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Media backgrounder #1: Highlights of 2013 liver cancer statistics

29 May 2013

TORONTO -

Liver cancer is the special topic in [Canadian Cancer Statistics 2013](#), released today by the Canadian Cancer Society in collaboration with the Public Health Agency of Canada and Statistics Canada.

Overall liver cancer facts

- Liver cancer is one of the fastest rising cancers in Canada.
- While it is still considered a rare cancer, accounting for an estimated 1% of all new cancer diagnoses and deaths in 2013, the incidence rate of liver cancer has tripled in Canadian men and doubled in women since 1970.
 - Between 1970 and 2007, there was an average annual increase of 3.6% per year in liver cancer incidence for men. For women, there was an annual average increase of 1.7%.
- The liver cancer death rate is also increasing:
 - The largest annual increase was between 1991 and 2009, when the liver cancer death rate in men rose by 2.5% per year. In women, the average annual death rate has risen 1.8% per year between 1994 and 2009.
- An estimated 2,100 Canadians will be diagnosed with liver cancer in 2013 (1,550 men and 490 women). An estimated 1,000 will die from the disease (780 men and 240 women).
- Liver cancer has a very poor prognosis, with a five-year relative survival rate of only 20%.
- Liver cancer is the 3rd leading cause of cancer death worldwide after lung and stomach cancer, accounting for about 700,000 deaths per year worldwide.



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- Hepatocellular carcinoma is the main type of liver cancer that accounts for the majority (71.9%) of liver cancers in Canada. Cholangiocarcinoma is a more rare type of liver cancer affecting the bile duct, accounting for 4.1% of liver cancers in Canada.

Survival

- Based on estimates for 2006-08, the five-year relative survival rate for liver cancer in Canada is 20 per cent (4 out of 5 people diagnosed will die within 5 years compared to people of the same age in the general population who don't have cancer).

Prevalence

- As of January 2009, it is estimated there were 2,985 Canadians (2,242 males and 743 females) who had been diagnosed with primary liver cancer in the previous 10 years and were still alive on that date.

Diagnosis and treatment

- In most cases, liver cancer does not cause any symptoms until very late in the course of the disease
- People with liver cancer often present with large, late-stage tumours that are generally not curable.
- People with liver cancer may present with symptoms such as jaundice, abdominal swelling, weight loss, night sweats, fatigue or abdominal pain
- Depending on the stage of the cancer and the health of the liver, treatment may include surgery to remove the tumour, radiofrequency ablation, chemoembolization, chemotherapy, or liver transplantation.

Liver cancer risk factors

Chronic hepatitis B and C infection are the main risk factors for liver cancer. Smoking, heavy alcohol use, obesity and diabetes are also associated with a higher risk of liver cancer.

Hepatitis B and C

- Hepatitis B and C are both viral infections that cause inflammation of the liver. Chronic infection with hepatitis B or C damages the liver, which can eventually lead to liver cancer.



- About 5-10% of people infected with hepatitis B become chronic carriers of the virus.
- About 75-85% of people infected with hepatitis C become chronic carriers of the virus. Many people infected with hepatitis B or C are not aware of their infection.
- It is possible that liver cancer rates are rising in Canada because of increasing immigration of persons chronically infected with hepatitis B or C to Canada from areas of the world where these infections are common.
- Another reason is that spread of infection occurs unknowingly from infected people to uninfected people (such as between household members for hepatitis B or among drug users for hepatitis C).
- The hepatitis B virus is commonly passed through exposure to contaminated blood or body fluids between sexual partners, sharing injecting equipment among drug users, or among household members by sharing personal care articles such as razors, scissors, nail clippers or toothbrushes with an infected person. The virus can also be transmitted from mother to child during birth.
- Most hepatitis C infection is spread through contact with contaminated blood.
- Last year, the US introduced hepatitis C screening guidelines for Americans born between 1945 and 1965 after considering the high prevalence of hepatitis C in this age cohort. Work is underway at the Public Health Agency of Canada (PHAC) to determine which age and population groups could benefit from hepatitis C screening as suggested in the US. The Society is supportive of PHAC's work in this area.

Smoking, heavy alcohol use, obesity and diabetes

- In the US and northern Europe, more than half of liver cancer cases are not linked to hepatitis B or hepatitis C, implying that other risk factors may play a role. These include alcohol-related cirrhosis of the liver, smoking, fatty liver disease caused by obesity, and diabetes.

Other possible liver cancer risk factors

- occupational exposure to vinyl chloride or PCBs
- metabolic diseases (such as hereditary hemochromatosis, alpha-antitrypsin deficiency)
- primary biliary cirrhosis



- exposure to aflatoxin (a carcinogenic toxin produced by an agricultural fungus, typically in the developing world)

Reducing the risk of liver cancer

There are a number of things Canadians can do to reduce their risk of liver cancer. These include:

- Protect yourself against hepatitis infection: chronic infection with hepatitis B or C virus increases the risk of developing liver cancer.
 - People can get vaccinated for hepatitis B if they haven't already done so. There is no vaccine for hepatitis C, but research to develop a vaccine is underway.
- Practise safe sex.
- Don't share needles or other drug-use equipment
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- Get treated if you have a hepatitis infection:
 - Treatment of chronic hepatitis B infection can reduce the amount of virus in a person, which may lead to a lower risk of liver cancer.
 - Treatment of chronic hepatitis C infection can reduce and in some people eliminate the virus completely.
- Limit the amount of alcohol you drink.
- Be a non-smoker.
- Be physically active and maintain a healthy body weight.

Research

- More research is needed in Canada about the most effective way for educating the public about the disease and to better understand the needs of liver cancer patients and survivors.
- More Canadian data is also needed to understand the best strategies for hepatitis B and C screening and treatment and how best to engage communities in promoting screening for hard-to-reach populations.



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Glossary

Five-year relative survival is the proportion of people alive five years after their diagnosis, adjusted for the deaths expected for people of the same age in the general population. Relative survival is the most often used method for analyzing the survival of cancer patients across a population.

Prevalence is the number of people with a new or previous cancer diagnosis in a given population who are alive on a specific date (known as the index date).

About the Canadian Cancer Society

For 75 years, the Canadian Cancer Society has been with Canadians in the fight for life. We have been relentless in our commitment to prevent cancer, fund research and support Canadians touched by cancer. From this foundation, we will work with Canadians to change cancer forever so fewer Canadians are diagnosed with the disease and more survive. Visit cancer.ca or call us at 1-888-939-3333 (TTY 1-866-786-3934).