

Poster Number: M72 Abstract #: 2284

**New risks, New Strategies: Greenlandic Inuit Responses to Climate Change.**

**K. R. Derry, BA<sup>1</sup>** and **L. Stallones, PhD<sup>2</sup>**

<sup>1</sup>Polar Field Services, Littleton, CO, <sup>2</sup>Colorado State university, Fort Collins, CO

**INTRODUCTION:** As climate change accelerates, its effects are especially pronounced in the Arctic region. The Arctic's indigenous people are facing increasing challenges, most notably their ability to harvest food resources. Changes in sea-ice conditions related to climate change may be increasing the risk of injuries during travel on ice for Greenlandic Inuit hunters and fishers.

**METHODS:** Data collection included participant observation, informal interviews, and formal semi-structured interviews. Participants included male hunters and fisherman ( $n=19$ ) and women who travel on sea ice ( $n=8$ ).

**RESULTS:** Observations of climate change by Greenlandic Inuit include changing wind and snow patterns; the sea ice that is forming now is not as solid or as thick, making travel especially dangerous; and there is more open water and less sea ice; variation in local weather patterns, such as an increase in precipitation and fog, and large storms develop at an increasing rate. Many fishermen observe that halibut is being replaced by cod, which is unusual but not surprising considering that cod is a warmer water fish than halibut. In addition, in general there are fewer fish. Others report that there are more pilot whales and killer whales in Uummannaq and an increased number of humpback and narwhal whales in Ilulissat. Acceptable risks/injuries include frostbite and losing fingers. Younger generations are hunting less. The shift from the traditional mode of teaching is seen by older hunters as placing younger Inuit at greater risk of injuries while traveling on the sea ice. Many hunters and fishers are seeking wage employment in other communities.

**CONCLUSIONS:** Climate related changes in sea ice conditions increase vulnerability to potential injury events during travel for Greenlandic Inuit hunters and fishers, particularly those living in remote areas. Local hunters value modern technology and traditional ecological knowledge for managing injury-related risks while traveling on sea ice.