

Cat parasite found in western Arctic Beluga deemed infectious

February 13 2014



Image taken on November 20, 2012 shows a young beluga whale swimming with an adult beluga at an aquarium in Chicago, Illinois

University of British Columbia scientists have found for the first time an infectious form of the cat parasite *Toxoplasma gondii* in western Arctic Beluga, prompting a health advisory to the Inuit people who eat whale meat.

The same team also discovered a new strain of the parasite *Sarcocystis*, previously sequestered in the icy north, that is responsible for killing 406 grey seals in the north Atlantic in 2012.

Presenting their findings today at the 2014 Annual Meeting of the American Association for the Advancement of Science (AAAS), Michael Grigg and Stephen Raverty from UBC's Marine Mammal Research Unit say that the "big thaw" occurring in the Arctic is allowing never-before-seen movement of pathogens between the Arctic and the lower latitudes.

"Ice is a major eco-barrier for pathogens," says Michael Grigg, a molecular parasitologist with the U.S. National Institutes of Health and an adjunct professor at UBC. "What we're seeing with the big thaw is the liberation of pathogens gaining access to vulnerable new hosts and wreaking havoc."

Toxoplasmosis, also known as kitty litter disease, is the leading cause of infectious blindness in humans and can be fatal to fetuses and to people and animals with compromised immune systems.

"Belugas are not only an integral part of Inuit culture and folklore, but also a major staple of the traditional diet. Hunters and community members are very concerned about food safety and security," says Raverty, a veterinary pathologist with the B.C. Ministry of Agriculture and Lands' Animal Health Centre and an adjunct professor at UBC. Raverty has led the systematic sampling and screening of hunter-harvested Beluga for 14 years.

Grigg has also identified the culprit of the 2012 grey seal die-off as a new strain of *Sarcocystis*. While not harmful to humans, the Arctic parasite, which was named *Sarcocystis pinnipedi* at the AAAS meeting today, has now killed an endangered Steller sea lion, seals, Hawaiian

monk seals, walruses, polar and grizzly bears in Alaska and as far south as British Columbia.

Provided by University of British Columbia

Citation: Cat parasite found in western Arctic Beluga deemed infectious (2014, February 13)
retrieved 10 April 2024 from

<https://phys.org/news/2014-02-cat-parasite-western-arctic-beluga.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.