Ottawa Public Health (OPH) aims to decrease the burden of preventable chronic diseases that are of public health importance. The Cancer in Ottawa, 2012 Report provides an in-depth description of the distribution of cancer in Ottawa and provides an overview of the most recent cancer incidence, mortality and survival data.

This report aims to supplement current and future cancer prevention strategies offered by OPH by providing evidence for program planning. The report identifies other cancers not covered under current initiatives that may benefit from new strategies and partnerships with community stakeholders.

Impact on the health of Ottawa's residents

Cancers are named according to the body part where an abnormal growth of cells occurs without control and have the potential to spread to other parts of the body (1). On average, mortality rates for these cancers and others have declined over time, which may be partly attributable to improved treatments and early detection.

In 2007, there were a total of 3890 new diagnoses of cancer among Ottawa residents. Overall, the most common cancers in Ottawa were:

- Breast cancer (553 cases)
- Lung cancer (502 cases)
- Prostate cancer (502 cases)
- Colorectal cancer (492 cases)

For males, the most common cancer diagnoses in 2007 were prostate cancer, colorectal cancer, lung cancer, Non-Hodgkin lymphoma and leukemia. Among Ottawa females, the four most common cancer diagnoses in 2007 were breast cancer, lung cancer, colorectal cancer and cancer of the body of the uterus.

In 2007, there were 1554 deaths attributed to cancer among Ottawa residents. Overall, the most common cancer deaths were:

- Lung cancer (370 deaths)
- Colorectal cancer (174 deaths)
- Breast cancer (123 deaths)
- Pancreatic cancer (98 deaths)

As shown in Figure 1, the number of new cancer cases has steadily increased since the late 1980s. This is primarily due to population growth and population aging. Historically, males have had higher cancer incidence rates than females. Among males and females, average cancer...
incidence rates stabilized by 2006, reaching an average of 446.6 per 100,000 and 352.7 per 100,000, respectively (Figure 1).

**Figure 1: Cancer incidence trends in Ottawa, 1986-2007**


Figure 2 shows how the number of cancer deaths has also increased since the late 1980s, however when factoring the population, the average cancer mortality rates have been declining. From 1988 to 2006, average mortality rates decreased from 245.5 per 100,000 to 195.6 per 100,000 among males and from 158 per 100,000 to 136.9 per 100,000 among females.

**Figure 2: Cancer mortality trends in Ottawa, 1986-2007**


**The most affected residents**

Incidence rates increase with increasing age (Figure 3). Between 2003 and 2007, there were 10,025 new cancer cases diagnosed among Ottawa adults aged 65 and older.
Different cancers are more common in different age groups. Between 2003 and 2007 in Ottawa, leukemia (33.3%) was the most common cancer among children less than 15 years of age, while lymphomas (21.7%) were the most common among adolescents and youth aged 15 to 29 years. Among adults aged 30 to 49 years and 50 to 65 years, breast cancer represented 26.2% and 17.9% of all cancer diagnoses, respectively. Prostate cancer (17.7%) and colorectal cancer (17.3%) were the most frequent diagnoses among adults aged 65 to 79 years and over 80.

**Figure 3: Age-specific incidence rates for all cancers by sex, Ottawa 2003-2007 combined**


**Who’s at risk for developing cancer?**

Ottawa residents who engage in risky behaviours, such as smoking, unhealthy food choices, unprotected and over-exposure to ultraviolet radiation have a higher risk of developing cancer than those who do not.

In 2009, almost 10% of Ottawa adults increased their risk for skin cancer by using artificial tanning equipment that exposes skin to harmful radiation. In 2010, 35% (± 2.6%) of Ottawa adults reported being sunburnt at least once in the last 12 months.

Cancer screening programs can help detect precancerous cells or cancer at early stages of development which should help reduce cancer incidence and mortality over time (3). A mammogram can help detect breast cancer. In 2009, 64.7% of Ottawa women aged 50 to 69 self-reported having a screening mammogram in the past 2 years.*

Early detection of colorectal cancer can increase the chance of survival (4). A fecal occult blood test (FOBT) is used to detect colorectal cancer. In 2010, 33.7% of Ottawa residents aged 50 to 74 reported have an FOBT during the past 2 years.

Regular Pap smears are an important part of cervical cancer screening (5). Since 2001, most Ottawa women aged 18 to 69 report having Pap smears within the recommended guidelines (3). In 2010, 84.9% of Ottawa women reported having a Pap smear within recommended guidelines compared to 90% in 2001.

* = Updated from Cancer in Ottawa 2012, Knowledge to Action, Winter 2012 posted on January 9, 2012
Reducing cancer in Ottawa

Cancer prevention is cost effective (6). Historically, most cancer funding is directed toward treatment, with only 1% directed to cancer prevention strategies such as health education and early detection (7). Treating cancer in its early stages is less expensive; it costs three times less to treat cervical cancer discovered early than at advanced stages (8).

To reduce the effect of cancer in Ottawa, primary and secondary prevention must be the main focus of our collective efforts in four areas:

- Promote healthy lifestyles which contribute to cancer risk reduction
- Increase awareness of the risk factors related to cancer
- Increase awareness of the benefits of screening for early detection of cancers for breast, cervical, colorectal, prostate and skin
- Work with community partners to reduce the incidence of cancer in Ottawa through a variety of programs

It is imperative that we work together in our community (youth, parents, teachers, employees, businesses, city planners, engineers, other health professionals, non-governmental organizations and government decision makers) to achieve a comprehensive approach to cancer prevention. To have an impact on the rate and severity of cancer in our community and relieve the burden on our health care system, change must occur on three fronts:

- Knowledge and skill
- Strengthening community actions
- Policy, legislation, and enforcement

Raise Awareness

Collectively, we must raise awareness, through campaigns and our community partners to:

- Demonstrate the link between daily healthy eating and routine physical activity in the reduction of risk for cancer
- Alert the public to the emerging news of the effects of alcohol in cancer related illness
- Disseminate key messages to the general public regarding the risk factors for developing certain preventable cancers such as:
  - tobacco use and breast and lung cancer
  - exposure to Human Papilloma virus (HPV) and cervical cancer
  - sun exposure and skin cancer
  - alcohol and risk of cancer

- Spread the messages regarding the benefits of early screening for:
  - breast cancer through mammograms
  - cervical cancer through PAP tests,
  - colorectal cancer, screening through the FOB test

- Inform our residents of protective actions to be taken:
  - colorectal cancer, screening through the FOB test
  - Immunization against HPV through the school immunization program
Seek shade, use sunscreen and avoid indoor tanning to prevent skin cancer

Eliminate tobacco use and reduce one’s exposure to second hand smoke

Have a healthy diet following Canada’s Food Guide that includes eating fruits and vegetables, and limits red and processed meats and saturated fats

Exercise regularly

Limit alcohol intake to the amounts published in the low risk drinking guidelines

Build Skills

By enhancing the knowledge and skills of Ottawa residents and those who work with more vulnerable populations, we can equip individuals to reduce their risk of developing cancer. Actions include:

- Providing educational sessions and resources relating to the prevention of certain cancers by reducing exposure to risks
- Immunizing against Human Papilloma Virus (HPV) for youth
- Supporting individuals to reduce and cease to use tobacco products or for youth to not initiate using tobacco at all
- Encouraging healthy eating and increased physical activity in individuals of all ages in order to reduce their risks linked to cancer
- Promoting the use of the low risk drinking guidelines for alcohol in order to prevent damage to vital organs
- Instructing young men and women to know their bodies and what action to take when they notice something different. This is an important practice when it comes to breast and skin cancers and in later life with colorectal cancer and prostate

Create supportive environments through healthy public policy

Ottawa was a leader in creating supportive healthy environments when it tackled the Ottawa Smoke-Free by-law in 2001. It takes a concerted effort by many players to achieve healthy supportive environments. To create change in our environments, we should:

- Use a health lens when planning for our community
- Review employee/employer workplace policies with a focus on health
- Advocate for new policies, regulations and laws

Examples of these include:

- Ensure that there is safe, accessible sidewalks, paths, parks and roadways in our community to ensure no barriers to daily physical activity
- Create appropriate shade and sun screen policies with partners
- Influence food and beverage and/or sponsorship policies to ensure the availability of healthy food options and eliminating the calorie dense nutrient poor foods available at facilities where family members work, live and play
- Update the Smoke-Free Ottawa by-law to include more smoke-free spaces
- Encourage private business to make their property entirely smoke-free

Strengthen community action

The Cancer Care Ontario - Cancer Prevention and Screening Network Champlain Region plays an important advisory role in our community in cancer prevention and the promotion of screening for Ottawa and surrounding area residents. OPH representatives co-chair this network and OPH has the secretariat role.

Through this network and with your participation:

- Community groups can receive financial support and collaborate with network members on special projects to prevent cancer such as the Arabic/Somali breast, cervical and
colorectal cancer prevention and screening peer training project.

- Ottawa residents are made aware of Colon Cancer Check, the Ontario Breast Screening Program and the immunization against Human Papilloma virus by disseminating posters, fact sheets and other awareness raising materials prepared by the network and its members.

- Key messages (related to alcohol use, healthy eating, physical activity, tobacco and UV radiation) for the prevention of cancer can be spread to the members of our communities.

**Re-orient health services to better meet community needs**

Ottawa Public Health will continue to review best practices and pertinent epidemiological data related to the most common cancers in order to monitor and address any trends that may emerge. In sharing this surveillance information through the Physicians Newsletter and other publications, OPH hopes to affect change through prompting:

- Non-traditional professionals to incorporate cancer prevention into their everyday work and look for ways to improve health among residents

- Improvement in access to services for high risk populations

By continuing these health protection and promotion efforts, OPH and partners can continue their contributions to lowering the trends of cancer rates in our city.

**References**


https://www.cancercare.on.ca/pcs/screening/coloscreening/ Accessed on December 5, 2011.


