To: all TCR 18 users, December 2006

Re: testing pregnant women in Iiyiyuu Aschii for mercury, lead and PCBs.

The New Relationship Agreement in 2002 included a new Mercury Agreement between the Crees and Hydro Quebec. At this time, the CHB started to look at whether further testing for mercury was necessary in the Cree population. People in the Cree communities were tested extensively starting in the late 1970’s, up till the mid-1990’s. Over this period, mercury levels went down steadily but a few people still had mercury levels higher than recommended by Health Canada and the World Health Organization.

Mercury in fish in Iiyuyuu Aschii comes from several sources:
- Mercury is present in small amounts in water from the underlying soil and rocks; it is taken up by plants and then by insects that fish eat.
- Some mercury is transported in the air from industries in southern Ontario and Quebec and northeastern USA and falls into northern lakes in the rain.
- Forestry and dams increase the levels of mercury in fish.

The levels of mercury in fish in reservoirs increases when the reservoir is new, and gradually decreases over 15 to 30 years. Fish that eat other fish, such as walleye, pike and lake trout, have higher levels of mercury; big ones have even higher levels. Whitefish, brook trout and most other fish have low levels of mercury.

Lead, presumably from contact with lead shot for hunting geese and ptarmigan, has been found in people’s blood in one Cree community. PCBs are man-made chemicals that are found in the soil and in food; they have been transported to all parts of the planet through global atmospheric pollution. With global warming, more PCBs may be found in the mid-north areas.

As a precaution, and following approval of the Board of Directors, the Public Health Department of the CHB has adopted two main strategies for keeping an eye on the levels and effects of contaminants such as mercury, lead and PCBs. One strategy is a series of studies (Nituuschischayhitaau Aschii) in each community during the summers, starting with Mistissini in 2005. The second strategy is to include tests for mercury, lead and PCBs in the routine prenatal care for all pregnant women in the Cree territory. Pregnant women were chosen because the developing baby inside the mother’s uterus is more sensitive to effects of mercury, lead and other contaminants.

Testing pregnant women for contaminants has started in Mistissini and Waswanipi and will start in the other communities in 2007. One hair sample and small amounts of blood are taken. As with the other prenatal tests, women will be informed if results are abnormal.

For further info about this, please contact the following persons in the Public Health Department: Elizabeth Robinson, Mathieu Trepanier, Paul Linton, Francine Brochu or Bella Petawabano.