



Battelle ARO Project Risk Assessment / Field Risk Resource Links

Critical Environmental Health, Safety and Environment Topics

Hazardous Materials:

- [Hazardous Waste Operations and Emergency Response \(HAZWOPER\) - Overview | Occupational Safety and Health Administration \(osha.gov\)](#)
- [What is Hazardous Material? | NFPA](#)
- [Hazard Communication - Guidance Documents | Occupational Safety and Health Administration \(osha.gov\)](#)

Explosives and Blasting:

- [OSMRE Blaster Certification | Office of Surface Mining Reclamation and Enforcement](#)
- [Reclamation Safety and Health Standards – 2024 Edition: Section 4.03 Blasting \(usbr.gov\)](#)
- [30 U.S. Code § 873 - Blasting and explosives | U.S. Code | US Law | LII / Legal Information Institute \(cornell.edu\)](#)

Science Equipment and Instruments:

- [Laboratory Equipment Hazards OSHAcademy Free Online Training \(oshatrain.org\)](#)
- [Laboratories - Overview | Occupational Safety and Health Administration \(osha.gov\)](#)

Firearms Safety:

- [Learn About Firearms Safety and Security | Bureau of Alcohol, Tobacco, Firearms and Explosives \(atf.gov\)](#)
- [Student Courses | Firearm Training \(nra.org\)](#)

Large and Dangerous Wildlife:

- [Alaska's Species Information, Alaska Department of Fish and Game](#)
- [Living With Wildlife, Alaska Department of Fish and Game](#)
- [Wildlife - Health & Safety \(U.S. National Park Service\) \(nps.gov\)](#)
- [Staying Safe Around Bears - Bears \(U.S. National Park Service\) \(nps.gov\)](#)
- [Be BearWise with these bear safety tips - at home and when outdoors](#)
- <https://polarbearagreement.org/about-us/1973-agreement>

Glacier Travel:

- [Mountaineering: The Freedom of the Hills - Wikipedia](#)

Trench and Pit Work:

- [Trenching and Excavation - Overview | Occupational Safety and Health Administration \(osha.gov\)](#)
- [Trenching and Excavation | NIOSH | CDC](#)



Heavy Assembly / Rigging:

- [1926.753 - Hoisting and rigging. | Occupational Safety and Health Administration \(osha.gov\)](#)
- [Hoisting & Rigging | Office of Environmental Health and Safety \(princeton.edu\)](#)

Tower Climbing / Work at Height:

- [Fall Protection - Overview | Occupational Safety and Health Administration \(osha.gov\)](#)
- [NATE: The Communications Infrastructure Contractors Association | Safety Resources \(natehome.com\)](#)

Small Boat Travel:

- [Watercraft Safety Training Program | U.S. Fish & Wildlife Service \(fws.gov\)](#)
- [United States Coast Guard | Boating Safety \(uscgboating.org\)](#)
- [AMSEA Knowledge Base](#)

Cold Water Immersion:

- [Why It's Dangerous | cold water safety](#)
- [Cold Water Hazards and Safety \(weather.gov\)](#)

Travel on Lake and River Ice:

- [Safety on Ice | FHWA \(dot.gov\)](#)
- [Learn How to Stay Safe on the Ice in the Winter \(adirondack.net\)](#)
- [General ice thickness guidelines | Minnesota DNR \(state.mn.us\)](#)

Health

Carbon Monoxide Poisoning:

- [Carbon monoxide poisoning - Symptoms and causes - Mayo Clinic](#)
- [Carbon Monoxide Poisoning | CDC](#)

Waterborne Illnesses:

- [Recreational Waterborne Illnesses: Recognition, Treatment, and Prevention | AAFP](#)
- [8 Prominent Types of Waterborne Diseases and How to Treat Them | AOS \(aosts.com\)](#)

Asbestos Containing Materials (ACM's):

- [Asbestos - Overview | Occupational Safety and Health Administration \(osha.gov\)](#)
- [Asbestos-Containing Materials \(ACM\) and Demolition | US EPA](#)

Environment

Alpine Terrain:

- [Chapter 1: Basic knowledge for alpine climbing | LAB ROCK \(ortovox.com\)](#)
- [Mountaineering Grades: Decoding the Different Systems – Ascentionism](#)



Avalanche Hazard:

- [Avalanche Safety & Rescue Courses | American Alpine Institute](#)
- [Avalanche Safety » Intro](#)
- [Avalanche Resources | AAIC \(alaskasnow.org\)](#)

Extreme Cold and Storm Conditions:

- [Hypothermia and Cold Weather Injuries | AAFP](#)
- [Frostbite - Symptoms and causes - Mayo Clinic](#)
- [Hypothermia: Signs, Symptoms, Causes, and Treatment \(webmd.com\)](#)
- [How to get dressed: Arctic Field Style by Lisa Hupp/USFWS | What's it take to be an extreme bird nerd? Well, sometimes it takes dressing up... What it's like to be inside a remote research camp in Arctic... | By U.S. Fish and Wildlife Service | Facebook](#)

Earthquakes:

- [Preparing for an Earthquake | Natural Disasters and Severe Weather | CDC](#)

Wildland Fire:

- [Wildfire preparedness tips \(nfpa.org\)](#)
- [Safety During a Wildfire | Wildfires \(cdc.gov\)](#)
- [Alaska Wildland Fire Information Map Series](#)

High Altitude:

- [Severe High Altitude Sickness Symptoms & Relief | Alpine Oxygen](#)
- [Altitude Sickness: Symptoms, Diagnosis, Treatment & Prevention \(clevelandclinic.org\)](#)
- [Acute Altitude Illness: Updated Prevention and Treatment Guidelines from the Wilderness Medical Society | AAFP](#)

Insects:

- [10 Types of Insect Bites and How To Treat Them \(health.com\)](#)
- [Mosquito bites - Diagnosis and treatment - Mayo Clinic](#)

Sea Ice Travel:

- [PowerPoint Presentation \(unis.no\)](#)
- [Full article: Changes in sea ice travel conditions in Uummannaq Fjord, Greenland \(1985–2019\) assessed through remote sensing and transportation accessibility modeling \(tandfonline.com\)](#)
- [Augmenting Inuit knowledge for safe sea-ice travel - The SmartICE information system | Request PDF \(researchgate.net\)](#)

Silt Flats and Quicksand:

- [How To Get Out Of Quicksand - WorldAtlas](#)
- [How To Survive Quicksand | Primal Survivor - YouTube](#)



Tsunami:

- [Tsunamis | National Oceanic and Atmospheric Administration \(noaa.gov\)](https://www.noaa.gov)
- [Tsunami Preparedness | Tsunami Safety Tips | Red Cross](#)

Equipment

Multiple Fuels:

- [Understanding HAZMAT Placards | ArcBest](#)
- [Hazard Communication - Overview | Occupational Safety and Health Administration \(osha.gov\)](#)

Unmanned Aircraft Systems/ UAVs:

- [Become a Drone Pilot | Federal Aviation Administration \(faa.gov\)](#)
- [Drone Pilot Certification Guide 2023: Inside the FAA's Part 107 Regulations \(neit.edu\)](#)
- [Course Catalog | IAT](#)
- [Unmanned Aircraft Systems \(UAS\) | Federal Aviation Administration \(faa.gov\)](#)

Power Tools and Equipment:

- [Personal Protective Equipment \(PPE\) Safety | SafetyCulture](#)
- [Hand and Power Tools - Standards | Occupational Safety and Health Administration \(osha.gov\)](#)

Vessels:

- [AMSEA - Alaska Marine Safety Education Association](#)
- [UNOLS Designated Vessels | UNOLS](#)
- [Safety at Sea Courses - US Sailing](#)
- [How to Operate a USCG Dewatering Pump \(amsea.org\)](#)

Activities

Remote Vehicle Travel:

- [University of Alaska](#)

ATV travel:

- [OHV & ATV Safety | CPSC.gov](#)
- [ATV_safety_information.pdf \(army.mil\)](#)

Knife Use:

- [Microsoft Word - 1435 Guide.docx \(apsafetytraining.com\)](#)



Fixed Wing Aircraft Safety:

- [Course Catalog | IAT](#)

Rotorcraft Safety:

- [Course Catalog | IAT](#)

Safe Lifting:

- [OSHA Proper Lifting Techniques: Safe Lifting Ergonomics](#)

Open Ocean Travel:

(see Equipment: Vessels)

River Crossings:

- [Safe River Crossings \(U.S. National Park Service\) \(nps.gov\)](#)
- [Stream crossing safety while hiking and backpacking - Pacific Crest Trail Association \(pcta.org\)](#)

Snow Machine Travel:

- [Snowmobiling Safety, ISMA \(International Snowmobile Manufacturers Association\)- Information for snowmobilers: snowmobiling trails and safety; facts and trends](#)

Truck Travel:

- [ruralremotedriving.pdf \(hpw.qld.gov.au\)](#)
- [Winter Weather - Hazards/Precautions | Occupational Safety and Health Administration \(osha.gov\)](#)