



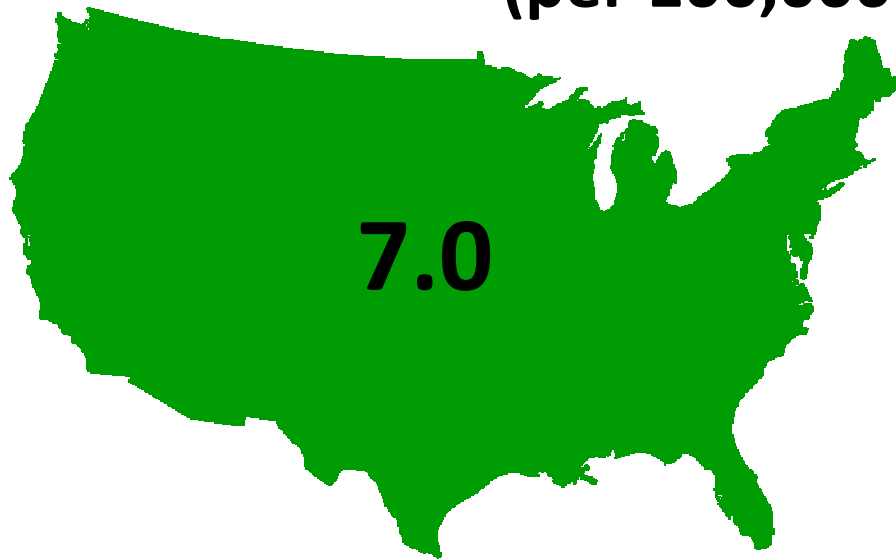
# Using Surveillance to Identify High-Risk Industries and Occupations in Alaska

## Alaska Occupational Injury Surveillance System (AOISS)

**Krystal Mason**  
**September 30, 2016**

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)



**5x Greater**



# BLS CFOI Data for 2014



## Alaska Ranks 3<sup>rd</sup> Highest

### In Occupational Fatality Rates



\*States not drawn to scale

## Alaska has Unique Hazards



# Epidemiologists



What my friends think I do



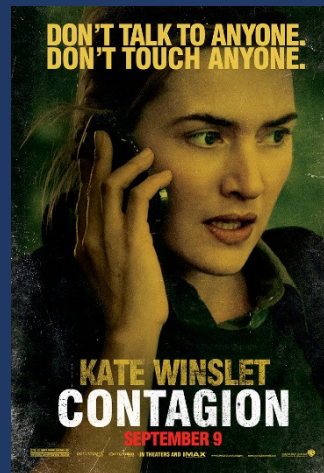
What my parents think I do



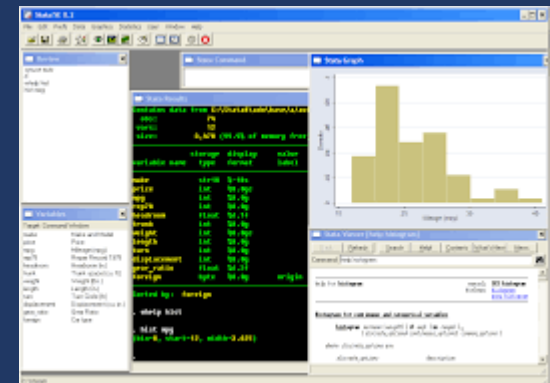
What society thinks I do



What the government thinks I do



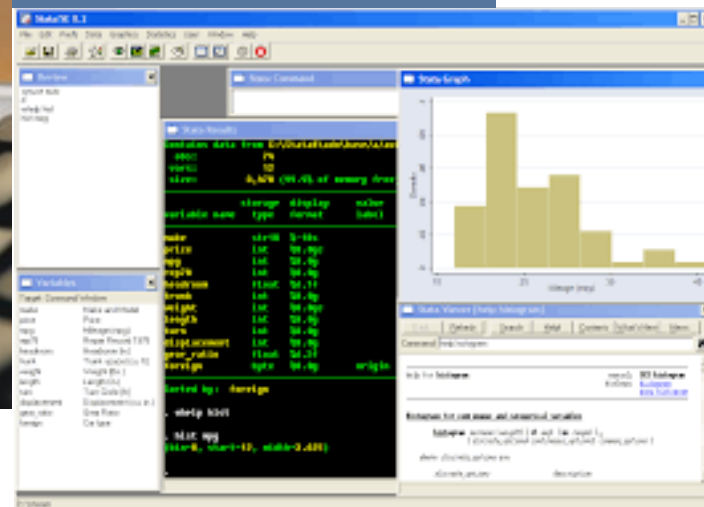
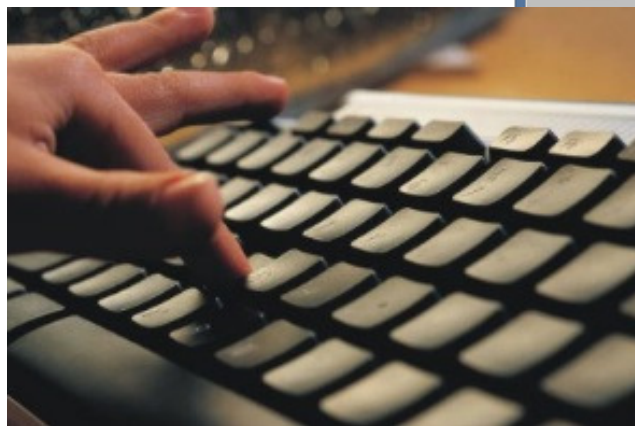
What I think I do



What I really do

## What I really do

**Alaska** Dispatch News



## Collaborative Partners



# Alaska Dispatch News

Alaska 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





# WSD-Alaska

## Information Collected in AOISS

**Alaska Occupational Injury Surveillance System**  
The National Institute for Occupational Safety and Health **NIOSH**

**Incident Details**

Case ID:   
AFS Category:   
Troopers Case ID:   
Police Case ID:   
FACE Number:   
USCG Activity:   
WTSE ID:   
Incident Date (mm/dd/yyyy):  Incident Time (hh:mm):   
Total Fatalities:  Occupational Fatalities:   
Short Description:   
Narrative:   
Weather Related:  Alcohol Suspected:   
Town:  Latitude:   
Consus Area:  Longitude:   
Administrator:  Create Date:  Create User:

**Aviation Incidents**

CFTI:   
Aircraft Type:

**Commercial Fishing Incidents**

CFID ID #:  Species:   
Incident Type:  Vessel Activity:   
Vessel Name:   
# Onboard:

### Incident Details

- Unique ID
- Date
- Location
- Event summary

**Alaska Occupational Injury Surveillance System**  
The National Institute for Occupational Safety and Health **NIOSH**

**Victim Details**

Case ID:  20150001  
Victim ID:  Victim Name:  Birthdate (mm/dd/yyyy):  Date of Death (mm/dd/yyyy):  Age:   
First & Last:  Sex:  (if unknown enter 99999999)  
Body Recovered:  Death Cert ID:  Drugs/Alcohol:   
Intent:  COD Immediate:  BAC:   
Weapon:  COD Underlying:  Drug Test:   
Volunteer:  RICO:  PFD Worn:  Cocaine:   
Working Alone:  Hispanic:  Initial Work:  Amphetamine:   
State Residence:  US Citizen:  Safety Belt:  Cannabis:   
Other:   
SOC:  OIICS Codes: OIICS 2007:  OIICS 2010:  ICD 9 Code:   
NAICS:  Event:  Nature:  ICD 10 Code:   
Body Part:   
Source Of Injury:   
Employer Name:   
Administrator:  Create Date:  Update Date:  Create User:  Update User:  Close Form

### Victim Details

- Unique ID
- Demographics
- Industry (NAICS)
- Occupation (SOC)



## Flexible Data Entry Categories

### Industry Specific

**Aviation Incidents**

CFIT

Aircraft Type

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**Commercial Fishing Incidents**

CFID ID #  Species

Incident Type  Vessel Activity

Vessel Name

# Onboard

### Event Specific

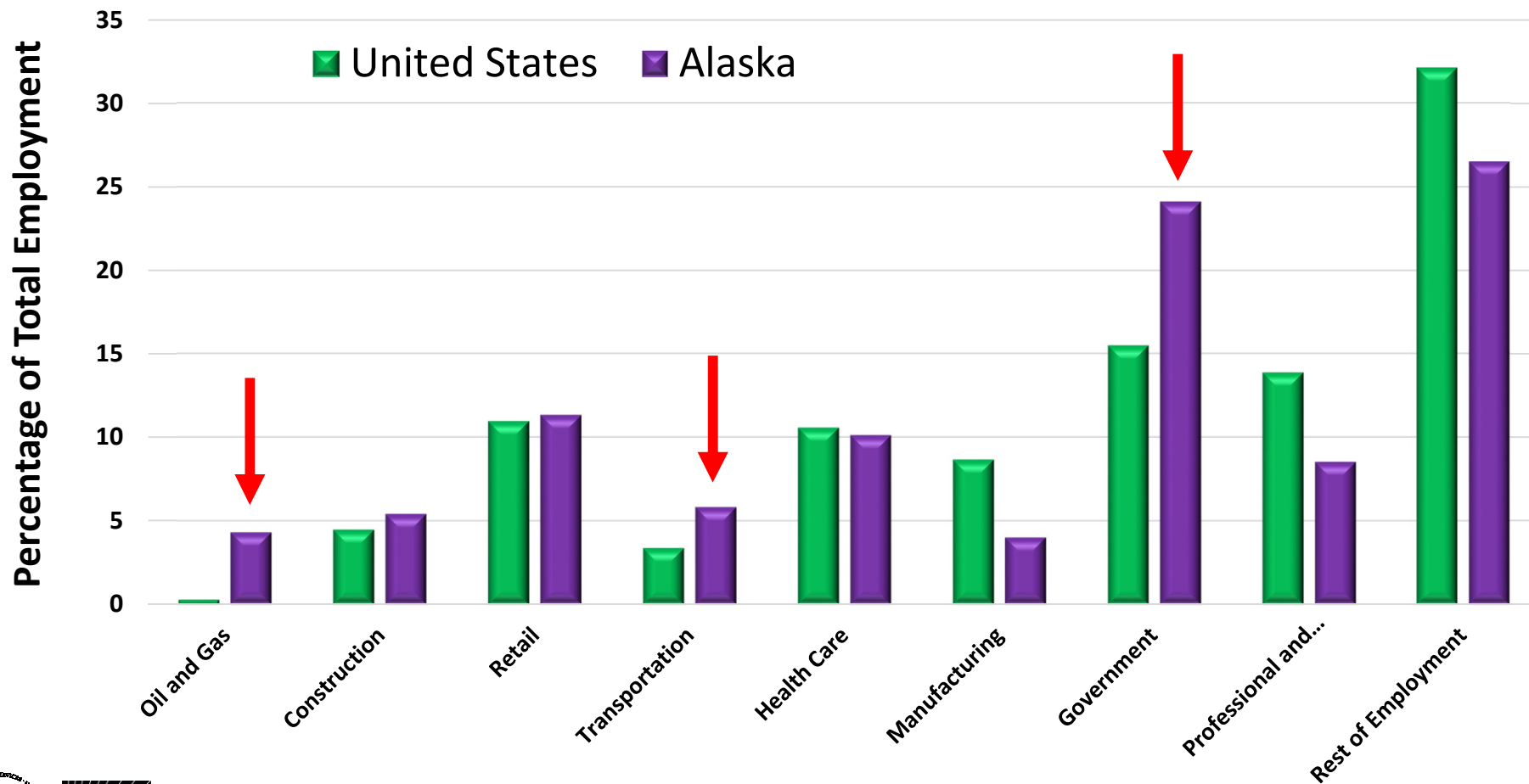
PFD Worn

ImSuit Worn

Safety Belt

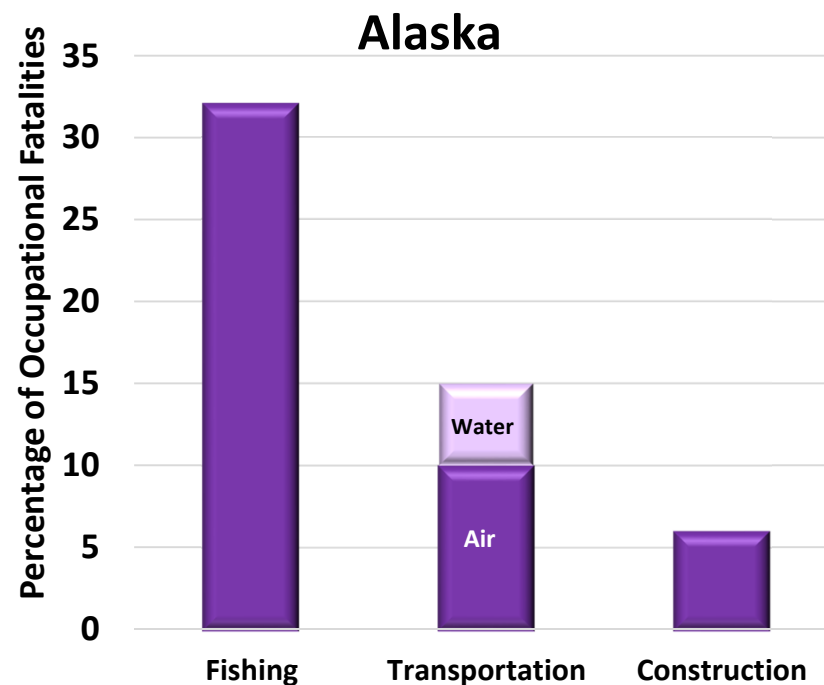
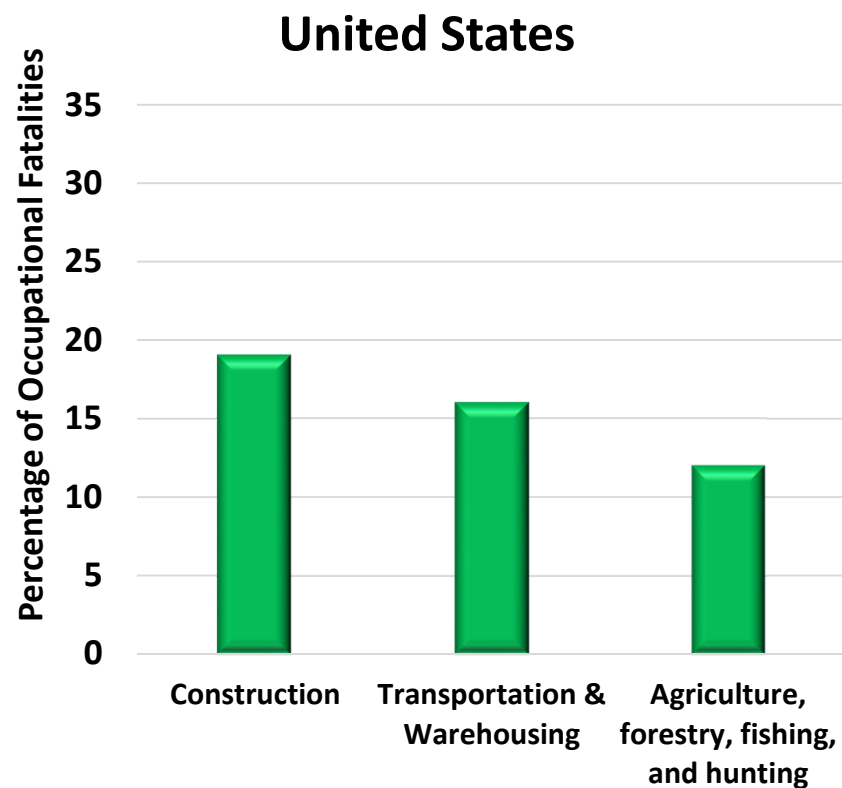


## Percent of Total Employment by Major Industry, Alaska vs United States, 2015

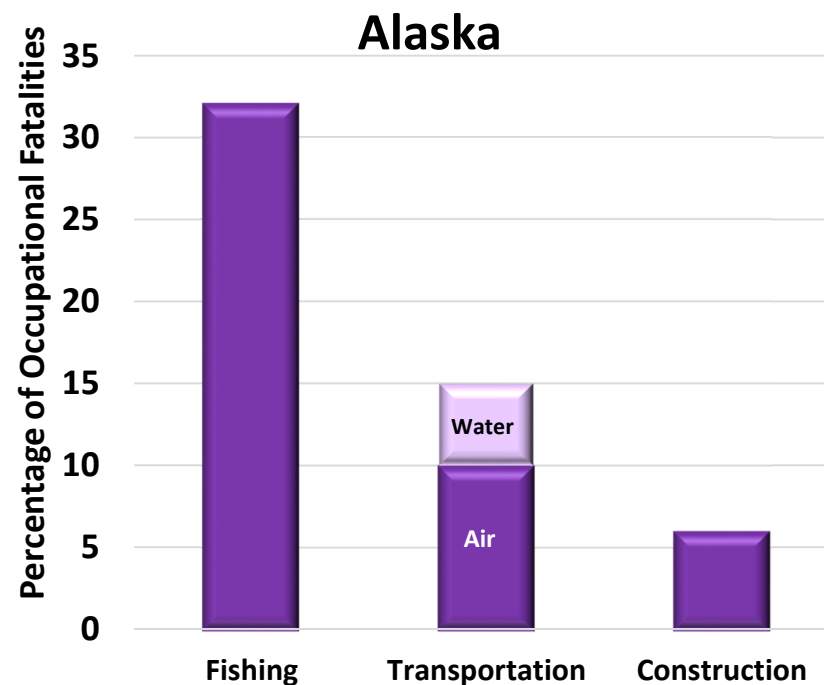
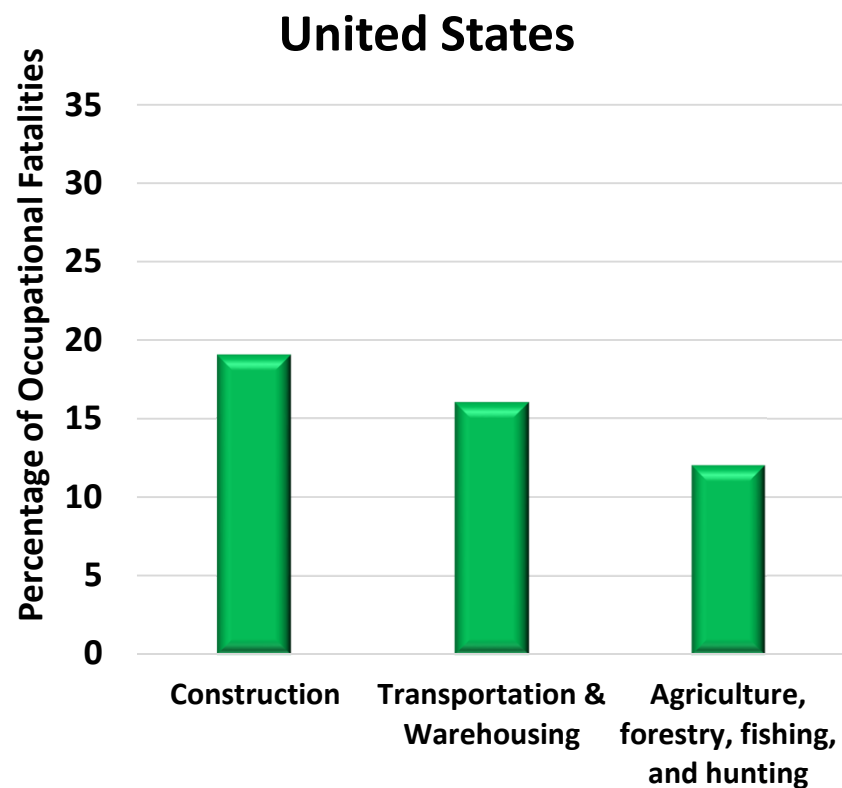


Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section and U.S. Department of Labor, Bureau of Labor Statistics; Alaska Economic Trends, April 2016 and January 2016

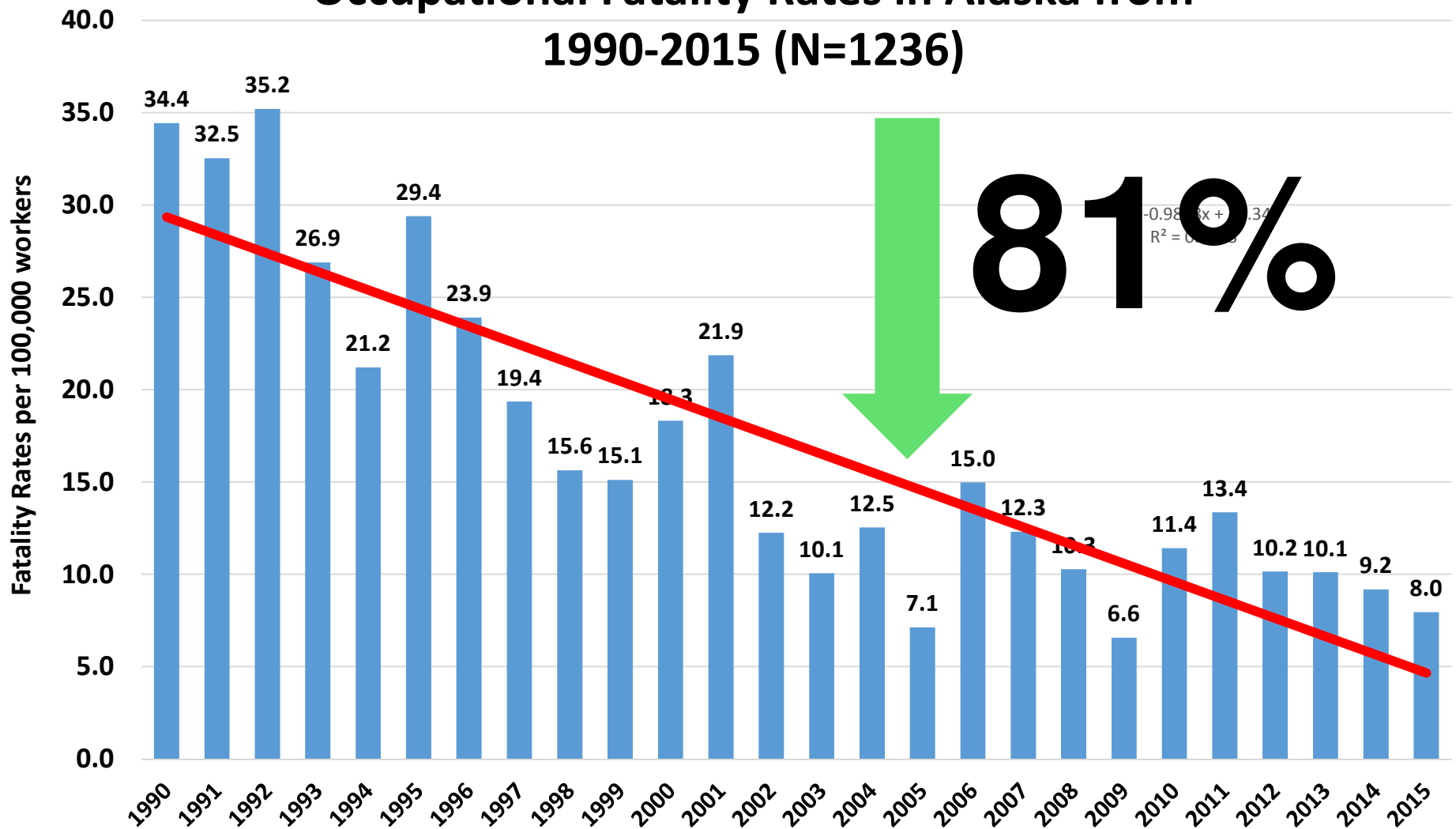
## Top Percentages of Occupational Fatalities by Industry Total in 2014



## Top Percentages of Occupational Fatalities by Industry Total in 2014



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



## The Occupations with the Highest Number of Fatalities in Alaska, 2000-2015



**Commercial Fishermen**

**182**



**Commercial Pilots**

**76**



**Water Transportation Workers**

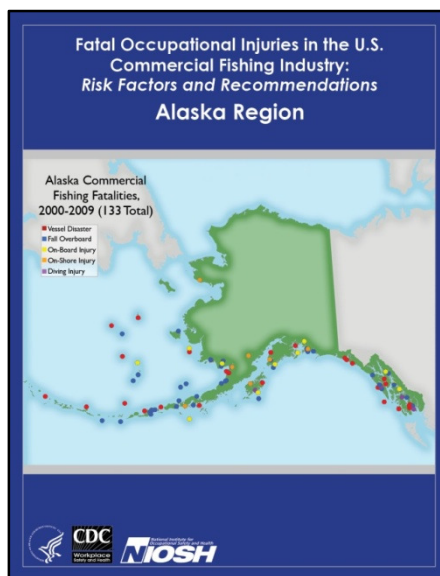
**44**



Source: AOISS

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

# Commercial Fishing





# Commercial Pilots



Introduction

## Fatigue Prevention for Pilots

A TRAINING PROGRAM FOR COMMERCIAL PILOTS IN ALASKA

Workplace training created by the  
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH



# 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



Source: AOISS

WSD | ALASKA

THANK YOU

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