Rural Alaska Worker Safety and Health Project

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Alaska Native Tribal Health Consortium
Division of Environmental Health & Engineering
Alaska Tribal Health System
Residents turn on in-home running water for the first time in Eek, AK.
Work in Rural Alaska

Angoon, AK – October, 2018
Lift station rehabilitation
Work in Rural Alaska

Lower Kalskag, 2018 sewer main construction
Target Workforce

- Temporary workers in hard to reach rural Alaska Native Villages are a vulnerable population
- Define injury types, cause and severity
- Develop recommendations and justification of targeted interventions

Fall protection & confined space entry training, Nome, AK July, 2019
Target Workforce

Fatal workplace injury rate per 100,000 full-time-equivalent workers in 2017


NAICS 2213 Water, sewage and Other systems
2014-2016 Injury rate per 100 full-time workers

Total recordable cases
Total cases with days away from work, job transfer, or restriction
Cases with days away from work
Cases with job transfer or restriction
Other recordable cases

AK NAICS 2213 2-year average
US NAICS 2213 3-year average
NAICS 236 Construction of buildings
2014-2016 Injury rate per 100 full-time workers
AK Rural Worker Safety and Health

• OSHA Susan Harwood Grant – FY 18 & 19
  – Develop & deliver training to rural Alaska Native construction and utilities workforce
  – Focus: Electrical safety & LOTO, Ergonomics, Excavation, Fall Protection, Permit-required Confined Space Entry, & Respirable Crystalline Silica
  – FY18: 349 trainees, 1,650 contact hours
  – FY19: 468 trainees, 2,500 contact hours

Kotzebue, Direct Read Instrument training June, 2019
AK Rural Worker Safety and Health
Underlying Factors for Elevated Injury Rates

Mitigating
• Safety culture and perceptions
• Training & experience
• Availability of safety equipment
• Engineering Design
• Western culture: communication and production expectations

Contextual
• High employment turnover
• Limited Supervision
• Lack of regulatory presence
• Socioeconomic status

Lower Kalskag, AK - April, 2019 sewer main construction
Possible Injury Multipliers

- Access to emergency care
- Access to occupational medicine providers
- Employer return to work programs
- Climate and conditions
- Economic hardship
- Fatigue & long work hours
- Housing and accessibility

Eek, AK February, 2016 Drinking Water Source intake construction
Future Work

• IRB is approved: descriptive study of rural AK worker injuries

• Key variables:
  – Standard Occupational Classification Code
  – Date of hire
  – Date of injury
  – Injury Location (rural/urban)
  – Cause
  – Nature of injury
  – Date disability began/ended
Impact

• Establish baseline?
• Evaluate Susan Harwood training program effectiveness in rural Alaska
• Communicate risk to stakeholders
• Training alone will not resolve OSH disparity in Alaska
• Justify ergonomics intervention
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Alaska Rural Water Association
Alaska Rural Utility Collaborative
Alaska Vocational Technical Center
AK Safety Training Services
Associated General Contractors of Alaska
Baranoff Housing Authority
Bristol Bay Area Health Corporation
Bristol Bay Housing Authority
Bristol Bay Native Association
Akiachak, AK
Atmautuak, AK
City of Sitka, AK
Eek Tribal Council
Enstar Natural Gas Company
EPA Region 10 Tribal Programs
Exclusive Paving
Kenaitze Indian Tribe
Interior Regional Housing Authority
Lower Kalskag Tribal Council
Maniilaq Health Corporation
Native Village of Atmautluak
NIOSH WSD Anchorage
Norton Sound Health Corporation
OSHA Region X
Pango Technology
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Thank you

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Check out our free Excavation Inspection App:
https://www.excavation-safety.net
OUR VISION:

Alaska Native people are the healthiest people in the world.