

High cancer rates among Fort Chipewyan residents

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Two doctors who raised concerns about cancer risks for residents of Fort Chipewyan living near Alberta's oil sands say they feel vindicated by a new report confirming elevated cancer rates in the community.

An Alberta Health Services study, released Feb. 6, found 51 cancers in 47 people between 1995 and 2006, instead of the 39 incidents of cancer that would have been expected statistically. There were higher incidents of biliary tract cancers (three cases: two of cholangiocarcinoma and one of adenocarcinoma of Ampulla of Vater), cancers of the blood and lymphatic system (eight cases — more than double what was expected), and two cases of soft tissue cancers, according to the study, which Dr. Yiqun Chen conducted for the province.

The increased incidence of these three types of cancers "warrant closer monitoring of cancer occurrence in upcoming years," the report states. "Whether people living in Fort Chipewyan have an increased risk of developing cancer is still not clear."

Alberta Health Services investigated the cancer incidence in Fort Chipewyan, a largely Aboriginal community 600

kilometres northeast of Edmonton, after Dr. John O'Connor went to the media reporting a high number of cases of cholangiocarcinoma, a rare bile duct cancer. O'Connor and community residents linked these and other cancers to exposure to environmental contaminations (*CMAJ* 2008;178[12]:1529).

The community is on the Athabasca River, 250 kilometres downstream from the oilsands and close to uranium mines and pulp mills. Although the provincial study confirmed only two cholangiocarcinoma cases, and O'Connor reported two confirmed and three suspected, O'Connor says the study confirms he and his patients were right to be alarmed.

"I certainly feel that I've been vindicated," O'Connor told *CMAJ* in an interview from Clyde River, Nova Scotia, where he now lives, although he still commutes to Alberta to see patients. "I'm definitely interested in looking into the detail of what defines a biliary tract cancer and a cholangiocarcinoma."

O'Connor's colleague in Fort McMurray, Alberta, Dr. Michel Sauvé, says the study also raises new questions, "particularly with the report of

statistically and clinically elevated rates of rare and environmentally sensitive cancers such as leukemias, found to be two times more common than expected, while no cases occurred in the control group."

In releasing the report, Dr. Tony Fields, head of Alberta's cancer services, said more study is required to confirm the reasons for the elevated number of cancers. He would not make the link to environmental concerns.

But Sauvé says even the provincial report acknowledges that the incidence rate of cholangiocarcinoma in all Alberta First Nations is two to three times higher than that in non-First Nations people. He raised a link to the amount of trihalomethanes, toxic chemicals that are a byproduct of chlorination. These levels were identified in the 1999 Northern River Basins Human Health Monitoring Program report as being more than twice the upper acceptable levels and in the range linked with causing cancer and fetal damage.

"Shouldn't that send a signal that further studies are needed?" asks Sauvé. — Laura Eggertson, *CMAJ*

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