by Industry Total in 2014

United States

- Construction
- Transportation & Warehousing
- Agriculture, forestry, fishing, and hunting

Alaska

- Fishing
- Transportation
- Construction

Occupational Fatality Rates in Alaska from 1990-2015 (N=1236)

Fatality Rates per 100,000 workers

Source: Alaska Occupational Injury Surveillance System (AOISS) for 1990 to 2015.
The Occupations with the Highest Number of Fatalities in Alaska, 2000-2015

Commercial Fishermen 182

Commercial Pilots 76

Water Transportation Workers 44

*Water transportation workers includes sailors and marine oilers; captains, mates, pilots of water vessels, motorboat operators, ship engineers

Source: AOISS
Commercial Fishing

Fatal Occupational Injuries in the U.S. Commercial Fishing Industry: Risk Factors and Recommendations
Alaska Region

You may learn to think like a fish, but you’ll never BREATHE LIKE ONE.

— Angus Iversen

Commercial fishing: Do you comfort yourself, easy to work in and just might save your life. Wear one.
Commercial Pilots
Water Transportation Workers
Conclusions

- Provides the data on which worker populations are most at-risk for fatal injuries to inform research projects and identify areas of intervention
- Provides up-to-date information
- Contains in-depth details over last 25+ years
- Allows flexibility for adding variables
- Highlights the importance of regional surveillance systems
Thank You! Thank You! Thank You! Thank You!

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