

**Aruba, February 18, 2014** - The *Toxoplasma* parasite has not previously been found in Arctic beluga whales. Ice has previously helped isolate the Arctic from pathogens found further south. (Ted S. Warren/Associated Press)

For the first time, a parasite that can affect humans has been found infecting Arctic beluga whales killed for food, suggesting one way climate change could pose a threat to human health. The spread of parasites, which some believe is related to climate change, is also now believed to be responsible for the die-off of 406 grey seals off Cape Breton Island in 2012, University of British Columbia researchers say.

The researchers announced at the 2014 annual meeting of the American Association for the Advancement of Science late last week that they had detected an infectious form of *Toxoplasma gondii* in a beluga whale in the Beaufort Sea. The whale was killed by Inuit hunters. The meat of whales such as belugas is valued as a traditional Inuit food. 'With the big thaw, there's a breakdown of these ecological barriers, so you've got liberation of parasites.' - Michael Grigg, molecular parasitologist

In humans, the *Toxoplasma* parasite causes toxoplasmosis or kitty litter disease, which can result in blindness and miscarriages in humans and can kill people with weakened immune systems. It has become known as a characteristic infection in people with AIDS.

"Because this parasite can cause serious diseases in people, we need to pay attention to its emergence in the North as a new potential threat to food safety," said Michael Grigg, who co-authored the research.

Grigg, a molecular parasitologist with the U.S. National Institutes of Health and an adjunct professor at UBC, said that while traditional Inuit processing and cooking methods should kill the parasite, vulnerable people such as pregnant women should be "extra vigilant" about handling and eating raw whale meat.

A UBC news release noted that the parasite is "not a major concern" for healthy people.

Previously, *Toxoplasmosis* was not found in the Arctic, even though it had been identified in mammals in the northern Pacific region, due to ice sheets that blocked it from spreading too far north. The ice that kept the Arctic isolated from the south is starting to melt.

"With the big thaw, there's a breakdown of these ecological barriers," Grigg said in a video posted by UBC, "so you've got liberation of parasites ... to cause infections in a new susceptible range of animals" that have never been exposed to it before.

Source/ Read more: <http://www.cbc.ca/news/technology/cat-parasite-found-in-western-arctic-belugas-1.2536234>