Cancer incidence in Fort Chipewyan follow-up report

A follow-up report on cancer incidence in Fort Chipewyan has been prepared by Alberta Health Services (AHS). The report follows a 2009 report on cancer cases in the community.

To help address specific questions about cancer incidence in Fort Chipewyan, Alberta Health Services compared the number of cancer cases reported in the area to the number expected based on age-adjusted cancer rates in Alberta.

Our follow-up report found that the total number of cancers and most types of cancers in the Fort Chipewyan area were the same as rates in the rest of Alberta.

No childhood cancer cases were diagnosed in Fort Chipewyan between 1992 and 2011. The absence of childhood cancer rates is reassuring, as children are more vulnerable than adults to carcinogens and environmental exposures.

It is our duty to protect and promote the health of Albertans, and this follow-up study is one way that we are fulfilling that duty, on behalf of Fort Chipewyan residents.

A summary of our findings is provided below.

All cancers combined, excluding non-melanoma skin cancer:
The overall number of new cancer cases diagnosed in males, females or both males and females combined showed no significant difference between the observed and expected number of cancer cases.

Specific cancers by type:

Cervical:
- Although the numbers were very small, there was a higher than expected number of cervical cancer cases in the most recent time period (2007-2011) as well as in the entire 20-year time period (1992-2011).
- Four cases of cervical cancer were reported. One case would be expected.
- The majority of cervical cancers are related to human papilloma virus exposure.
- The human papilloma virus vaccine can prevent this kind of cancer.
- Routine pap smears for early detection and treatment can also prevent it.

Biliary Tract, other & unspecified:
- Biliary tract cancer incidence was higher than expected from 2002-2006 and caused the overall biliary tract cancer incidence to be elevated for the entire period assessed (1992-2011).
- Three cases were reported; none would be expected. Another case of biliary tract cancer has been confirmed in the region, but is not included in the period examined in this report. This case is being reviewed and will be included in future updates on cancer rates in Fort Chipewyan.
- The known risk factors for bile duct cancer are complicated, including family history, bile duct stones, cysts and abnormalities, liver cirrhosis, inflammatory bowel disease, aging,
obesity, alcohol, diabetes and viral hepatitis.

- Possible risk factors that might increase the risk include smoking, pancreatitis, infection with HIV, and exposure to asbestos, radon, dioxin, nitrosamines or some polychlorinated biphenyls.

**Bronchus/Lung:**
- Bronchus/lung cancer for both genders combined was *no different* than expected based on provincial rates for any time period examined.
- Bronchus/lung cancer in females from 1992-2011, though not statistically significant, is on the verge of being higher than expected, based on Alberta rates.
- There were eight cases of lung cancer among women. Four cases would be expected.
- The majority of lung cancers are related to smoking.
- Preventing teens and young adults from beginning to smoke and programs to aid smokers in quitting can help prevent lung cancer and a host of other diseases.

**Non-Hodgkin Lymphoma:**
- There were more cases of non-Hodgkin lymphoma than expected in the earliest time period (1992-1996); however, there is no difference between the expected and observed numbers for any period since that time.

**Breast, Colorectal & Prostate:**
- The rates for these cancers were *no different* than expected based on provincial rates for any time period examined.

Because of the small population, just a few cancer cases can make a significant statistical difference in the cancer incidence rates. We'll continue to monitor the area every three years to see if a trend develops over time.

We analyzed all cancers that occurred in Fort Chipewyan from 1992-2011; this summary however, includes the top four most common cancers in Alberta and those that were statistically different than expected for any time period. More detailed information on other cancer types can be found in the report.