



CIHR IRSC  
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# Aboriginal Health

## The CIHR Institute

CIHR's Institute for Aboriginal Peoples' Health has a mission - to reduce the health disparities that affect the lives of so many Aboriginal Peoples in Canada. It is forging partnerships, based on research excellence, with researchers and communities that respect Aboriginal values and cultures, while engaging Aboriginal People to become health researchers themselves.

## About CIHR

The Canadian Institutes of Health Research (CIHR) is the Government of Canada's agency for health research. CIHR's mission is to create new scientific knowledge and to catalyze its translation into improved health, more effective health services and products, and a strengthened Canadian healthcare system. Composed of 13 Institutes, CIHR provides leadership and support to more than 10,000 health researchers and trainees across Canada.

The Canadian Institutes of Health Research (CIHR) is the Government of Canada's agency for health research. Through CIHR, the Government of Canada invested approximately \$19.5 million in 2005-06 in Aboriginal health research across Canada.

## The Facts

Life expectancy and the burden of disease for Aboriginal Canadians differs from other Canadians. From the data that are available we know the following:

- In 2000, First Nations males had a life expectancy of 68.9 years compared to 76.6 years for females. In comparison, non-Aboriginal Canadians' life expectancies in 2001 were longer by 8.1 years for males and 5.5 years for females.\*
- The infant mortality rate among First Nations in 2000 was 6.4 deaths per 1,000 live births, compared to the Canadian infant mortality rate of 5.5.\*
- The tuberculosis rate among First Nations people is 6.2 times higher than in the general population.\*
- Diabetes is 2.7 times more prevalent among First Nations than in the general population.\*
- First Nations peoples on reserves have reported rates of heart diseases 16% higher than the general population.\*

## Research Finding Solutions to Aboriginal Peoples' Health

- CIHR-funded researcher Dr. Paul Hackett of the University of Manitoba has applied historical research to learn more about the underlying causes of disease and mortality rates among First Nations people in Manitoba and to demonstrate how such information could help policy-makers develop better health services for First Nations people. He notes that past efforts by the health system to deal with diseases such as tuberculosis have created negative experiences passed down from one generation to the next and, as a result, may limit the effectiveness of current health initiatives.
- In an ongoing study of First Nations people's use of healthcare services, CIHR-supported researcher Dr. Patricia Martens of the University of Manitoba and Doreen Sanderson of the Assembly of Manitoba Chiefs found that, while First Nations people use hospitals and ambulances more than all other Manitobans, they do not seek as many consultations with healthcare specialists. Further research will shed light on whether the low consultation rate has anything to do with lack of access or referral biases.
- Metabolic syndrome is the term used to describe a broad range of conditions occurring together that all can lead to heart disease. The list includes obesity, especially abdominal obesity, high blood sugar, high blood pressure and cholesterol problems. In a study of Canadians of European origin living in Manitoba, Oji-Cree First Nations from northwestern Ontario and Manitoba and Inuit from the Keewatin region of Nunavut, CIHR-funded researcher Dr. Kue Young of the University of Manitoba found that metabolic syndrome varies substantially according to ethnic group. Compared with Canadians of European origin, First Nations had a worse metabolic profile, while Inuit had a better metabolic profile except for a high rate of abdominal obesity. Metabolic syndrome affects as many as 45% of First Nations women and as few as 8% of Inuit men.

\* Health Canada (First Nations and Inuit Health Branch) 2000.

## The Researchers... Dr. Caroline Tait – Addressing High-risk Problems for Canada’s Aboriginal Peoples

Existing treatment and support programs designed to prevent fetal alcohol spectrum disorder (FASD) are no match for the poverty and inadequate housing that contribute to the vulnerability and marginalization of a group of Indigenous women who are at risk of abusing alcohol while pregnant, according to Dr. Caroline Tait, a Métis medical anthropologist and Assistant Professor at the University of Saskatchewan. She is studying the root causes of FASD and her research has shown that overcrowding and the lack of safe and adequate housing both on and off reserve play a major role in increased mental distress and alcohol abuse.”

“The person goes through treatment,” says Dr. Tait. “They’re healthier, they’re eating better, they’ve been getting counseling. Then they head right back to the same conditions that reinforced their substance abuse.”

Dr. Tait says that researchers, policy-makers and indigenous community leaders need to work together in order to address overcrowding and the lack of safe and affordable housing on and off reserve. From there, efforts can be better made to resolve poverty, mental health problems, poor nutrition and low educational status among Canada’s Aboriginal people.

Dr. Tait can relate to poverty. She grew up poor in a small town in Saskatchewan, and did not have the opportunity to attend university until she was in her late 20s. Once there, however, she rapidly completed a series of degrees, winning significant awards along the way, including a Fulbright scholarship. In May 2004, Dr. Tait was hired by the Indigenous Peoples Health Research Centre (IPHRC), in a tenure-track position.

Now, as well as continuing her research on FASD prevention and mental health disparities among Canada’s Aboriginal peoples, Dr. Tait is focusing on building a strong research community in the area. She is an active member of the National Network for Aboriginal Mental Health Research, which was created in 2001 to build capacity for mental health research in Aboriginal communities. The network combines mentorship programs for students with a strong interdisciplinary approach to research. This approach brings together community representatives, researchers, mental health practitioners, public health experts, educators and front-line health and social service workers.

“We need interdisciplinary research,” says Dr. Tait. “We need to continue along that path. I think it’s really important to have that dialogue and networking opportunities.”

- As part of an ongoing study to examine the prevalence of, and risk factors for, complications of type 2 diabetes among Aboriginal Canadians, CIHR-funded researcher Dr. Anthony Hanley from the University of Toronto looked at the causes of peripheral arterial disease (PAD), which restricts blood circulation in arteries leading to the kidneys, stomach, arms, legs and feet. People with PAD often have fatty buildup in the arteries of the heart and brain which raises the risk of death from heart attack and stroke. Persons with type 2 diabetes are twice as likely to develop PAD. There have also been questions about the role of a genetic mutation known as MTHFR 677C>T. Research with Oji-Cree with type 2 diabetes and who have this particular mutation determined that, for the Oji-Cree, MTHFR 677C>T is a major risk factor for developing PAD. The research was conducted in partnership with the Sandy Lake First Nations Band.
- Dr. Chris Furgal, from Université Laval, in partnership with the Inuit Tapiriit Kanatami, is investigating the impact of environmental contaminants in the Canadian Arctic on human health. He has discovered that various organochlorines (OCs) and toxic metals are found in the traditional diets of Aboriginal peoples who live there. This can contribute to immune system, birth weight and childhood respiratory problems, among other impacts. In order to make any changes to these traditional diets, Dr. Furgal says that health researchers must be respectful of the social, cultural, spiritual, nutritional and economic beliefs of the members of the Arctic communities who consume the contaminated foods.

## In the Pipeline... Addressing the Burden of Aboriginal Suicide

Suicide rates in Aboriginal communities are almost ten times the national average. CIHR-supported researcher Dr. Gustavo Turecki of McGill University in Montreal is leading a team to find out what, exactly, are the risk factors for suicide among Aborigines. The team has begun conducting detailed one-on-one interviews in communities across Nunavut with people who have survived a suicide attempt and with people who have had a family member or friend who has committed suicide. The team will also be talking to an equal number of people untouched by suicide.

The second part of the project, led by Dr. Rod McCormick, a Mohawk psychologist and professor at the University of British Columbia, will interview only people who have attempted and survived suicide. Interviews will take place in Aboriginal communities in British Columbia, Ontario, Quebec, Nova Scotia and Nunavut. The researchers want to learn more about what helped these people overcome the threat of suicide and move on with life. The project includes the following organizations as partners: Nunavut Tunngavik Inc.; Isaksimagit Inuusirmi Katujjiqatigiit (‘Embrace Life’ suicide prevention council, Nunavut); Office of the Chief Coroner of Nunavut Snuneymuxw First Nation (B.C.); and the Inter Tribal Health Authority (B.C.).