## Alaska Climate and Health E-News Raising Awareness about Climate Change and Public Health No. 68, June 3, 2011

**Ice road trucking in jeopardy** *May 30, 2011* A study published in the journal *Nature*, suggests that hundreds of thousands of square miles will become un-navigable by ice roads as early as mid century. In many parts of the Arctic, ice roads are built each winter out of compacted snow and ice. In small towns like Trout Lake, Canada, diesel trucks use ice roads to carry fuel, food and supplies. Researchers speculate that it will not be economically viable to replace the ice roads with conventional ones. At the same time however, marine shipping access is expected to increase for many Arctic coastal communities. The Globe and Mail

In Alaska, more extreme warm days, less extreme cold 2011 Brooke Stewart, a University of Illinois at Urbana Champaign graduate student reviewed National Climate Data Center records of daily maximum and minimum temperatures from 1950 to 2008 and evaluated changes in the frequency of extreme events. The results indicate an overall increase in the frequency of extreme high temperature events and a decrease in extreme low temperature events. The strongest trends occurred in winter and spring. Read paper

Northern Abalone at risk from ocean acidification May 26, 2011 The northern abalone is prized as a delicacy and as an important subsistence food for many Pacific Northwest First Nations. A study published in the Journal of Experimental Marine Biology and Ecology reports on the effects of increased acidity on the abalone larvae. Increases of CO2 levels from 400 to 1,800 ppm killed 40 percent of the larvae, decreased the size of surviving larvae, and increased shell abnormalities. Average ocean CO2 levels hover around 380 ppm but much higher spikes are already being observed during periods when abalone are spawning. ScienceDaily

Climate Change and Marine Mammals: Winners and Losers May 28, 2011 A study published in the journal PLoS ONE by the University of Freiburg evaluated potential future changes in global marine mammal habitat. The study projected that in the next 40 years half of species would experience habitat loss, while others would see significant range increase. In polar regions the models predicted native species losses of up to 80%, while at the same time, the number of invasive species would increase by an order of magnitude. ScienceDaily

**Alaska Climate Events Map** – Visit our <u>Google Map</u> to see the floods, wildfires, algae blooms and other incidents that have occurred around Alaska during the past month.

Climate and Health E-News is received around the circumpolar north by people who are interested in climate impacts on health. For back issues or to join the mailing list, visit our website. Please click following link if you would like to subscribe or unsubscribe.

Regards - Mike

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