GRAND COUNCIL TREATY #3

Cancer Report

GRAND COUNCIL TREATY #3
HEALTH COUNCIL

GRAND COUNCIL
TREATY #3
The GOVERNMENT OF THE ANISHINAABE NATION in Treaty #3

Ontario
Cancer Care Ontario

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Message from Francis Kavanaugh

GRAND CHIEF

GICHI OZHIBIIGE OGAAMIG
ADMINISTRATIVE OFFICE

I am pleased to introduce, in collaboration with Cancer Care Ontario, the *Grand Council Treaty #3 Cancer Burden Report*. This is the first report that provides estimates of cancer patterns in our Grand Council Treaty #3 communities.

This report will arm our Health Council and staff with the information they need to develop programs and services that will improve the impact of cancer in our people.

This report came into being as a result of concerns we have been hearing about rising numbers of cancers among our Grand Council Treaty #3 citizens. In 2014, Grand Council Treaty #3 signed a resolution (CA-14-14) at Seine River allowing Cancer Care Ontario to create an aggregate cancer profile report for our territory.

The report shows that there are higher rates of colorectal and cervical cancers among our people, and poorer survival than the Ontario population. It is important that our citizens get early screenings for cancer and that they receive the appropriate follow-up care. We must also take actions to improve the health of our people by reducing known risk factors for cancer: stop smoking and drinking alcohol, eat healthier foods—especially fruit and vegetables—and get lots of physical activity.

I am very pleased with the strong partnership between Grand Council Treaty #3 Health Council and Cancer Care Ontario. Since signing the Relationship Protocol in May 2013, Cancer Care Ontario and representatives from the Northwest Regional Cancer Program have met with Grand Council Treaty #3's leadership and Health Council to provide a number of verbal reports, and to seek the ongoing guidance and approval of Grand Council Treaty #3 on all matters that relate to cancer control for our communities and people. They have also collaborated with us on a variety of initiatives.

This report was developed through significant direction from our Grand Council Treaty #3 Cancer Surveillance Advisory Team that consisted of our Grand Council Treaty #3 Health Council and several representatives from our communities. It will help us properly plan programs and support services. Together, we will continue to work towards understanding and improving the impact of cancer in our communities.

Grand Chief Francis Kavanaugh

Message from Michael Sherar

PRESIDENT & CEO
CANCER CARE ONTARIO

When Cancer Care Ontario and Grand Council Treaty #3 signed a Relationship Protocol in May 2013, we set on a path together to improve the cancer system for this community.

The release of *Grand Council Treaty #3 Cancer Burden Report* is another important step in our partnership journey.

As the Ontario government's principal advisor on cancer care, Cancer Care Ontario works with many partners to drive continuous improvement in cancer prevention and screening, the delivery of care and the patient experience for all Ontarians. This mission is supported by our fourth Ontario Cancer Plan, which reinforces our commitment to ensuring health equity, and our third *Aboriginal Cancer Strategy*, which places a priority on productive relationships, prevention, and research and surveillance among First Nations, Inuit and Métis.

Good surveillance data are the foundation for identifying where the greatest needs exist, making informed decisions, taking action and measuring the impact of our initiatives. The signing of a resolution allowing Cancer Care Ontario to create an aggregate cancer profile report for Grand Council Treaty #3 was critical to understanding the unique and diverse needs of this community.

Grand Council Treaty #3 Cancer Burden Report is the first cancer profile to focus specifically on this population. It sheds light on how cancer affects this community, providing evidence of higher incidence of several cancer types, particularly colorectal and cervical cancer, and poorer survival from certain cancers in the people of Grand Council Treaty #3 compared to other people in Ontario. This report also helps identify opportunities to set health priorities and develop evidence-based, culturally relevant policy recommendations for reducing the burden of cancer in this community.

Today, First Nations, Inuit and Métis peoples across Ontario are facing disproportionately high burdens of cancer and other chronic diseases. It is important to continue building our knowledge of cancer in these communities to help support and develop effective health policies and implement recommendations set forth in Cancer Care Ontario's *Path to Prevention—Recommendations for Reducing Chronic Disease in First Nations, Inuit and Métis* (released June 2016).

This report is the result of a strong collaboration with Grand Council Treaty #3, and it reflects our shared vision to improve the performance of the cancer system for Grand Council Treaty #3 members. I am delighted to join Grand Chief Francis Kavanaugh in the release of this report and continue our joint work to improve the health and well-being of Grand Council Treaty #3 members in Ontario.

Michael Sherar

Key Messages

- Grand Council Treaty #3 (GCT#3) and Cancer Care Ontario have entered into a partnership to develop this report, which addresses the information gap associated with cancer data for GCT#3 members living in Ontario.
- GCT#3 members have higher incidence and mortality for many cancer types and poorer cancer survival than other people in Ontario. Of greatest concern are the high incidence and mortality for colorectal, kidney and cervical cancers.
- These findings call for the development of culturally appropriate cancer prevention programs that emphasize the four main behavioural risk factors for cancer: commercial tobacco, alcohol, diet (inadequate vegetable and fruit intake) and physical inactivity.
- To achieve significant and lasting impacts on health when planning risk reduction efforts that target individual behaviour, it is essential to address social determinants of health. System-level initiatives, including public health policies and community programming, that reflect cultural distinctions are required to help reduce the prevalence of behavioural risk factors.
- These findings call for increased access, education and awareness of the breast, cervical and colorectal cancer screening programs and services (including the mobile screening bus) offered through Cancer Care Ontario.

Call to Action

Behavioural risk factors

- Our findings call for the development of culturally tailored or community-led cancer prevention programs that emphasize the four main behavioural risk factors for cancer: commercial tobacco, alcohol, diet (inadequate vegetable and fruit intake) and physical inactivity.
- Efforts to reduce these risk factors in Grand Council Treaty #3 (GCT#3) communities will improve not only the rate of cancer, but also rates of other chronic diseases, including heart and respiratory diseases, and diabetes.
- To achieve significant and lasting impacts on health when planning risk reduction efforts that target individual behaviour, it is essential to address social determinants of health. System-level initiatives, including public health policy and community programming, that reflect cultural distinctions are required to help reduce the prevalence of behavioural risk factors.

Cancer screening

- Given the high rates of colorectal and cervical cancers in GCT#3 communities, these findings call for increased access, education and awareness of cancer screening programs and services.
- Cancer screening programs are offered through Cancer Care Ontario for breast, cervical and colorectal cancers, but culturally and geographically appropriate adaptations are needed to ensure coverage of GCT#3 members.

Need for data

- While this report presents important information for cancer control planning and priority-setting, there is currently no ability to update these statistics beyond the year 2010. There is a significant need for good quality, comprehensive and recent health data on GCT#3 communities in Ontario.
- A strategy for increasing the availability of this type of data is required to accurately determine cancer burden in GCT#3 communities, and evaluate the value and success of community-led cancer control programs in reducing the burden of cancer.

About this Report

This report was developed in response to concerns expressed by Grand Council Treaty #3 (GCT#3) leadership and community members about high numbers of cancers and deaths from cancer in their communities.

A resolution was passed on October 23, 2014, in Seine River (resolution #CA-14-14) allowing Cancer Care Ontario to develop a GCT#3-specific cancer report. The resolution recognized the importance of the First Nations Cancer Surveillance Project, which was developed to respect and uphold the sovereign rights of First Nations and authority conferred or mandated to their representative bodies. Through the resolution, GCT#3 provided consent to release aggregate-level estimates of cancer burden (e.g., incidence, mortality, survival and prevalence) for GCT#3 Status First Nations in Ontario.

This report will be presenting cancer burden information (new cases, deaths, chances of survival after diagnosis, and new and existing cases combined) on the top six cancers in GCT#3 members: colorectal, lung, female breast, prostate, cervical and kidney. Each cancer type will have its own section. In this report, GCT#3 members are identified as First Nations people registered under the Indian Act living in Ontario with membership to any GCT#3 band (including non-Ontario bands) from 1991 to 2010.

Specifically, the report includes:

- some context about GCT#3 members in Ontario, including history and demographics;
- information about cancer, including risk factors, and symptoms;
- statistics about cancer in GCT#3 members in Ontario over 20 years (1991 to 2010) organized into sections by cancer type. These statistics include incidence (new cases), mortality (deaths), survival (chances of living after a cancer diagnosis) and prevalence (new and existing cases); and
- what these statistics may mean for prevention, policies and programs.

It is expected that this information will give First Nations communities and decision makers a greater understanding of how each cancer type affects First Nations people in Ontario, and equip them with the information needed to set priorities and plan initiatives that can address areas of concern.

Background and Context

About Grand Council Treaty #3

First Nations communities in Ontario affiliate with Political Territorial Organizations or are Independent First Nations. Grand Council Treaty #3 (GCT#3) is the historic traditional government of the Anishinaabe Nation in GCT#3 and is the political government for the 28 First Nations, representing 26 First Nations in northwestern Ontario (Figure) and two First Nations in Manitoba.

By treaty with Her Majesty in 1873, the Nation shared its duties and responsibilities and protected its rights respecting 55,000 square miles of territory. The Anishinaabe Nation did not surrender any rights of self-government and so continues to exercise its traditional government. It has made significant movement over the years back towards Anishinaabe Nationhood by the member communities.

The population of the GCT#3 membership is approximately 25,000 and the territory spans from west of Thunder Bay to north of Sioux Lookout, along the international border, to the province of Manitoba. This territory is governed by a Grand Council of Anishinaabe Chiefs.

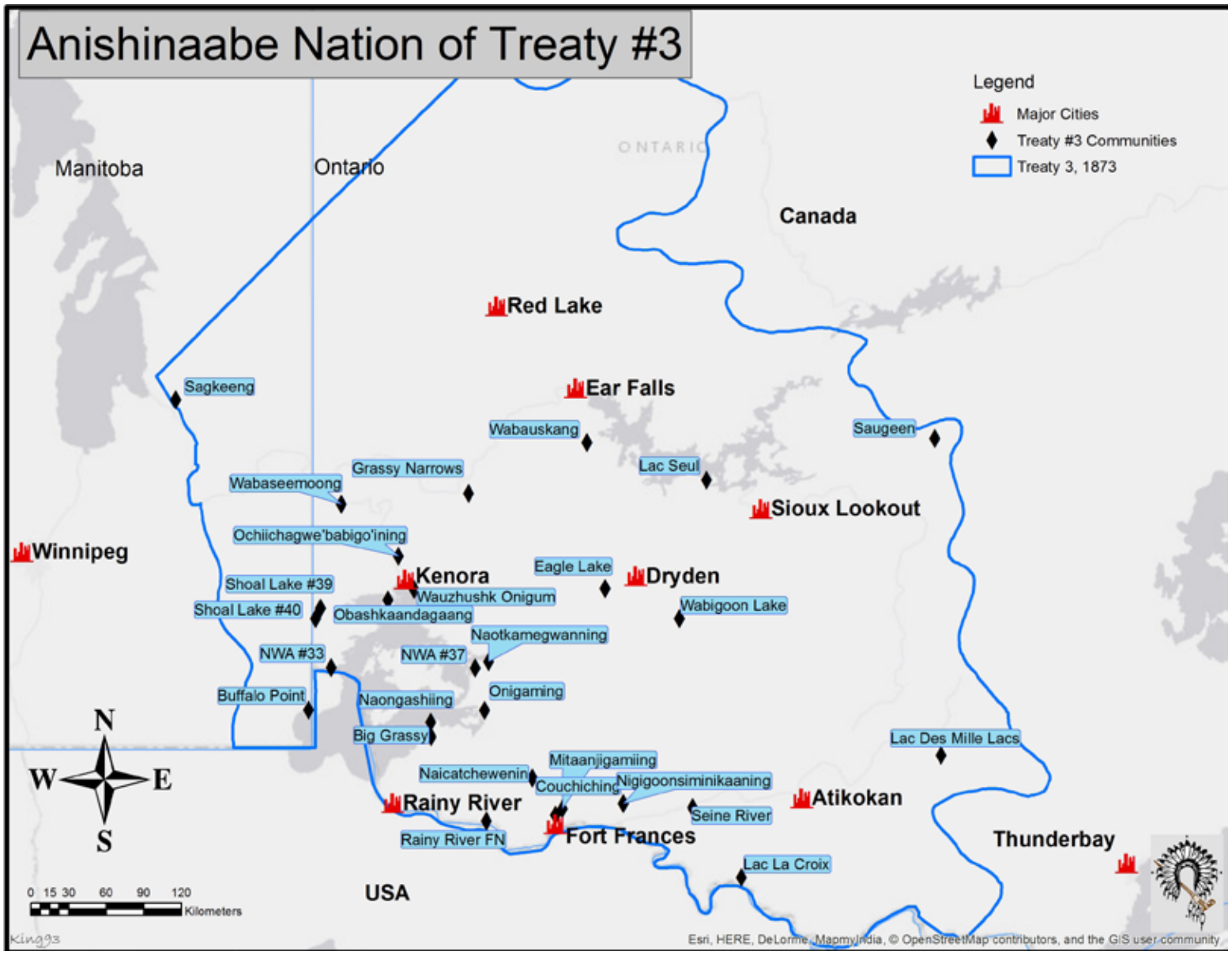
The GCT#3 mandate, at the direction of the leadership, is to protect, preserve and enhance Treaty and Aboriginal rights by advancing the exercise of inherent jurisdiction, sovereignty, nation building and traditional governance with the aim to preserve and build the Anishinaabe Nation's goal of self-determination.

GCT#3 delivers its mandate through operating a political and administrative office for its Anishinaabe Nation Government. The administrative office is a non-profit charitable organization that employs 40 technical staff and works to reinvigorate traditional governance in the following areas (but is not limited to): health, education, social services, policing and justice, infrastructure, childcare, land and resources, fish and wildlife, and economic development. The GCT#3 administrative office's non-profit corporate name is Grand Council Treaty #3 Representative Services, and its Board of Directors consists of four Chiefs from each direction in the Treaty 3 territory who are appointed every four years through decision making. The day-to-day management of the organization is facilitated by an Executive Director who reports directly to the Board of Directors. GCT#3 Representative Services is accountable to the Nation through the office of the Grand Chief and the Grand Council Executive Council.

GCT#3 people

For the timeline used in this report—1991 to 2010—there were 17,022 registered First Nations people who lived in Ontario and had membership with a GCT#3 community. The GCT#3 population was about 52 percent male and 48 percent female, and the median age was age 27. GCT#3 members account for just under 10 percent of all First Nations people in Ontario.

Grand Council Treaty #3 territory and communities



Cancer in First Nations People in Ontario: An Overview

This is the first cancer profile on Grand Council Treaty #3 (GCT#3) members. Most population -level information on cancer has been collected on the First Nations population in Ontario as a whole and not on individual communities.

Marrett and Chaudhry (2003) linked the Ontario portion of the Indian Registration System to the Ontario Cancer Registry and found that from 1968 to 1991, registered First Nations people had lower cancer rates.[1] However, their rates were rising more quickly than those of other people in Ontario, particularly for lung and colorectal cancers.[1] Follow-up studies found that First Nations people also had worse cancer survival than non-First Nations people in Ontario, particularly for colorectal, female breast, male lung and prostate cancers.[2, 3] This research found that First Nations women diagnosed with breast cancer were more likely to be diagnosed at a later stage, when the cancer is more difficult to treat, and to have a chronic condition (e.g., diabetes) in addition to their cancer. These differences may partially explain why First Nations women had poorer breast cancer survival.

Since then, efforts have been made to update what is known about cancer in First Nations people in Ontario as a whole. The most recent population-level information was released in fall 2017 in a report titled *Cancer in First Nations People in Ontario: Incidence, Mortality, Survival and Prevalence*. This report found that from 1991 to 2010, registered First Nations people had higher cancer rates for lung, colorectal, cervical, kidney, gallbladder, liver and myeloma; they had lower rates of female breast, prostate, bladder, brain and thyroid cancers, as well as melanoma, non-Hodgkin lymphoma and leukemia. Furthermore, First Nations people had poorer survival for cancers of the lung (males), breast (females), prostate, kidney, uterus, cervix, oral cavity and pharynx (males), as well as non-Hodgkin lymphoma (males), leukemia (females) and myeloma (males).

Following a directive from the GCT#3 Chief and Council, this current report was developed to provide a profile of cancer in GCT#3 members living in Ontario from 1991 to 2010 (see the About this Report section and Appendix A). Although GCT#3 territories include two communities in Manitoba, only Manitoba community members who now live in Ontario are included in the report's analysis.

There is no terminology for cancer in Anishinaabemowin. In some First Nations communities, cancer is a taboo subject surrounded by secrecy and fear because historically cancer was rare among First Nations people. Historical and cultural contexts have contributed to the view of cancer as a death sentence in First Nations culture. This view may impact how receptive First Nations people are to cancer education, prevention and delivery of care.

Background information about cancer

WHAT IS CANCER?

Every cancer starts in a cell. When a cell is damaged, the body tries to repair it. If repairs don't work, the body removes the damaged cell. However, sometimes damaged cells aren't removed, and then they divide and copy themselves. Cancer develops when a damaged cell grows and makes more damaged cell copies.

There are over 200 types of cancer, usually named after the organ where the cancer starts (e.g., breast cancer is a cancer starting in the breast). Every cancer develops differently. Some grow quickly. Others grow slowly or rarely spread beyond the organ where they started.

RISK FACTORS FOR CANCER

Risk factors are exposures, behaviours or other characteristics that affect someone's risk of developing a disease. Risk factors can cause the kind of cell damage that can lead to cancer. Cell damage can also happen naturally over time through normal cell growth and aging. Other causes of cell damage include not living a healthy life, environmental toxins (e.g., pollution) and genes that might be passed down from relatives.[4, 5]

Behavioural factors—smoking or chewing commercial tobacco, drinking alcohol, eating a poor diet and being physically inactive—play a large role in the risk of developing cancer.[4, 6]

Environmental factors can also play a role in the risk of developing cancer, but in general, they cause fewer cancer cases each year than behavioural factors. The environmental risk factors associated with the greatest number of cancer cases in Ontario are ultraviolet radiation from the sun, radon gas from the ground and outdoor air pollution. The amount that people are exposed to any given environmental risk factor is usually different in different regions of the province.

In addition to risk factors, social determinants of health can contribute to someone's risk of developing cancer. Examples of social determinants of health include access to care, community resources and the lasting effects of colonialism. These social determinants are important to consider when planning programs or services to reduce behavioural risk factors and improve cancer outcomes in First Nations people.

HOW CANCER IS FOUND

Cancer starts in one place in the body: at the cell level. The earlier the cancer is found and treated, the better the chances are for recovery. Sometimes small cell changes that could lead to cancer can be found and treated very early to prevent cancer from developing altogether. However, cancer is not always obvious. There may be no symptoms. Sometimes people find a lump themselves or have unusual symptoms. A doctor or nurse may also find an existing cancer during a regular check-up.

Screening tests help find cancer early, before someone has symptoms and when the cancer is easier to treat. Ontario has screening programs for breast cancer (screening mammogram), cervical cancer (Pap test) and colorectal cancer (test for blood in the stool, colonoscopy or flexible sigmoidoscopy).

PEOPLE DO SURVIVE CANCER!

More people are surviving cancer now, particularly when it is found and treated early. Some of the most common cancers grow slowly or are less likely to spread. For example, people with prostate or breast cancer tend to live almost as long as people without cancer. There are still some cancers—such as lung cancer or pancreatic cancer—that can shorten people's lives. For these cancers, there are very few early symptoms, so by the time a cancer is found, it is harder to treat. The most important factor in cancer survival is early diagnosis. Getting regular check-ups and participating in cancer screening programs are the first steps to diagnosing cancer early.

Normal cell | Cancer cell

Cancer in Grand Council Treaty #3: An Overview

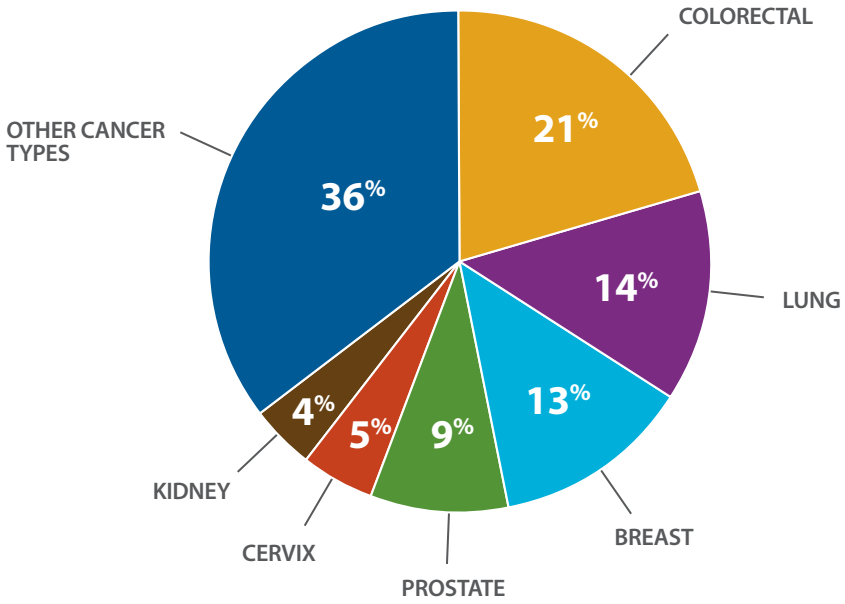
From 1991 to 2010, there were 464 cancers diagnosed in 17,022 GCT#3 members. Over half (56 percent) of these cancers were diagnosed in females (261 cancer cases in 8,239 females) and forty four percent were diagnosed in males (203 cancer cases in 8,783 males).

The rest of this section provides a detailed summary of the incidence (new cases), mortality (deaths), survival and prevalence (new and existing cases) of cancer in GCT#3 members living in Ontario.

Most common cancer types in GCT#3 members

- The four most common cancers in GCT#3 members were colorectal, lung, breast and prostate, which account for over 50 percent of all cancers diagnosed from 1991 to 2010 (Figure 1). The same four cancer types were also most common in other First Nations people and other people in Ontario (but with differences in how they are ranked).
- Cervical cancer is the fifth most common cancer diagnosed among GCT#3 members, whereas cervical cancer is much less common (19th overall) in other people in Ontario.
- Kidney cancer is the sixth most common cancer diagnosed among GCT#3 members, whereas kidney cancer is much less common (12th overall) in other people in Ontario.

FIGURE 1: Most common cancers in GCT#3 members in Ontario, all ages, 1991–2010



Notes: "Other cancer types" includes a variety of cancers that affect fewer people, such as cancers of the stomach, liver, pancreas and bladder.

The risk of getting cancer increases with age. Most cases of cancer (59 percent) are diagnosed in GCT#3 members ages 50 to 74. Cancer is less common in children and young adults.

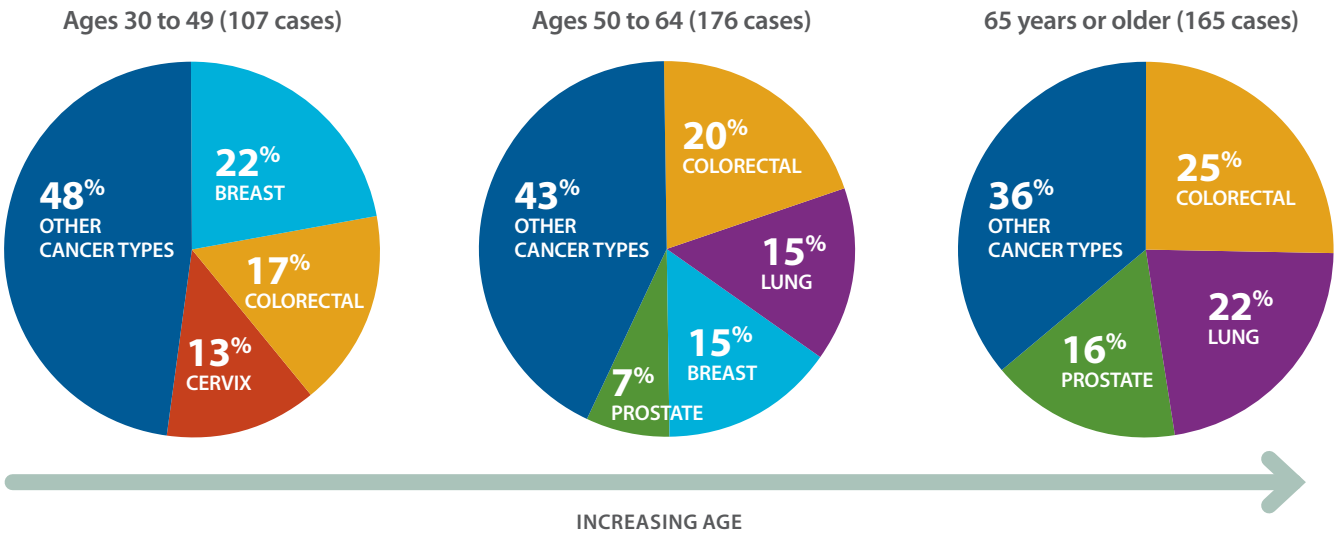
Most common cancer types in GCT#3 members, by age

Cancer types in GCT#3 members ages zero to 29 could not be reported due to the small number of people in this age group and to ensure privacy. Cancer is less common in the younger population. From 1991 to 2010, there were 16 cases of cancer among GCT#3 children and young adults, which accounted for only three percent of all cancers in the GCT#3 population.

The most common types of cancer (breast, colorectal lung and prostate) were similar across most age groups; however, some of these cancers were more common than others (see Figure 2):

- Among GCT#3 adults ages 30 to 49, breast cancer was the most common cancer, followed by colorectal and cervical cancers.
- Among GCT#3 adults ages 50 to 64, colorectal cancer was the most common cancer, followed by lung, breast and prostate cancers.
- Among GCT#3 older adults (age 65 or older), colorectal cancer was also the most common cancer, followed by lung and prostate cancers.

FIGURE 2: Most common cancers in GCT#3 adults in Ontario, by age and cancer type, 1991–2010



Notes: "Other cancer types" in each age group includes a variety of cancers that affect fewer people. In children and young adults examples include cancer of the soft tissue, and bones and joints. In older adults, examples include cancer of the stomach, liver and bladder.
Data sources: Indian Registration System, Ontario Cancer Registry

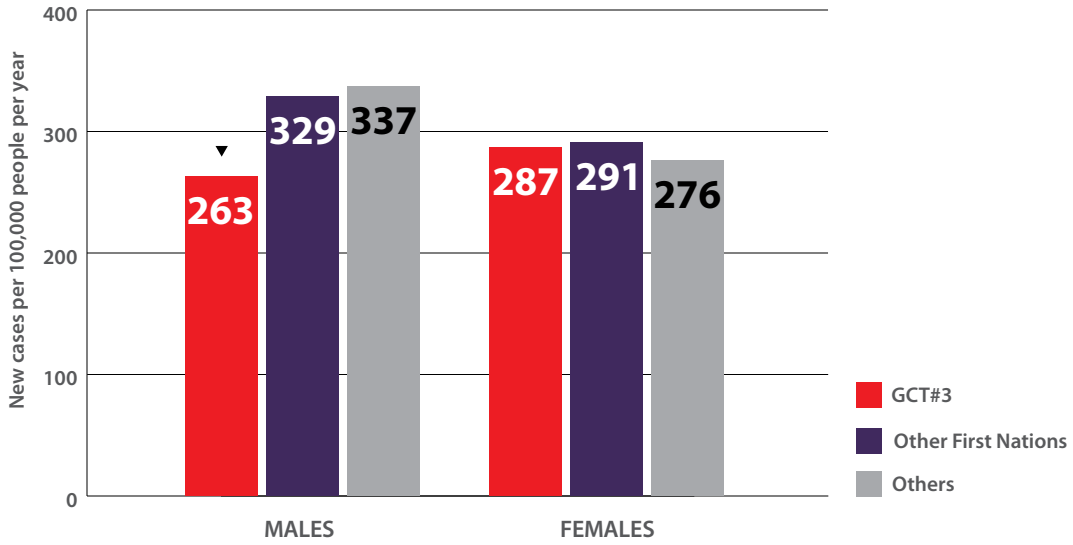
Cancer incidence (new cases)

Cancer incidence is the number of people who are newly diagnosed with cancer in a specific population over a set period of time. The higher the incidence rate in a population, the more common the disease. For a more detailed explanation of incidence, visit cancercare.on.ca/measuringcancerFNIM.

Incidence (new cases) in GCT#3 members compared to other people in Ontario

- From 1991 to 2010, about 263 cases of cancer per 100,000 GCT#3 males and 287 cases of cancer per 100,000 GCT#3 females were diagnosed each year.
- GCT#3 males had a lower cancer incidence than other First Nations males and other males in Ontario.
- The cancer incidence for GCT#3 females was similar to that of other First Nations females and other females in Ontario.

FIGURE 3: Colorectal cancer incidence (new cases) in GCT#3 members, other First Nations and other people in Ontario, by sex, 1991–2010

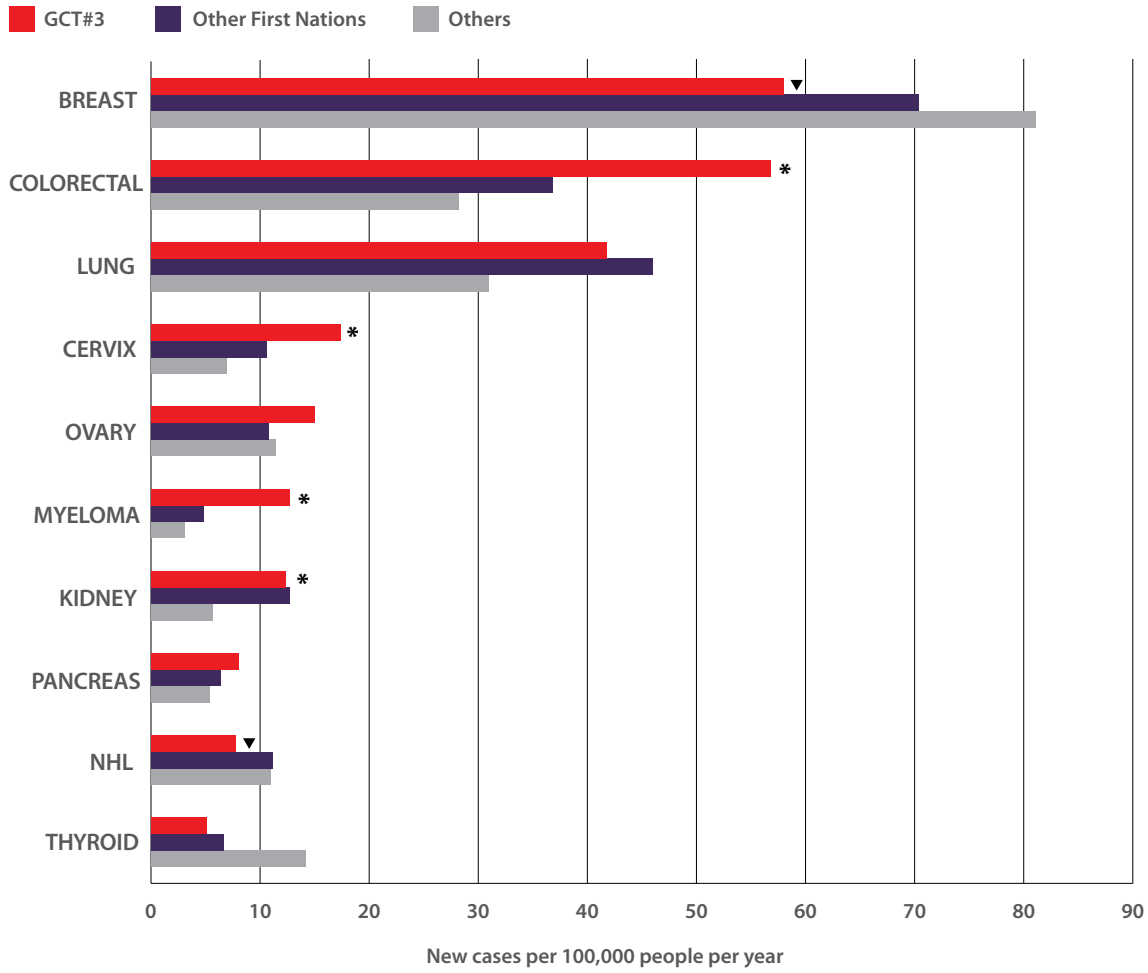


Notes: ▼ Indicates that incidence for GCT#3 members significantly **lower** than for other people in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

Focus on cancer types that are higher or lower in GCT#3 females (Figure 4)

- In GCT#3 females, breast, colorectal and lung cancers had the highest incidence rates. In other females in Ontario, these three cancer types also had the highest incidence rates.
- GCT#3 females had lower incidence rates of breast and thyroid cancers than other females in Ontario.
- GCT#3 females had higher incidence rates of colorectal, cervical, myeloma and kidney cancers, compared to other females in Ontario.

FIGURE 4: Cancer incidence (new cases) in GCT#3 females, other First Nations and other females in Ontario, all ages, by cancer type, 1991-2010

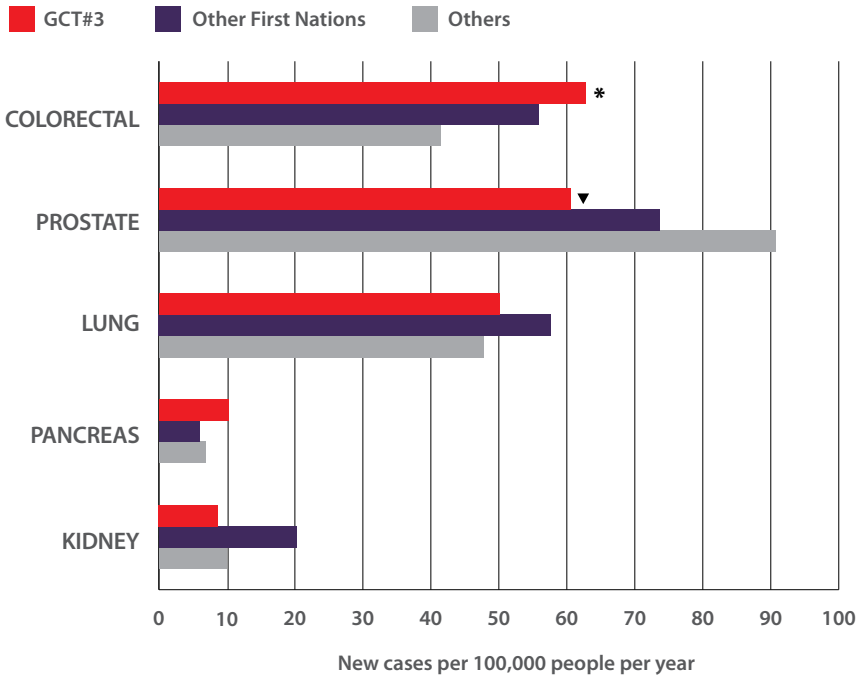


Notes: * Indicates that incidence for GCT#3 females is significantly **higher** than for other females in Ontario.
▼ Indicates that incidence for GCT#3 females is significantly lower than for other females in Ontario.
Includes cancer types with 6 or more cancers diagnosed in GCT#3 females.
NHL=non-Hodgkins lymphoma
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

Focus on cancer types that are higher or lower in GCT#3 males (Figure 5)

- In GCT#3 males, colorectal, prostate and lung cancers had the highest incidence rates. In other males in Ontario, these three cancer types also had the highest incidence rates.
- GCT#3 males had a lower incidence of prostate cancer than other males in Ontario.
- GCT#3 males had a higher incidence of colorectal cancer than other males in Ontario.

FIGURE 5: Cancer incidence (new cases) in GCT#3 males, other First Nations and other males in Ontario, all ages, by cancer type, 1991–2010



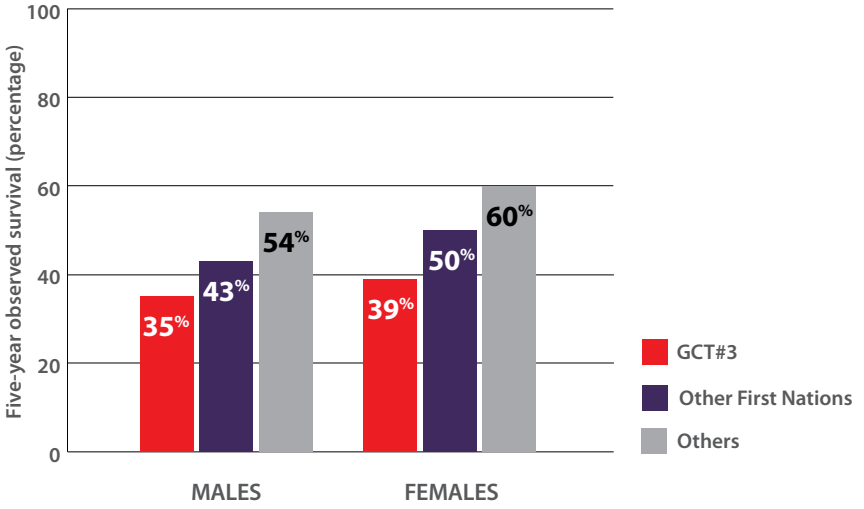
Notes: ▼ Indicates that incidence for GCT#3 members significantly **lower** than for other people in Ontario. Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

Cancer survival (chances of living after diagnosis)

Cancer survival is the percentage of people still alive for a set time period after being diagnosed with cancer (usually five years). Survival improves when more cancers are caught early—before they spread to other parts of the body—and when there are improvements in cancer treatment that help people with cancer live longer. For a more detailed explanation of survival, visit cancercare.on.ca/measuringcancerFNIM.

- Just over a third GCT#3 males (35 percent) and females (39 percent) survived for five years or longer after their cancer diagnosis, compared to over half of other males (54 percent) and females (60 percent) in Ontario (Figure 6).
- Cancer survival was poorer in GCT#3 members than other people in Ontario; however, due to small numbers, this difference was not statistically significant.

FIGURE 6: Cancer survival five years following diagnosis in GCT#3 members, other First Nations and other people in Ontario, ages 15–74 at diagnosis, by sex, 1991–2010

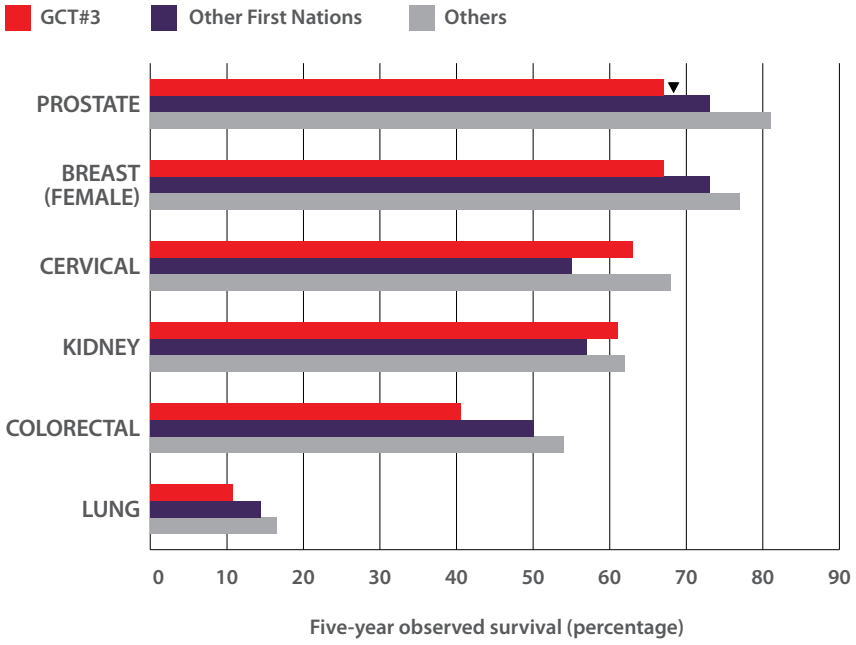


Notes: Age-standardized to the International Cancer Survival Standard population (ages 15–74).
Data sources: Indian Registration System; Ontario Cancer Registry

Cancer survival, by cancer type

- Survival for GCT#3 members was best for male prostate and female breast cancer (Figure 7). About two-thirds of GCT#3 people with one of these cancer types lived for five years or longer after their diagnosis.
- Survival was poorest for lung cancer. Only 10 percent of GCT#3 members with lung cancer lived five years or longer after their diagnosis.
- Survival for prostate and colorectal (for females) cancers was lower among GCT#3 members than other people in Ontario.

FIGURE 7: Five-year survival among GCT#3 members, other First Nations and other people in Ontario, ages 15–74 at diagnosis, 1991–2010



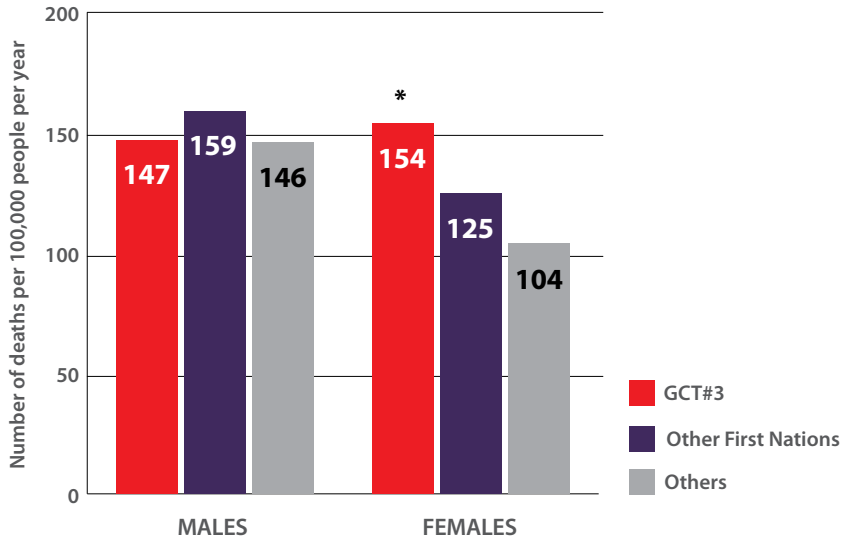
Notes: ▼ Indicates that survival for GCT#3 members is significantly **lower** than for other people in Ontario.
Age-standardized to the International Cancer Survival Standard population (ages 15–74).
Data sources: Indian Registration System; Ontario Cancer Registry

Cancer mortality (deaths)

Mortality is the number of deaths in a population over a set period of time. Cancer mortality is lower when fewer people are being diagnosed with cancer or when more people are living longer after a cancer diagnosis. For a more detailed explanation of mortality, visit cancercare.on.ca/measuringcancerFNIM.

- From 1991 to 2010, it was estimated that about 147 cancer deaths per 100,000 GCT#3 males and 154 cancer deaths per 100,000 GCT#3 females occurred each year (Figure 8).
- GCT#3 females had higher cancer mortality than other females in Ontario.
- Cancer mortality was similar for GCT#3 males, other First Nations males and other males in Ontario.

FIGURE 8: Cancer mortality (deaths) in GCT#3 members, other First Nations and other people, all ages, by sex, 1991–2010

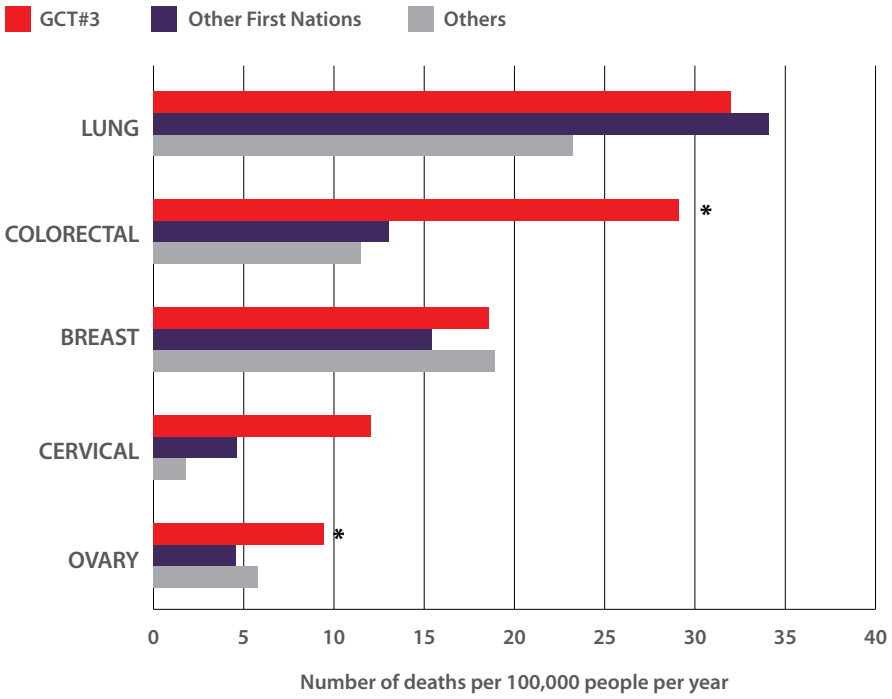


Notes: * Indicates that mortality for GCT#3 members is significantly **higher** than for other people in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

Cancer mortality (deaths), by sex and type (Figures 9 and 10)

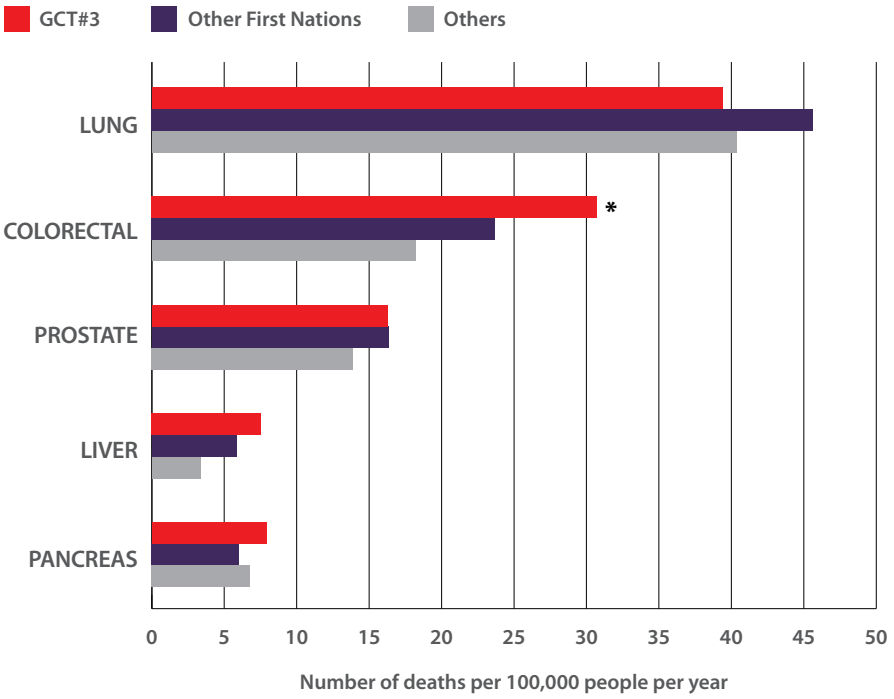
- The leading cause of cancer death in 1991 to 2010 was lung cancer for GCT#3 people and other people.
- GCT#3 members (males and females) had higher mortality than other people in Ontario for colorectal cancer.
- GCT#3 females had higher cervical cancer mortality than other females in Ontario.

FIGURE 9: Cancer mortality (deaths) in GCT#3 females, other First Nations and other females in Ontario, all ages, by cancer type, 1991–2010



Notes: Includes cancer types with 6 or more cancer deaths in GCT#3 females.
* Indicates that mortality for GCT#3 females is significantly **higher** than for other females in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

FIGURE 10: Cancer mortality (deaths) in GCT#3 males, other First Nations and other males in Ontario, all ages, by cancer type, 1991–2010



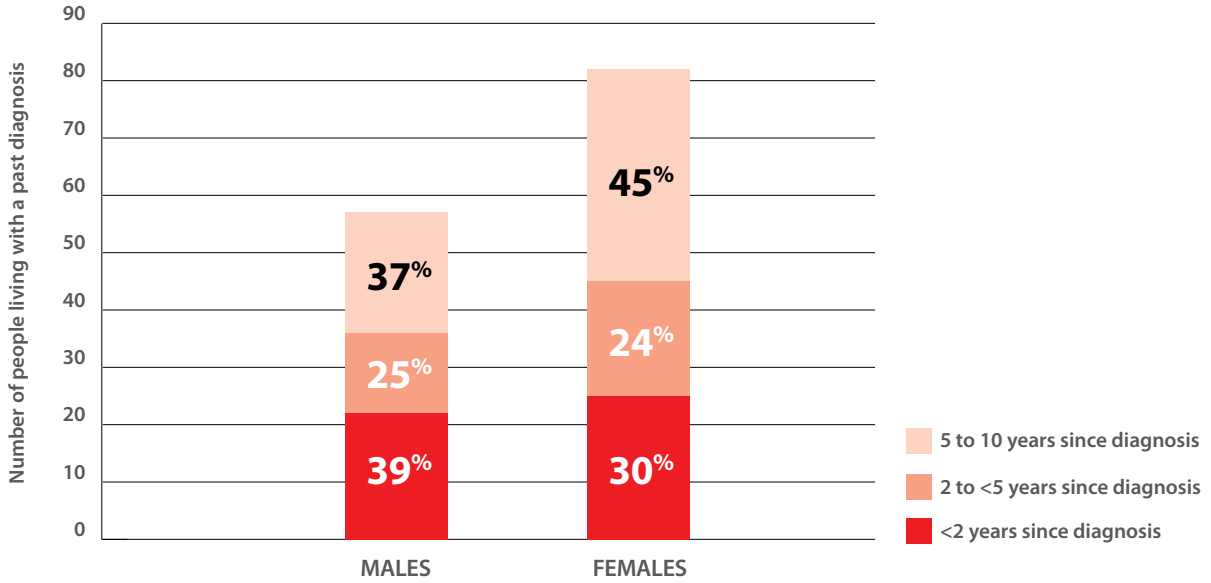
Notes: Includes cancer types with 6 or more cancer deaths in GCT#3 males.
* Indicates that mortality for GCT#3 males is significantly **higher** than for other males in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

Cancer prevalence (new and existing cases)

Cancer prevalence is defined as the number of people living with a past diagnosis of cancer in a set time period. A high prevalence of any given cancer might be explained by a high incidence (i.e., the cancer is very common) and/or high survival (i.e., someone is more likely to live long after being diagnosed). For a more detailed explanation of prevalence, visit cancercare.on.ca/measuringcancerFNIM.

- As of January 1, 2011, there were 57 GCT#3 males (about one percent) and 82 GCT#3 females (slightly more than one percent) who had been living with a past cancer diagnosis in the previous 10 years (i.e., sometime from 2000 to 2010) (Figure 11).
- Just over a third of GCT#3 males (39 percent) and slightly less than one-third of GCT#3 females (30 percent) living with a past cancer diagnosis were diagnosed less than two years earlier (i.e., sometime from 2008 to 2010).
- About one-quarter of GCT#3 males (25 percent) and females (24 percent) living with cancer had been diagnosed two to five years earlier and might still have been receiving treatment.
- The remaining 37 percent of GCT#3 males and 45 percent of GCT#3 females were alive five years or longer after their diagnosis and may have been considered cancer free.

FIGURE 11: Cancer prevalence (new and existing cases) in GCT#3 members in Ontario as of January 1, 2011, all ages, by sex and time since diagnosis

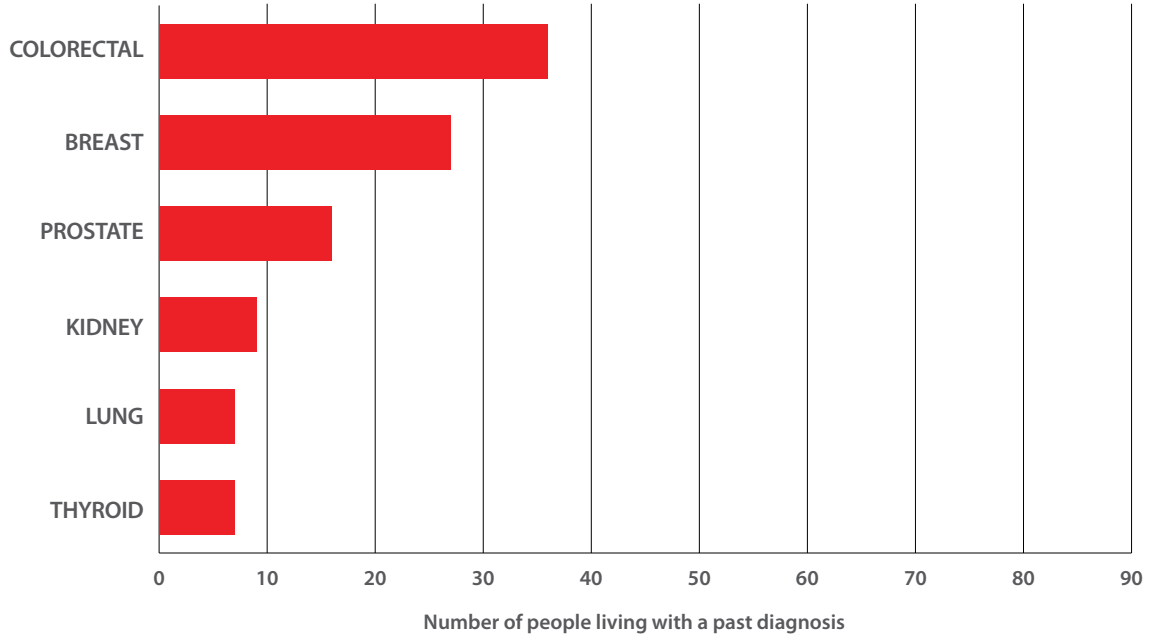


Data sources: Indian Registration System; Ontario Cancer Registry

Cancer prevalence (new and existing cases), by cancer type (Figure 12)

- As of January 1, 2011, colorectal cancer was the most prevalent cancer type in GCT#3 members, followed by breast (females) and prostate (males) cancers.
- Fewer people were living with a past diagnosis of lung cancer, despite the high incidence of this cancer in GCT#3 members, because the chances of surviving for a long time after a lung cancer diagnosis are poor.

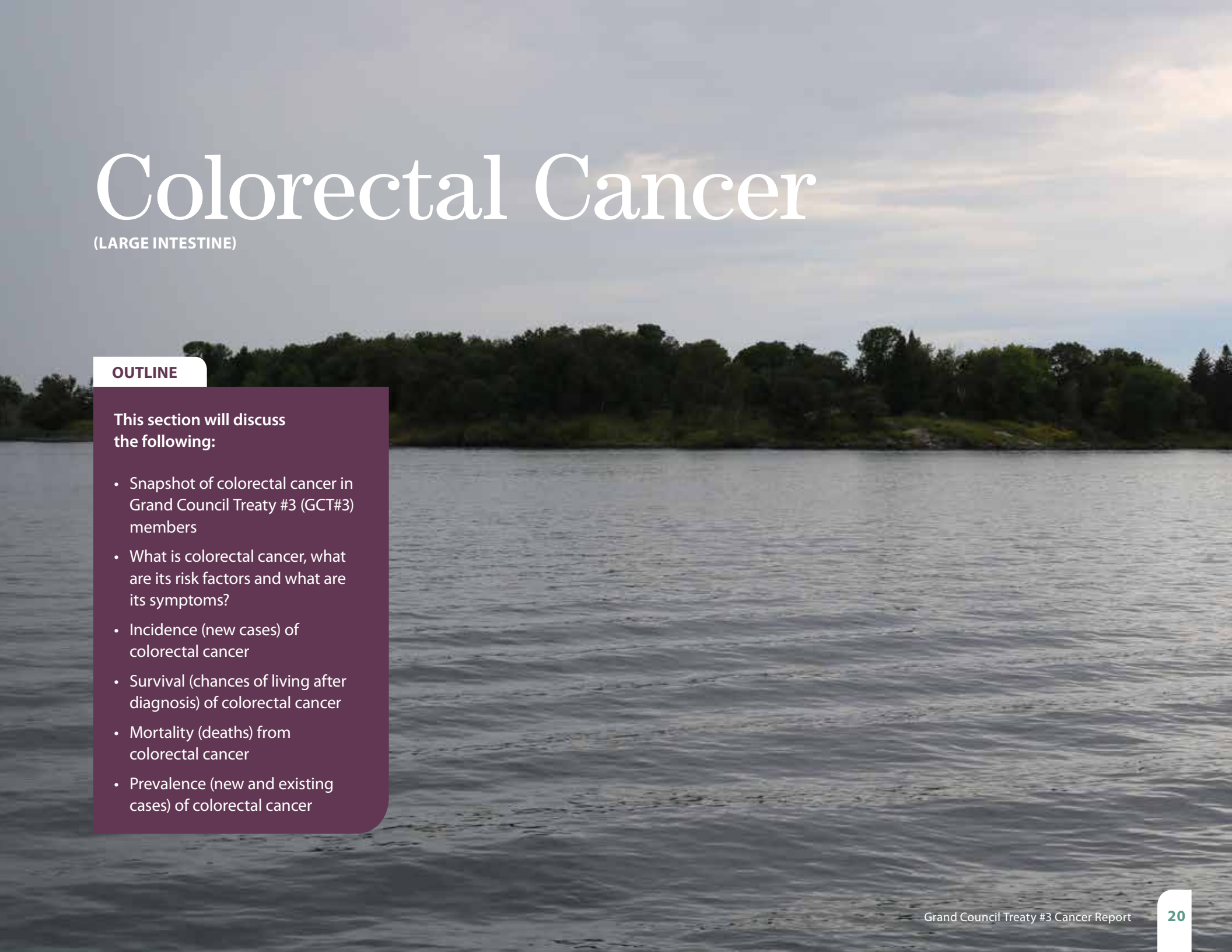
FIGURE 12: Ten-year cancer prevalence among GCT#3 members in Ontario as of January 1, 2011, all ages, by cancer type



Notes: Includes cancer types where 6 or more GCT#3 members are living with a past diagnosis.
Data sources: Indian Registration System, Ontario Cancer Registry

Colorectal Cancer

(LARGE INTESTINE)



OUTLINE

This section will discuss the following:

- Snapshot of colorectal cancer in Grand Council Treaty #3 (GCT#3) members
- What is colorectal cancer, what are its risk factors and what are its symptoms?
- Incidence (new cases) of colorectal cancer
- Survival (chances of living after diagnosis) of colorectal cancer
- Mortality (deaths) from colorectal cancer
- Prevalence (new and existing cases) of colorectal cancer

Snapshot of colorectal cancer in GCT#3 members

From 1991 to 2010, colorectal cancer was the most commonly diagnosed cancer in GCT#3 members. Colorectal cancer accounted for almost 100 new cases in this 20-year time period. It was the second most common cancer diagnosed among other First Nations people and the fourth most common cancer diagnosed among other people in Ontario.

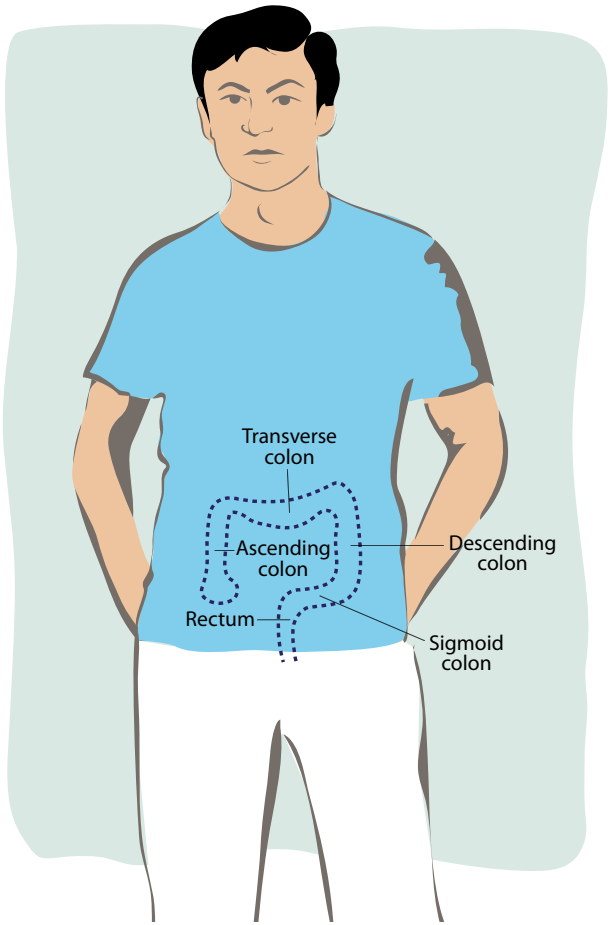
Colorectal cancer was the second leading cause of cancer death in GCT#3 members, other First Nations people and other people in Ontario. About two in five GCT#3 members with colorectal cancer (40 percent) survived for at least five years after their cancer diagnosis. Survival was lower than for other First Nations (50 percent) and other people in Ontario (54 percent). Five-year survival after a colorectal cancer diagnosis is better if the cancer is caught at an earlier stage, before someone has symptoms and when the cancer is easier to treat.

What is colorectal cancer?

The colon and rectum are parts of the large intestine in the digestive system. They are made of the same tissues, so cancers that grow in the colon and rectum are often grouped together as colorectal cancer. Colorectal cancer starts when cells in the colon or rectum change, grow out of control and group together to form a tumour, or lump. As with many other cancers, the most common reason colon and rectum cells change is age. The older a person gets, the more their cells lose the ability to repair damage over time. Colorectal cancer is more common among adults age 50 and older, and occurs more in men than women.

Symptoms

There are many colorectal cancer symptoms, which can also be caused by other health conditions (for a full list of symptoms, search for colorectal cancer at **cancer.ca**). People experiencing any unusual symptoms should visit a doctor or other healthcare provider to discuss. Some of the symptoms of colorectal cancer include diarrhea, constipation, stools that are narrower than usual, blood in the stool or bleeding from the rectum.



Risk factors

The risk factors for colorectal cancer described in this section are exposures, behaviours or other individual characteristics that affect someone's risk of developing this disease. Although they are not described in detail here, factors that individuals have little control over, such as access to care, community infrastructure and the lasting effects of colonialism, are as important as or more important than individual risk factors to determining someone's likelihood of getting cancer.

Some of the factors that can increase the risk of developing colorectal cancer include:

- **Drinking alcohol:** While avoiding alcohol is the best way of reduce your risk of cancer, if you are going to drink, men should limit themselves to two drinks per day and women to one drink per day.[7]
- **Smoking cigarettes:** Smoking cigarettes can increase the risks of colorectal cancer.[8]
- **Diet:** Eating processed or red meats can increase colorectal cancer risk.[8]
- **Excess body weight:** Being overweight or obese can also increase the risk of colorectal cancer.[8]
- **Being sedentary:** Long periods of physical inactivity, such as watching television, playing videogames or sitting at a desk can increase colorectal cancer risk.[9]
- **Family history:** Having a close blood relative, such as a mother, father or sibling, who has had colorectal cancer can increase colorectal cancer risk.
- **Genetic conditions:** There are some conditions passed down through the genes that can increase the risk for colorectal cancer.[7]
- **Medical conditions:** People with pre-existing medical conditions, including inflammatory bowel disease and diabetes, are at an increased risk for colorectal cancer. Diabetes is significantly more common in First Nations people than in non-First Nations people. Diabetes and cancer have similar risk factors (e.g., obesity, diet, physical inactivity) and often diabetes can complicate treatment for cancer, which, in turn, impacts survival.[10]

Certain behavioural changes can help reduce the risk of colorectal cancer:

- **Physical activity:** Participating in one hour of light activity or 20 minutes of vigorous activity a day can reduce the risk of colon cancer by 20 to 25 percent.[7]
- **Dietary fibre:** Having a diet that is high in fibre (e.g., legumes, grains, certain vegetables and fruit) reduces the risk of colorectal cancer, particularly colon cancer.[7]

Factors described in this section that can increase risk of colorectal cancer

- Drinking alcohol
- Smoking cigarettes
- Eating processed or red meats
- Excess body weight
- Being sedentary
- Family history of colorectal cancer
- Genetic conditions
- Diabetes

Factors described in this section that can reduce the risk of colorectal cancer

- Physical activity
- Dietary fibre

Colorectal cancer screening

Screening tests help find cancer early, before someone has symptoms and when the cancer is easier to treat. ColonCancerCheck is a province-wide screening program run by Cancer Care Ontario and the Ontario Ministry of Health and Long-Term Care.

ColonCancerCheck recommends that Ontarians ages 50 to 74 without a family history of colorectal cancer (average risk) get screened once every two years for the disease with an at-home test called the fecal occult blood test (FOBT). ColonCancerCheck is in the process of switching from FOBT to a better at-home test called the fecal immunochemical test (FIT). People at average risk for colorectal cancer who choose to be screened with flexible sigmoidoscopy should get screened every 10 years.

ColonCancerCheck recommends that people with a family history of colorectal cancer (i.e., a parent, child or sibling with the disease) get screened with colonoscopy beginning at age 50, or 10 years earlier than the age their relative was diagnosed, whichever occurs first.

The Screen for Life coach is a bus that travels across the northwestern Ontario region (including some GCT#3 communities) to make cancer screening services more accessible and convenient. The coach offers breast, cervical and colorectal cancer screening. One of the coach's services is handing out fecal occult blood test (FOBT) kits to people ages 50 to 74. The coach is often accessible from locations near GCT#3 communities. Please visit the Screen for Life website for additional information and schedules: http://www.tbrhsc.net/programs-services/regional-cancer-care/cancer-screening/screen-for-life/

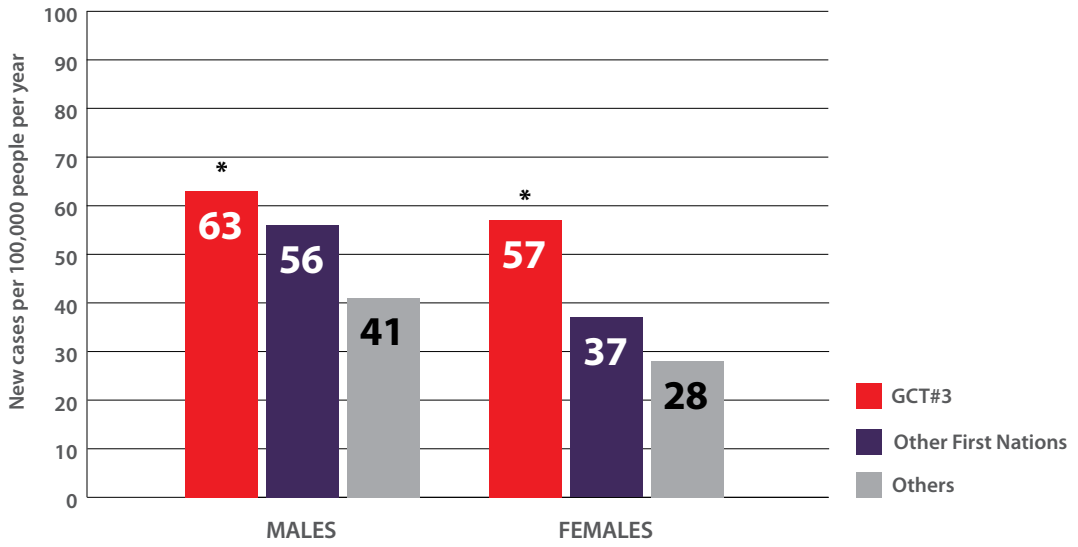
Colorectal cancer incidence (new cases) in GCT#3

Cancer incidence is the number of people who are newly diagnosed with cancer in a specific population over a set period of time. The higher the incidence rate in a population, the more common the disease. For a more detailed explanation, visit cancercare.on.ca/measuringcancerFNIM.

Colorectal cancer incidence (new cases), by sex (Figure 13)

- Of all the groups, GCT#3 members had the highest incidence of colorectal cancer.
- GCT#3 members (males and females) had a higher incidence of colorectal cancer than other people in Ontario.

FIGURE 13: Colorectal cancer incidence (new cases) among GCT#3 members, other First Nations and other people in Ontario, by sex, 1991–2010



Notes: * Indicates that incidence for GCT#3 members is significantly **higher** than for other people in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

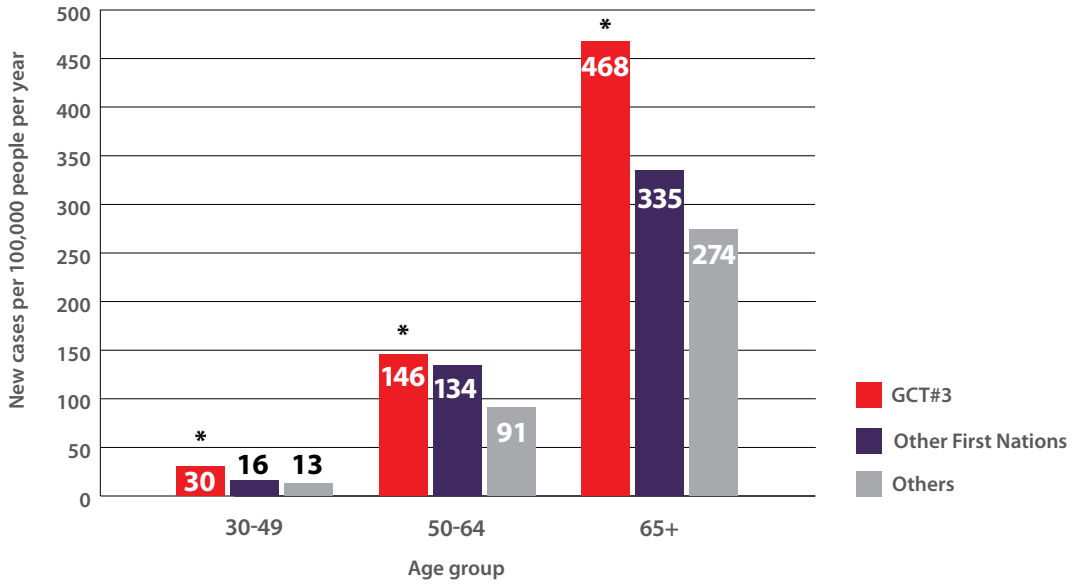
A diet high in red meat (e.g., beef, pork) or processed meats (e.g., hot dogs, luncheon meats) can increase the risk of colorectal cancer. A diet high in fibre (e.g., legumes, grains, certain vegetables and fruit) can protect against colorectal cancer.

The risk of colorectal cancer increases with age. Colorectal cancer is more common among adults age 50 and older and occurs more in men than women.

Colorectal cancer incidence (new cases), by age group (Figure 14)

- Colorectal cancer incidence increased with age.
- In every age group, GCT#3 members had a higher incidence of colorectal cancer than other people in Ontario.

FIGURE 14: Colorectal cancer incidence (new cases) among GCT#3 members, other First Nations and other people in Ontario, by age group, 1991–2010



Notes: * Indicates that incidence for GCT#3 members is significantly **higher** than for other people in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

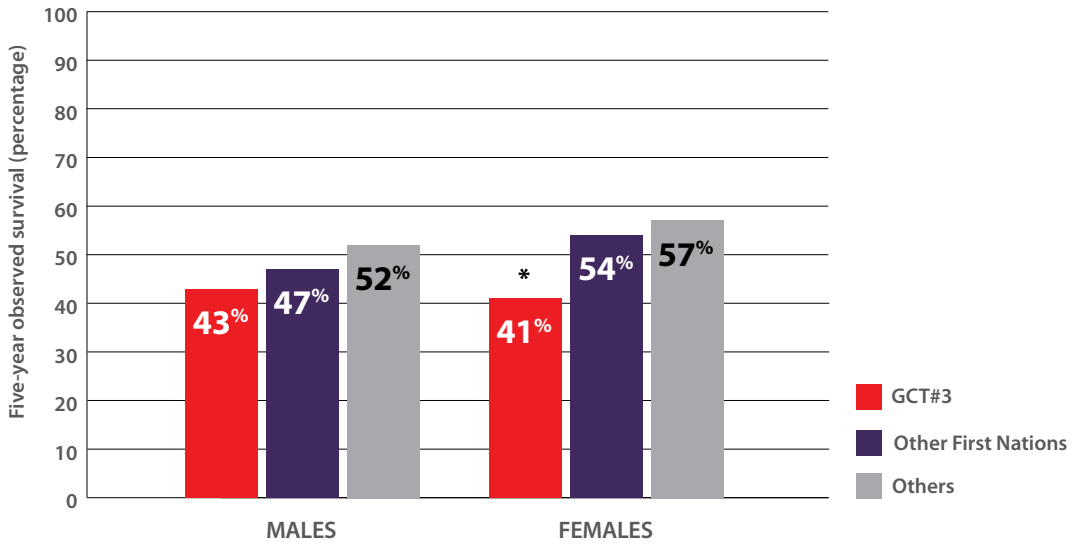
Colorectal cancer survival (chances of living after diagnosis) in GCT#3

Cancer survival is the percentage of people still alive for a set time period after being diagnosed with cancer (usually five years). Survival improves when more cancers are caught early—before they spread to other parts of the body—and when there are improvements in cancer treatment that help people with cancer live longer. For a more detailed explanation of survival, visit cancercare.on.ca/measuringcancerFNIM.

Colorectal cancer survival, by sex (Figure 15)

- Less than half of GCT#3 males (43 percent) and females (41 percent) survived five years or longer after a colorectal cancer diagnosis.
- GCT#3 males and other Ontario males had similar colorectal cancer survival.
- GCT#3 females had worse colorectal survival than other Ontario females (41 percent for GCT#3 and 57 percent for other females in Ontario).

FIGURE 15: Five-year colorectal cancer survival in GCT#3 members, other First Nations and other people in Ontario, ages 15–74 at diagnosis, by sex, 1991–2010



Notes: * Indicates that survival for GCT#3 members is significantly different than for other people in Ontario.
Age-standardized to the International Cancer Survival Standard population (ages 15–74).
Data sources: Indian Registration System, Ontario Cancer Registry

ColonCancerCheck recommends that Ontarians ages 50 to 74 without a family history of colorectal cancer (average risk) get screened once every two years for the disease with an at-home test called the fecal occult blood test (FOBT).

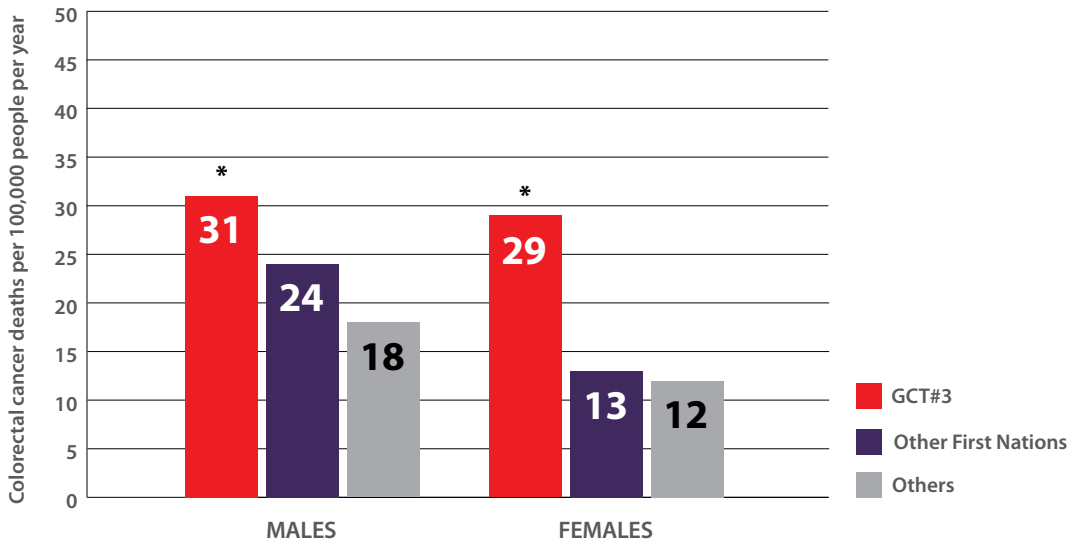
Colorectal cancer mortality (deaths) in GCT#3

Mortality is the number of deaths in a population over a set period of time. Cancer mortality is lower when fewer people are being diagnosed with cancer or when more people are living longer after a cancer diagnosis. For a more detailed explanation of mortality, visit cancercare.on.ca/measuringcancerFNIM.

Colorectal cancer mortality (deaths), by sex (Figure 16)

- Of all the groups, GCT#3 members have the highest colorectal cancer mortality.
- GCT#3 males and females had higher colorectal cancer mortality than other people in Ontario.
- GCT#3 males and other First Nations males had similar colorectal cancer mortality. However, colorectal cancer mortality among GCT#3 females was higher than mortality in other First Nations females.
- Males and females in GCT#3 had similar colorectal cancer mortality. However, in the other two groups, males had higher colorectal cancer mortality than females.

FIGURE 16: Colorectal cancer mortality (deaths) among GCT#3 members, other First Nations and other people in Ontario, by sex, 1991–2010



Notes: * Indicates that mortality for GCT#3 members is significantly **higher** than for other people in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

Participation in colorectal cancer screening can reduce colorectal cancer mortality.[11] If found early through screening, colorectal cancer may be easier to treat.

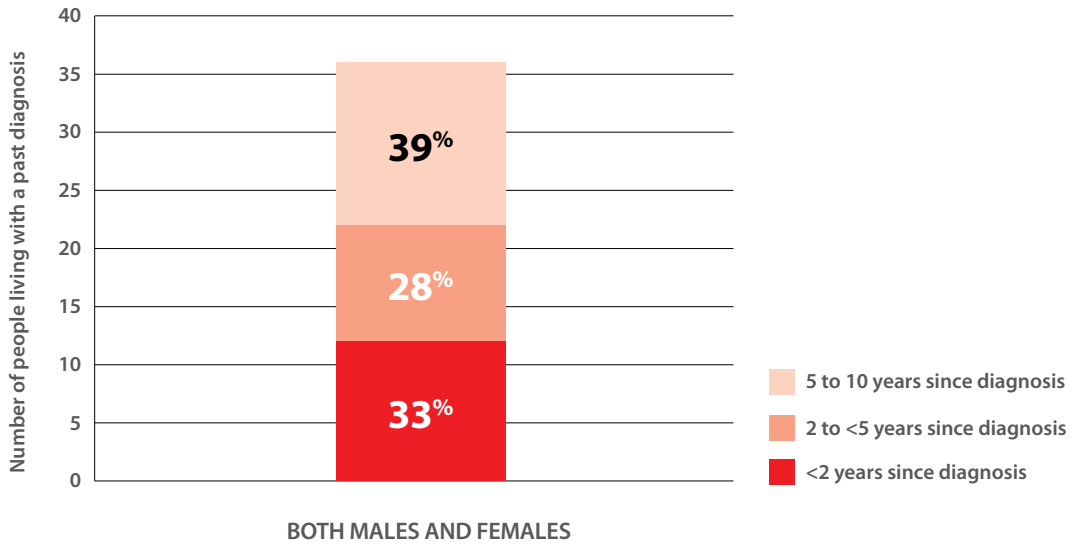
Colorectal cancer prevalence in GCT#3

Cancer prevalence is defined as the number of people living with a past diagnosis of cancer in a set time period. A high prevalence of any given cancer might be explained by a high incidence (i.e., the cancer is very common) and/or high survival (i.e., someone is more likely to live long after being diagnosed). For a more detailed explanation of prevalence, visit cancercare.on.ca/measuringcancerFNIM.

Colorectal cancer prevalence, by sex (Figure 17)

- As of January 1, 2011, there were 35 GCT#3 males and females who had been living with a diagnosis of colorectal cancer in the previous 10 years (i.e., sometime from 2000 to 2010).
- Most people living with a past diagnosis of colorectal cancer (61 percent) were alive at least five years after diagnosis. These people may still be undergoing treatment for colorectal cancer and may be in need of support services.
- Over one-third of people living with colorectal cancer (39 percent) were alive five to 10 years after their diagnosis and might be considered cancer free.

FIGURE 17: Five-year colorectal cancer survival in GCT#3 members, other First Nations and other people in Ontario, ages 15–74 at diagnosis, by sex, 1991–2010



Data sources: Indian Registration System, Ontario Cancer Registry

Aboriginal Navigators are professionals who help facilitate and coordinate access to cancer services and resources, and work to address the cultural and spiritual needs of people with cancer and their families. GCT#3 members diagnosed with cancer should work with their Navigator and health care providers to come up with a cancer plan that is right for them. Connect with the North West Navigator at **807-684-7200.**

Lung Cancer

OUTLINE

This section will discuss the following:

- Snapshot of lung cancer in Grand Council Treaty #3 (GCT#3) members
- What is lung cancer, what are its risk factors and what are its symptoms?
- Incidence (new cases) of lung cancer
- Survival (chances of living after diagnosis) of lung cancer
- Mortality (deaths) from lung cancer
- Prevalence (new and existing cases) of lung cancer

Snapshot of lung cancer in GCT#3 members

Lung cancer was the second most commonly diagnosed cancer in GCT#3 members, accounting for 66 new cases in a 20-year time period (1991 to 2010). It was the most common cancer diagnosed among other First Nations people and the third most common cancer diagnosed among other people in Ontario in the same time period.

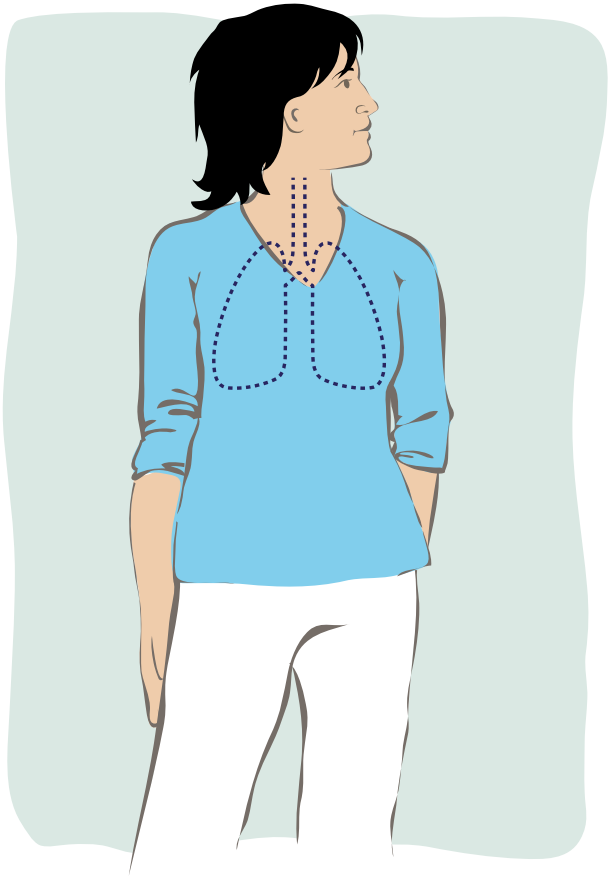
Lung cancer was the leading cause of cancer death in GCT#3 members, other First Nations and other people in Ontario. About 11 percent of GCT#3 members with lung cancer survived for at least five years after their cancer diagnosis, compared to 14 percent of other First Nations people and 17 percent of other people in Ontario. Five-year survival after a lung cancer diagnosis is poor because most lung cancers are found at a late stage when they are hard to treat.

What is lung cancer?

Lung cancer starts when cells in the lung change, grow out of control and group together to form a tumour, or lump. The most common reason lung cells change is because they are exposed to dangerous chemicals that people breathe, such as smoke from commercial tobacco (e.g., cigarettes), radon gas in the home or outdoor air pollution. Even people who were exposed to these chemicals a long time ago are still at risk for lung cancer. It may take years for lung cancer to grow and there are often no symptoms early on. Most new cases of lung cancer are diagnosed in adults age 50 or older. Lung cancer survival can be poor because symptoms usually do not appear until the cancer has spread to other parts of the body, making it harder to treat.

Symptoms

There are many lung cancer symptoms (for a full list, search for lung cancer at **cancer.ca**), which can also be caused by other health conditions. People with any unusual symptoms should visit a doctor or healthcare provider to discuss. Some of the earlier symptoms of lung cancer include a cough that gets worse or doesn't go away, chest pain that doesn't go away and is made worse by deep breathing or coughing, blood-stained mucus coughed up from the lungs, shortness of breath, wheezing and fatigue. Examples of late symptoms include buildup of fluid around the lungs, bone pain, trouble swallowing and yellowing of the skin (jaundice).



Risk factors

The risk factors for lung cancer described in this section are exposures, behaviours or other characteristics that affect someone's risk of developing this disease. Although they are not described in detail here, structural factors that individual people have little control over, such as access to care, community infrastructure, and the lasting effects of colonialism, are as important as or more important than individual risk factors to determining outcomes of cancer.

Some of the factors that can increase the risk of developing lung cancer include:

- **Smoking cigarettes:** Smoking is the main risk factor for lung cancer. In Ontario, cigarette smoking causes 71 percent of all lung cancer cases diagnosed each year.[12] Other forms of commercial tobacco use, such as cigars, spit or smokeless tobacco, also increase the risk of lung cancer, as well as some other cancers, and are being used more and more by young people.[13]
- **Second-hand smoke:** Even people who do not smoke can have a higher risk of lung cancer if they breathe in the cigarette smoke of others (second-hand smoke or enviornmental smoke).[14] People can breathe in second-hand smoke in public places or in more private spaces, such as a home or a car.
- **Environmental factors:** Although breathing in commercial tobacco is the cause of most lung cancer cases in Ontario, there are other environmental risk factors associated with a much smaller number of lung cancer cases each year. In Ontario, about 10 percent of lung cancer cases are caused by breathing in radon gas in homes or other buildings.[15] Environmental risk factors for lung cancer in Ontario that cause an even smaller number of cancers each year are breathing in air pollution or asbestos (when buildings with asbestos start to break down, or are disturbed or damaged), and eating foods or drinking water containing arsenic.

Factors described in this section that can increase risk of colorectal cancer

- Smoking cigarettes
- Second-hand smoke
- Environmental factors (e.g., radon gas in homes or other buildings, particulate air pollution or asbestos)

To many First Nations people, tobacco is a sacred plant that has spiritual and medicinal purposes. It is important to promote respect for traditional uses of tobacco through education of the cultural benefits and teachings associated with traditional and ceremonial uses of tobacco. However, the recreational use of commercial tobacco (e.g., smoking cigarettes) has no connection to First Nations spirituality. *–Traditional Teachings of First Nations People*

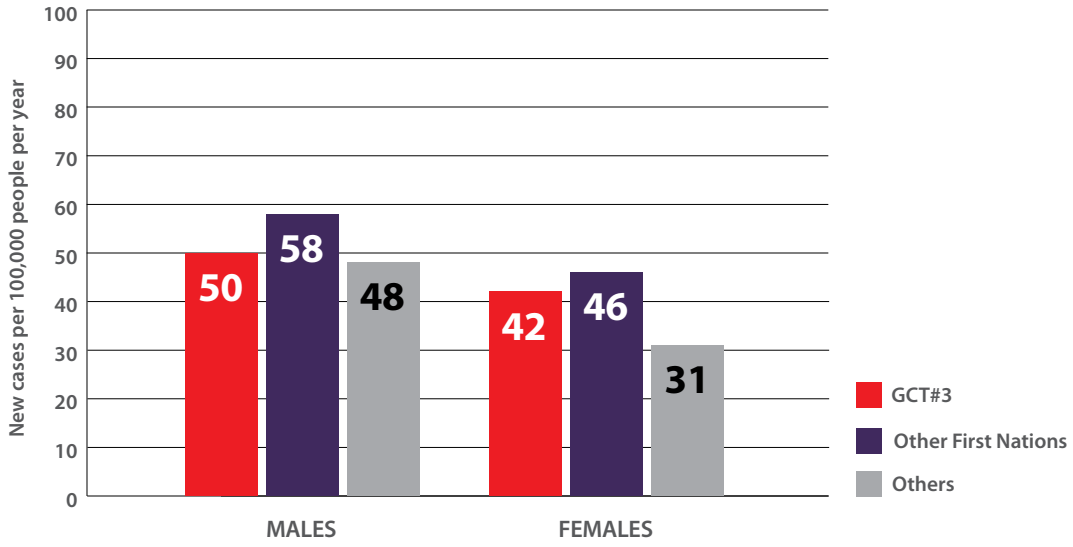
Lung cancer incidence (new cases)

Cancer incidence is the number of people who are newly diagnosed with cancer in a specific population over a set period of time. The higher the incidence rate in a population, the more common the disease. For a more detailed explanation of incidence, visit cancercare.on.ca/measuringcancerFNIM.

Lung cancer incidence (new cases), by sex (Figure 18)

- From 1991 to 2010, about 50 lung cancers per 100,000 GCT#3 males and 42 lung cancers per 100,000 GCT#3 females were diagnosed each year.
- Lung cancer incidence was similar for GCT#3 members and other people in Ontario. Although the incidence for GCT#3 females appears higher than for other females in Ontario, this difference is not statistically significant.

FIGURE 18: Lung cancer incidence (new cases) in GCT#3 members, other First Nations and other people in Ontario, all ages, by sex, 1991–2010



Notes: Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

Cigarette smoking is the main risk factor for lung cancer. Other forms of commercial tobacco use, such as cigars, spit or smokeless tobacco also increase the risk of lung cancer.

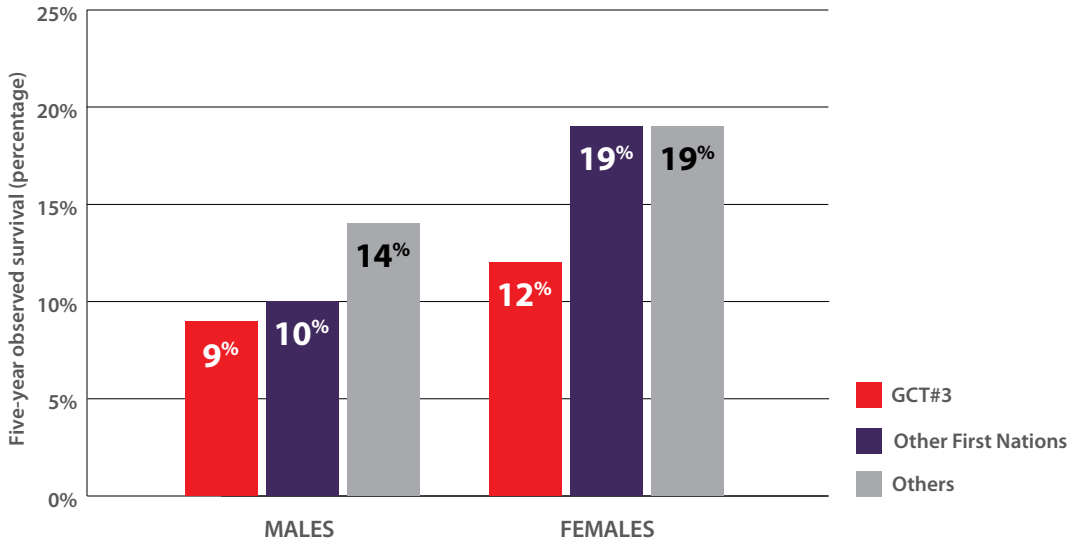
Lung cancer survival (chances of living after diagnosis)

Cancer survival is the percentage of people still alive for a set time period after being diagnosed with cancer (usually five years). Survival improves when more cancers are caught early—before they spread to other parts of the body—and when there are improvements in cancer treatment that help people with cancer live longer. For a more detailed explanation of survival, visit cancercare.on.ca/measuringcancerFNIM.

Lung cancer survival, by sex (Figure 19)

- Nine percent of GCT#3 males and 12 percent of GCT#3 females survived five years or longer after a lung cancer diagnosis.
- GCT#3 males and females with lung cancer had lower survival than other males and females in Ontario, although the differences were not statistically significant.

FIGURE 19: Five-year lung cancer survival in GCT#3 members, other First Nations and other people in Ontario, ages 15–74 at diagnosis, by sex, 1991–2010



Notes: Age-standardized to the International Cancer Survival Standard population (ages 15–74).
Data sources: Indian Registration System; Ontario Cancer Registry

Regular check-ups with a healthcare provider can sometimes catch cancer earlier.

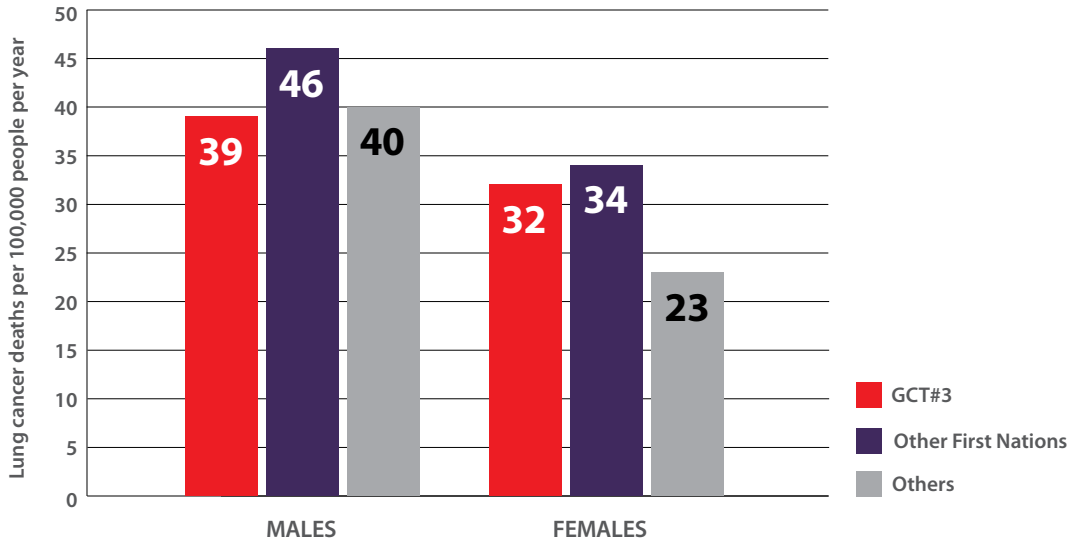
Lung cancer mortality (deaths)

Mortality is the number of deaths in a population over a set period of time. Cancer mortality is lower when fewer people are being diagnosed with cancer or when more people are living longer after a cancer diagnosis. For a more detailed explanation of mortality, visit cancercare.on.ca/measuringcancerFNIM.

Lung cancer mortality (deaths), by sex (Figure 20)

- From 1991 to 2010, about 39 lung cancer deaths per 100,000 GCT#3 males and 32 lung cancer deaths per 100,000 GCT#3 females occurred each year.
- Males had higher lung cancer mortality than females (among all groups).
- Lung cancer mortality was similar for GCT#3 members and other people in Ontario (among males and females). Although mortality for GCT#3 females appears to be higher than for other females in Ontario, this difference is not statistically significant.

FIGURE 20: Lung cancer mortality (deaths) in GCT#3 people, other First Nations and other people in Ontario, all ages, by sex, 1991–2010



Notes: Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

Even people who do not smoke can have a higher risk of lung cancer if they breathe in the cigarette smoke of others (second-hand smoke or enviornmental smoke).

Lung cancer prevalence (new and existing cases)

Cancer prevalence is defined as the number of people living with a past diagnosis of cancer in a set time period. A high prevalence of any given cancer might be explained by a high incidence (i.e., the cancer is very common) and/or high survival (i.e., someone is more likely to live long after being diagnosed). For a more detailed explanation of prevalence, visit cancercare.on.ca/measuringcancerFNIM.

Lung cancer prevalence (new and existing cases)

- As of January 1, 2011, there were seven GCT#3 members who had been living with a diagnosis of lung cancer in the previous 10 years (i.e., sometime from 2000 to 2010). Some of these people may have been diagnosed recently and might still be undergoing treatment, while others may have been diagnosed over five years ago and might be considered cancer free.
- Prevalence is typically lower for lung cancer because of its poorer survival. Lung cancer can be a deadly disease because symptoms usually do not appear until the cancer has spread to other parts of the body, making it harder to treat.

Aboriginal Navigators are professionals who help facilitate and coordinate access to cancer services and resources, and work to address the cultural and spiritual needs of people with cancer and their families. GCT#3 members diagnosed with cancer should work with their Navigator and health care providers to come up with a cancer plan that is right for them. Connect with the North West Navigator at **807-684-7200.**

Breast Cancer

OUTLINE

This section will discuss the following:

- Snapshot of breast cancer in Grand Council Treaty #3 (GCT#3) females
- What is breast cancer, what are its risk factors and what are its symptoms?
- Incidence (new cases) of breast cancer
- Survival (chances of living after diagnosis) of breast cancer
- Mortality (deaths) from breast cancer
- Prevalence (new and existing cases) of breast cancer

Snapshot of breast cancer in GCT#3 members

Breast cancer was the most commonly diagnosed cancer among GCT#3 females, accounting for almost 60 new cases in a 20-year time period (1991 to 2010). It was also the most commonly diagnosed cancer among other First Nations females and other females in Ontario in the same time period.

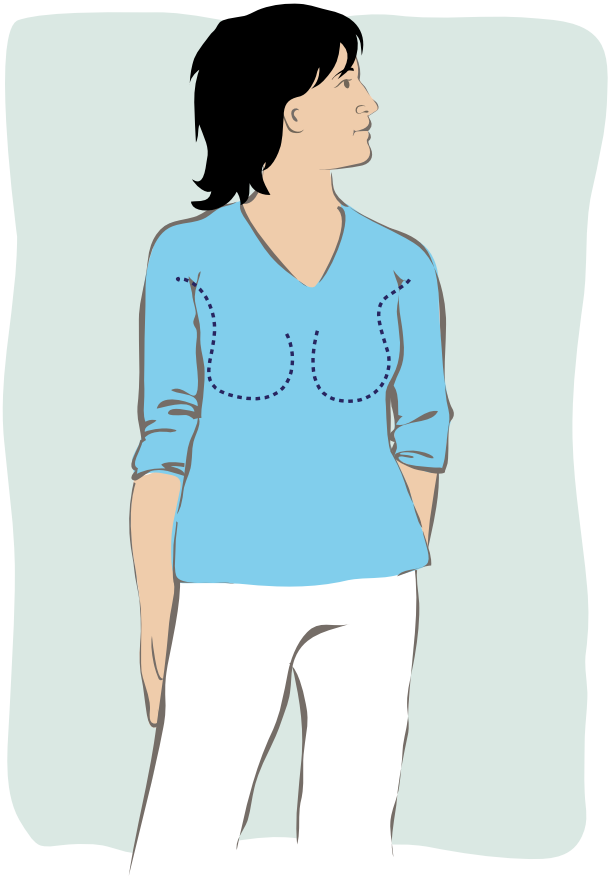
Breast cancer was the second leading cause of death in GCT#3 females, other First Nations females and other females in Ontario. Death from breast cancer was similar among the three groups. There is a very good chance of surviving five years or longer after a breast cancer diagnosis. Over two-thirds (67 percent) of GCT#3 females diagnosed with breast cancer survived five years or longer. A similar percentage of other First Nations females (76 percent) and other Ontario females (77 percent) with breast cancer survived five years or longer.

What is breast cancer?

Breast cancer starts when cells in breast tissue change, grow out of control and group together to form a tumour, or lump. Some types of breast cancer may make breast tissue feel thicker or harder. Breast cancer is the most commonly diagnosed cancer among women, but among men, it is rare, accounting for less than one percent of all cases. As with many other cancers, the most common reason breast cells change is age. The older someone gets, the more their cells lose the ability to repair damage over time. About one in eight Canadian women will develop breast cancer in her lifetime and breast cancer typically occurs in women ages 50 to 69. However, it is also one of the most common cancers diagnosed in women under age 50. Breast cancer survival is relatively good when it is found at an early stage before it has spread to other parts of the body.[16]

Symptoms

There are many breast cancer symptoms (for a full list, search for breast cancer at **cancer.ca**). People with any unusual symptoms should visit a doctor or other healthcare provider to discuss. Symptoms of breast cancer usually occur when the cancer has spread to other parts of the body or when the tumour is large enough to feel as a lump in the breast. The lump is often firm and tender, but not painful. There are other forms of breast cancer that make the tissue in the breast feel thicker or harder instead of forming a lump. Other symptoms of breast cancer can include a lump in the armpit, changes in the shape or size of the breast, changes to the nipple or discharge from the nipple without squeezing it. Examples of late symptoms of breast cancer can include bone pain, weight loss, nausea and loss of appetite.



Risk factors

The risk factors for breast cancer described in this section are exposures, behaviours or individual characteristics that affect someone's risk of developing this disease. Although they are not described in detail here, factors that individuals have little control over such as access to care, community infrastructure, and the lasting effects of colonialism, are as important as or more important than individual risk factors to determining someone's likelihood of getting cancer.

Some of the factors that can increase the risk of developing breast cancer include:

- **Drinking alcohol:** While avoiding alcohol is the best way of reduce your risk of cancer, if you are going to drink, men should limit themselves to two drinks per day and women to one drink per day.[7]
- **Excess body weight:** Being overweight or obese can increase the risk of breast cancer for post-menopausal women.[7, 8]
- **Natural body changes:** There are several natural bodily changes triggered by hormones that can increase the risk of breast cancer. Hormones are chemicals that send messages throughout the body. These changes include a woman getting her first menstrual period at a younger age, giving birth to her first child at an older age and reaching menopause at an older age.[17]
- **Medications:** Using oral contraceptives (birth control pills) and hormone replacement therapy can also increase the risk for breast cancer. These hormone-related risk factors are mainly linked to changing levels of estrogen in the body over time.[18, 19]
- **Radiation:** Being exposed to radiation (e.g., through medical radiation therapy), particularly on the chest, can increase breast cancer risk.[8]
- **Family history:** Having a close blood relative, such as a mother, father or sibling, who has had breast cancer can increase breast cancer risk.
- **Genetic factors:** Changes to the genes, called BRCA1 and BRCA2 mutations, can be inherited, or passed down, from family members and can increase cancer risk by speeding up the growth of cancer cells. About five to 10 percent of breast cancers are caused by an inherited gene mutation.[20]
- **Diabetes:** People with pre-existing diabetes are at an increased risk for breast cancer. Diabetes is significantly more common in First Nations people than in non-First Nations people. Diabetes and cancer have similar risk factors (e.g., obesity, diet, physical inactivity) and often diabetes can complicate treatment for cancer, which, in turn, impacts survival.[10]

Certain factors can protect against the risk of developing breast cancer:

- **Physical activity:** Participating in one hour of light activity or 20 minutes of vigorous activity a day can lower the risk of breast cancer.[21]
- **Giving birth and breastfeeding:** Women who have given birth many times and women who breastfeed their children have a lower risk of developing breast cancer.[8, 17]

Factors described in this section that can increase the risk of breast cancer

- Drinking alcohol
- Excess body weight
- Natural body changes
- Medication
- Radiation
- Family history
- Genetic factors
- Diabetes

Factors described in this section that can reduce the risk of breast cancer

- Physical activity
- Giving birth and breastfeeding

It is possible for breast cancer to be diagnosed in men. However, breast cancer in men is rare and accounts for less than one percent of all cases.

Breast cancer screening

Screening tests help find cancer early, before someone has symptoms and when the cancer is easier to treat.[22] The Ontario Breast Screening Program (OBSP) recommends that women ages 50 to 74 have a screening mammogram every two years. When a woman turns 50 years old, Cancer Care Ontario, which operates the province-wide OBSP, will send her a letter inviting her to get screened for breast cancer and giving her information on how and where to get screened.

Women ages 30 to 69 who are at high risk for breast cancer (have a breast cancer-related genetic mutation or strong family history of breast cancer) are advised to have a mammogram and breast MRI (magnetic resonance imaging) every year. Women are referred to this high risk screening program by their physician based on their medical history.

The Screen for Life coach is a bus that travels across the northwestern Ontario region (including some GCT#3 communities) to make cancer screening services more accessible and convenient. The coach offers breast, cervical and colorectal cancer screening. One of the coach's services is handing out fecal occult blood test (FOBT) kits to people ages 50 to 74. The coach is often accessible from locations near GCT#3 communities. Please visit the Screen for Life website for additional information and schedules: **http://www.tbrhsc.net/programs-services/regional-cancer-care/cancer-screening/screen-for-life/**

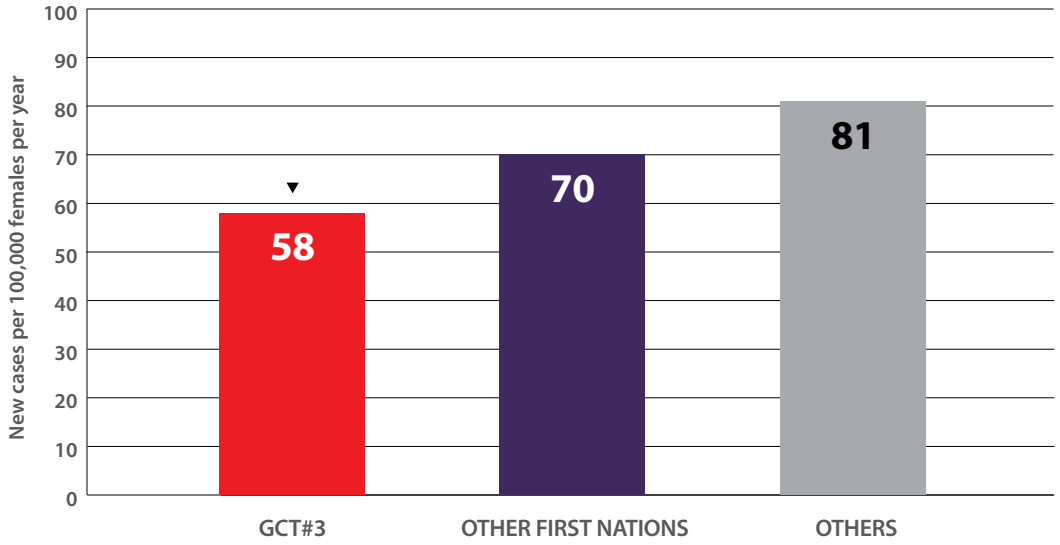
Breast cancer incidence (new cases)

Cancer incidence is the number of people who are newly diagnosed with cancer in a specific population over a set period of time. The higher the incidence rate in a population, the more common the disease. For a more detailed explanation of incidence, visit cancercare.on.ca/measuringcancerFNIM.

Breast cancer incidence (new cases) (Figure 21)

- From 1991 to 2010, about 58 cases of breast cancer per 100,000 GCT#3 females were diagnosed each year.
- GCT#3 females had a lower incidence of breast cancer than other females in Ontario.

FIGURE 21: Breast cancer incidence (new cases) in GCT#3 females, other First Nations and other females in Ontario, all ages, 1991–2010



Notes: ▼ Indicates that incidence for GCT#3 females is significantly **lower** than for other females in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

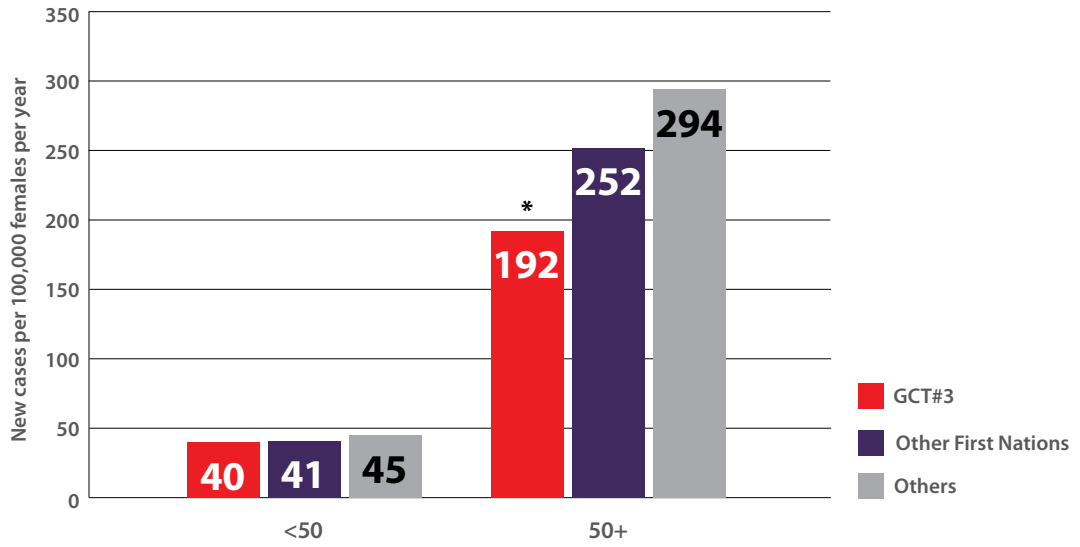
Drinking alcohol can increase the risk of breast cancer. There is no safe level of alcohol consumption according to the cancer prevention guidelines.

Breast cancer typically occurs in women ages 50 to 69. However, it is also one of the most common cancers diagnosed in women under age 50. Women ages 30 to 69 who are at high risk for breast cancer (have a breast cancer-related genetic mutation or strong family history of breast cancer) should also be screened with mammography and breast MRI (magnetic resonance imaging) every year.

Breast cancer incidence (new cases), by age (Figure 22)

- GCT#3 females age 50 and older had a higher incidence of breast cancer than other females in Ontario age 50 and older.
- Breast cancer incidence was similar for GCT#3 females under age 50 and other females in Ontario in the same age group.

FIGURE 22: Breast cancer incidence (new cases) in GCT#3 females, other First Nations and other females in Ontario, by age, 1991–2010



Notes: * Indicates that incidence for GCT#3 females is significantly different than for other females in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

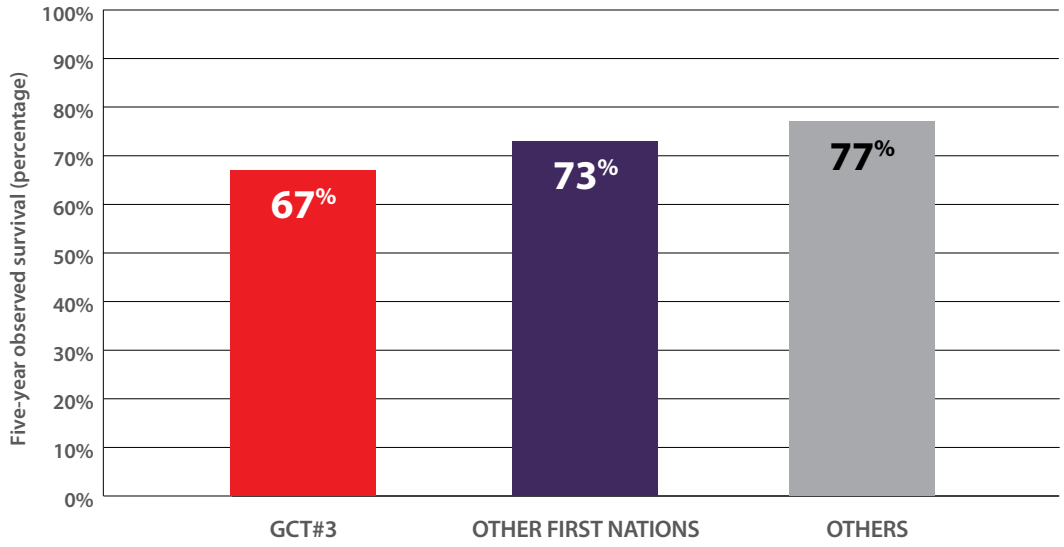
Breast cancer survival (chances of living after diagnosis)

Cancer survival is the percentage of people still alive for a set time period after being diagnosed with cancer (usually five years). Survival improves when more cancers are caught early—before they spread to other parts of the body—and when there are improvements in cancer treatment that help people with cancer live longer. For a more detailed explanation of survival, visit cancercare.on.ca/measuringcancerFNIM.

Breast cancer survival (Figure 23)

- Just over a third (67 percent) of GCT#3 females survived five years or longer after a breast cancer diagnosis, compared to 77 percent of other females in Ontario.
- Breast cancer survival was poorer in GCT#3 females than in other females in Ontario; however, due to the small number of women with breast cancer, this difference was not statistically significant.

FIGURE 23: Five-year breast cancer survival in GCT#3 females, other First Nations and other females in Ontario, ages 15–74 at diagnosis, 1991–2010



Notes: Age-standardized to the International Cancer Survival Standard population (ages 15–74).
Data sources: Indian Registration System; Ontario Cancer Registry

The Ontario Breast Screening Program recommends that women ages 50 to 74 have a screening mammogram every two years.

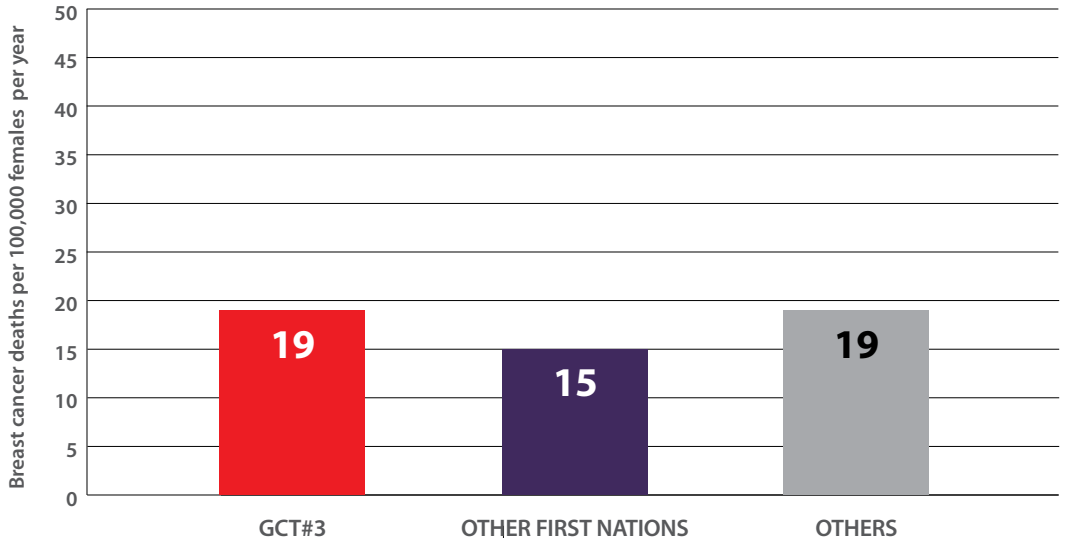
Breast cancer mortality (deaths)

Mortality is the number of deaths in a population over a set period of time. Cancer mortality is lower when fewer people are being diagnosed with cancer or when more people are living longer after a cancer diagnosis. For a more detailed explanation of mortality, visit cancercare.on.ca/measuringcancerFNIM.

Breast cancer mortality (Figure 24)

- From 1991 to 2010, about 19 breast cancer deaths per 100,000 GCT#3 females occurred each year.
- Breast cancer mortality was similar for GCT#3 females and other females in Ontario.

FIGURE 24: Breast cancer mortality (deaths) in GCT#3 females, other First Nations and other females in Ontario, all ages, 1991–2010



Notes: Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System; Ontario Cancer Registry

Participating in regular breast cancer screening can help reduce breast cancer mortality.[23]

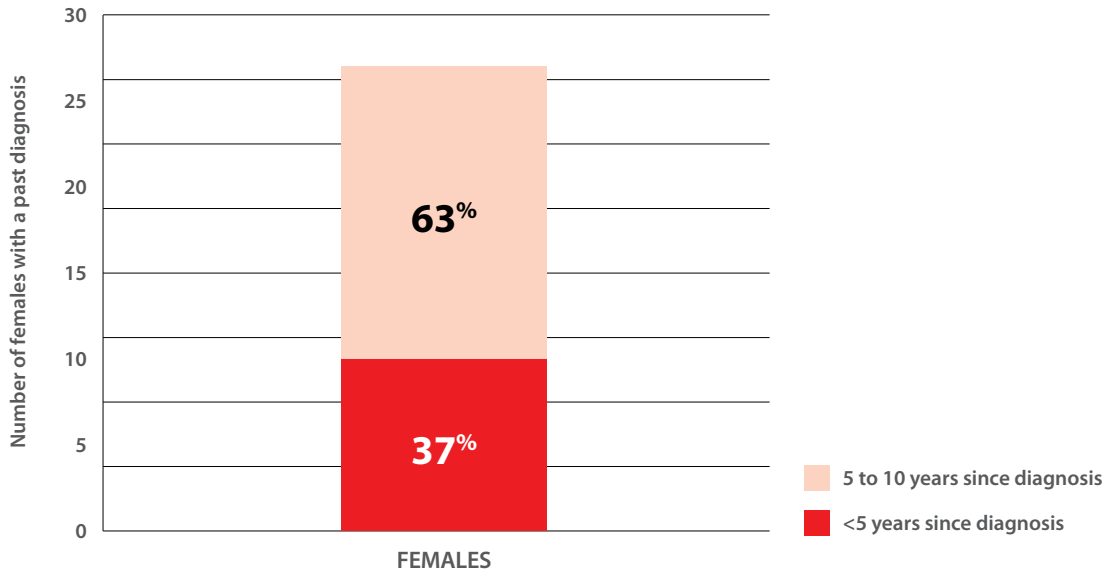
Breast cancer prevalence (new and existing cases)

Cancer prevalence is defined as the number of people living with a past diagnosis of cancer in a set time period. A high prevalence of any given cancer might be explained by a high incidence (i.e., the cancer is very common) and/or high survival (i.e., someone is more likely to live long after being diagnosed). For a more detailed explanation of prevalence, visit cancercare.on.ca/measuringcancerFNIM.

Breast cancer prevalence (Figure 25)

- As of January 1, 2011, there were 27 GCT#3 females in Ontario who had been living with a diagnosis of breast cancer in the previous 10 years (i.e., sometime from 2001 to 2010).
- Most females living with a past diagnosis of breast cancer (63 percent) were alive within five to 10 years after being diagnosed, which is a result of the relatively high survival for breast cancer.

FIGURE 25: Breast cancer prevalence in GCT#3 females in Ontario as of January 1, 2011, all ages, by time since diagnosis



Data sources: Indian Registration System; Ontario Cancer Registry

Aboriginal Navigators are professionals who help facilitate and coordinate access to cancer services and resources, and work to address the cultural and spiritual needs of people with cancer and their families. GCT#3 members diagnosed with cancer should work with their Navigator and healthcare providers to come up with a cancer plan that is right for them. Connect with the North West Navigator at **807-684-7200.**

Prostate Cancer

OUTLINE

This section will discuss the following:

- Snapshot of prostate cancer in Grand Council Treaty #3 (GCT#3) males
- What is prostate cancer, what are its risk factors and what are its symptoms?
- Incidence (new cases) of prostate cancer
- Survival (chances of living after diagnosis) of prostate cancer
- Mortality (deaths) from prostate cancer
- Prevalence (new and existing cases) of prostate cancer

Snapshot of prostate cancer in GCT#3 members

Prostate cancer was the most commonly diagnosed cancer among GCT#3 males, accounting for 40 new cases in a 20-year time period (1991 to 2010). It was also the most commonly diagnosed cancer in other First Nations males and other males in Ontario in the same time period.

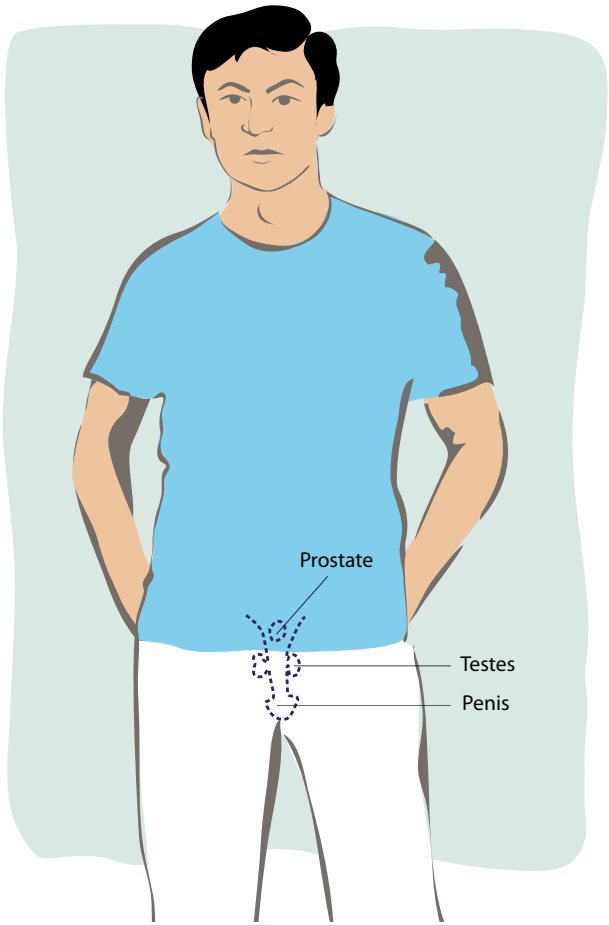
Prostate cancer was the third leading cause of death in GCT#3 males, other First Nations males and other males in Ontario. Death from prostate cancer is similar among the three groups. There is a good chance of surviving five years or longer after a prostate cancer diagnosis. Prostate cancer survival was lower in GCT#3 males (67 percent) than in other First Nations males (73 percent) and other males in Ontario (81 percent).

What is prostate cancer?

The prostate is a small gland (about the size of a walnut) found below the bladder that makes up part of the male reproductive system. Prostate cancer starts when cells in the prostate change, grow uncontrollably and group together to form a tumour, or lump. As with many other cancers, the most common reason prostate cells change is age. The older a man gets, the more his cells lose the ability to repair damage over time. These age-related changes can lead to non-cancerous conditions, such as prostatitis (swelling of the prostate), or sometimes prostate cancer. It may take years for prostate cancer to develop and it often does not cause symptoms early on. When prostate cancer is found and treated early, survival is typically very good because this cancer usually grows slowly.

Symptoms

There are many prostate cancer symptoms (for a full list, search for prostate cancer at **cancer.ca**), which can also be caused by other health conditions. People experiencing any unusual symptoms should visit a doctor or other healthcare provider to discuss. Some of the earlier symptoms of prostate cancer include changes in bladder habits (e.g., needing to urinate often, inability to urinate, weak or decreased flow of urine, burning or pain when urinating) and blood in the urine or semen. Examples of late symptoms include bone pain, weakness or numbness in the legs, and the loss of bowel or bladder control.



Risk factors

The risk factors for prostate cancer described in this section are exposures, behaviours or other individual characteristics that affect someone's risk of developing this disease. Although they are not described in detail here, factors that individuals have little control over, such as access to care, community infrastructure and the lasting effects of colonialism, are as important as or more important than risk factors to determining someone's likelihood of getting cancer. In the case of prostate cancer, we know very little about what increases or reduces cancer risk.

Some of the factors for prostate cancer include:

- **Age:** Prostate cancer risk increases with age, especially after age 50. Prostate cancer is often diagnosed in men over age 65.[16]
- **Family history:** Having a close blood male relative, such as a father or brother, who has had prostate cancer can increase risk for this disease. Family history plays a role in about five to 10 percent of all prostate cancer cases.
- **Being sedentary:** Long periods of physical inactivity, such as watching television, playing videogames and sitting at a desk, can increase cancer risk. The evidence linking sedentary behaviour with prostate cancer is limited.[9]

Factors described in this section that can increase the risk of breast cancer

- Age
- Family history
- Being sedentary (limited evidence)

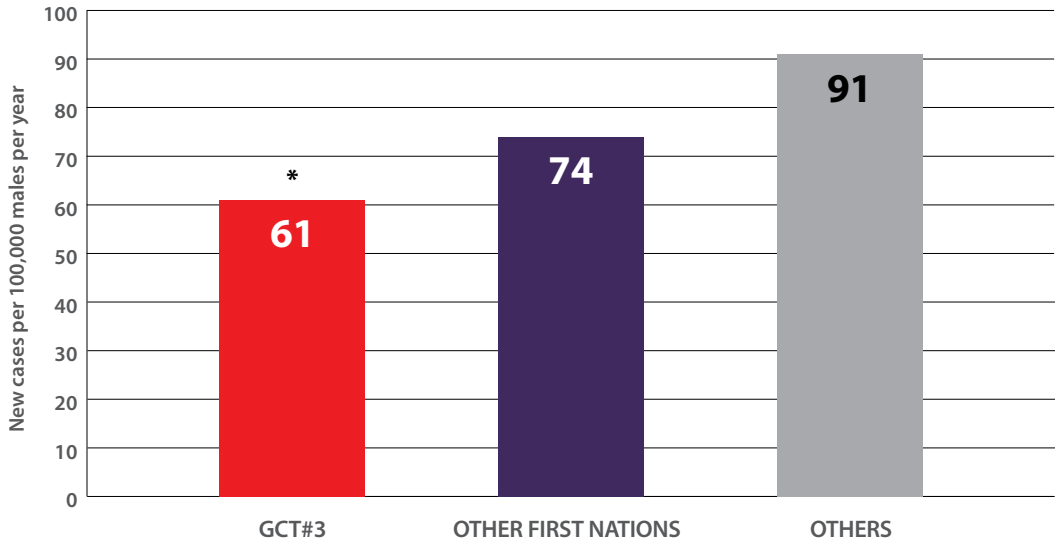
Prostate cancer incidence (new cases)

Cancer incidence is the number of people who are newly diagnosed with cancer in a specific population over a set period of time. The higher the incidence rate in a population, the more common the disease. For a more detailed explanation, visit cancercare.on.ca/measuringcancerFNIM.

Prostate cancer incidence (new cases) (Figure 26)

- From 1991 to 2010, about 61 prostate cancers per 100,000 GCT#3 males were diagnosed each year.
- GCT#3 males had a lower incidence of prostate cancer than other males in Ontario.

FIGURE 26: Prostate cancer incidence (new cases) in GCT#3 males, other First Nations and other males in Ontario, all ages, 1991–2010



Notes: * Indicates that incidence for GCT#3 males is significantly **higher** than for other males in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System; Ontario Cancer Registry

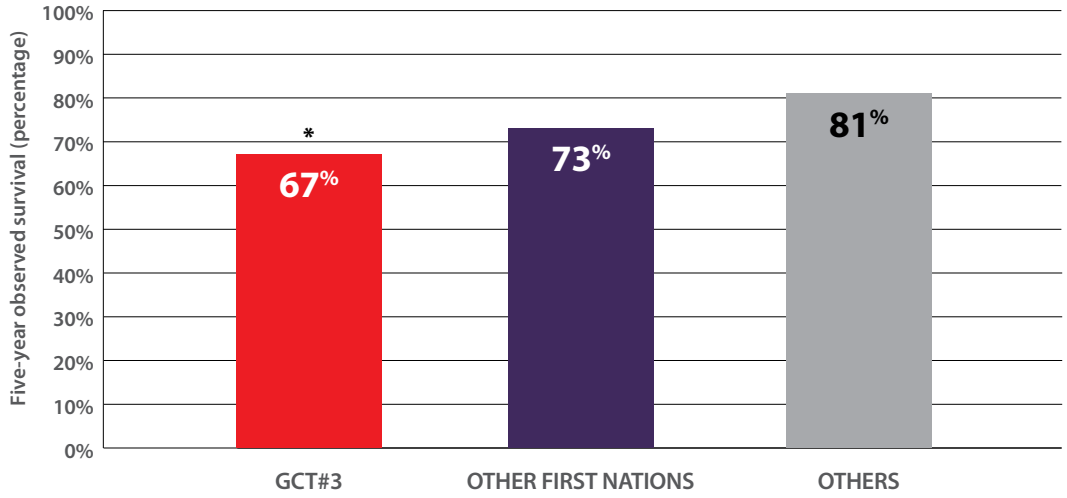
Prostate cancer survival (chances of living after diagnosis)

Cancer survival is the percentage of people still alive for a set time period after being diagnosed with cancer (usually five years). Survival improves when more cancers are caught early—before they spread to other parts of the body—and when there are improvements in cancer treatment that help people with cancer live longer. For a more detailed explanation of survival, cancercare.on.ca/measuringcancerFNIM.

Prostate cancer survival (Figure 27)

- Just over two-thirds (67 percent) of GCT#3 males survived five years or longer after a prostate cancer diagnosis.
- GCT#3 males had worse prostate cancer survival than other males in Ontario..

FIGURE 27: Five-year prostate cancer survival in GCT#3 males, other First Nations and other males in Ontario, ages 15–74, 1991–2010



Notes: * Indicates that survival for GCT#3 males is significantly **higher** than for other males in Ontario.
Age-standardized to the International Cancer Survival Standard population (ages 15–74).
Data sources: Indian Registration System, Ontario Cancer Registry

Regular check-ups with a healthcare provider can help catch prostate cancer earlier.

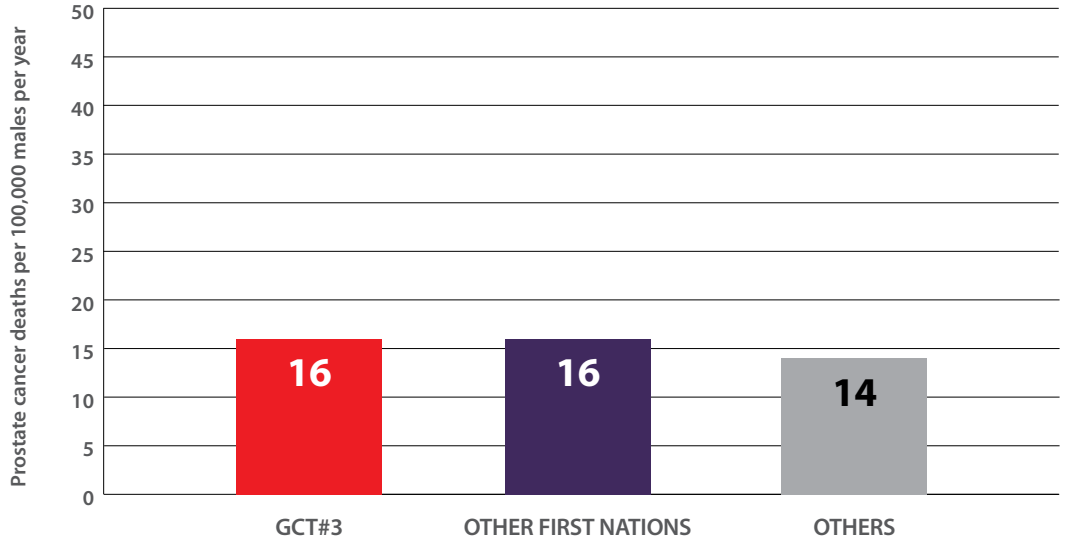
Prostate cancer mortality (deaths)

Mortality is the number of deaths in a population over a set period of time. Cancer mortality is lower when fewer people are being diagnosed with cancer or when more people are living longer after a cancer diagnosis. For a more detailed explanation of mortality, visit cancercare.on.ca/measuringcancerFNIM.

Prostate cancer mortality (deaths) (Figure 28)

- From 1991 to 2010, about 16 prostate cancer deaths per 100,000 GCT#3 males occurred each year.
- Prostate cancer mortality was similar for GCT#3 males and other males in Ontario.

FIGURE 28: Prostate cancer mortality (deaths) in GCT#3 males, other First Nations and other males in Ontario, all ages, 1991–2010



Notes: Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System; Ontario Cancer Registry

Having a close blood male relative, such as a father or brother, who has had prostate cancer can increase the risk of developing this disease.

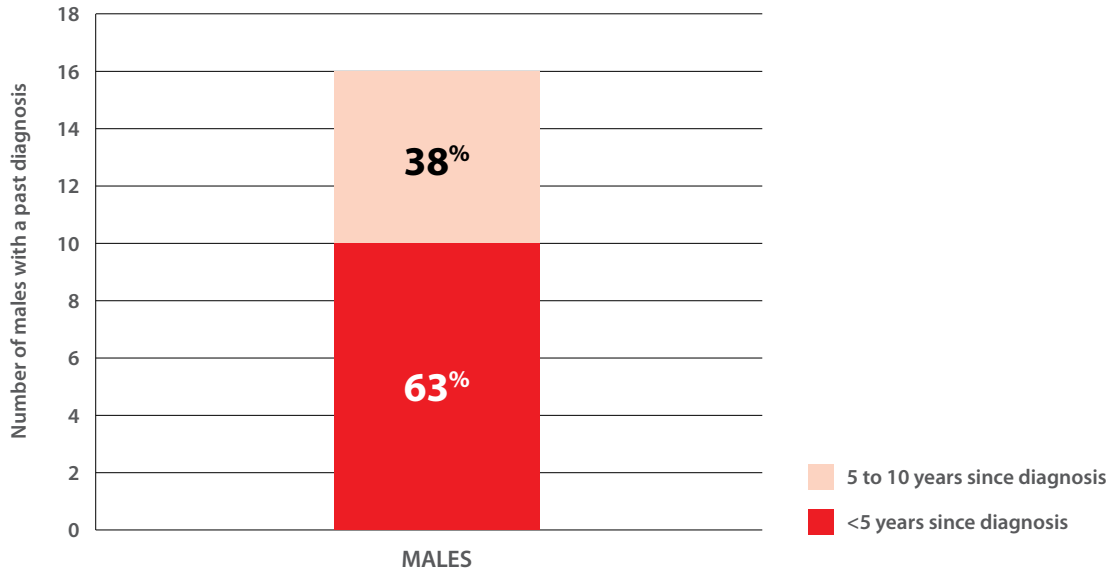
Prostate cancer prevalence (new and existing cases)

Cancer prevalence is defined as the number of people living with a past diagnosis of cancer in a set time period. A high prevalence of any given cancer might be explained by a high incidence (very common) and/or high survival (more likely to live long after being diagnosed). For a more detailed explanation, visit cancercare.on.ca/measuringcancerFNIM.

Prostate cancer prevalence (Figure 29)

- As of January 1, 2011, there were 16 GCT#3 males in Ontario who had been living with a diagnosis of prostate cancer in the previous 10 years (i.e., sometime from 2001 to 2010).
- Most males living with a past diagnosis of prostate cancer (63 percent) were alive at least five years after being diagnosed, and may still be receiving cancer treatment and in need of support services.
- Because prostate cancer has a high incidence (many new cases) and good survival, prostate cancer typically has a high prevalence.

FIGURE 29: Prostate cancer prevalence among GCT#3 males in Ontario as of January 1, 2011, all ages, by time since diagnosis



Data sources: Indian Registration System; Ontario Cancer Registry

Aboriginal Navigators are professionals who help facilitate and coordinate access to cancer services and resources, and work to address the cultural and spiritual needs of people with cancer and their families. GCT#3 members diagnosed with cancer should work with their Navigator and healthcare providers to come up with a cancer plan that is right for them. Connect with the North West Navigator at **807-684-7200.**

Cervical Cancer

OUTLINE

This section will discuss the following:

- Snapshot of cervical cancer in Grand Council Treaty #3 (GCT#3) females
- What is cervical cancer, what are its risk factors and what are its symptoms?
- Incidence (new cases) of cervical cancer
- Survival (chances of living after diagnosis) of cervical cancer
- Mortality (deaths) from cervical cancer

Snapshot of cervical cancer in GCT#3 members

Cervical cancer was the fourth most commonly diagnosed cancer in GCT#3 females, accounting for 21 new cases in a 20-year time period (1991 to 2010). It was the fifth most commonly diagnosed cancer among other First Nations females and 11th most commonly diagnosed in other females in Ontario.

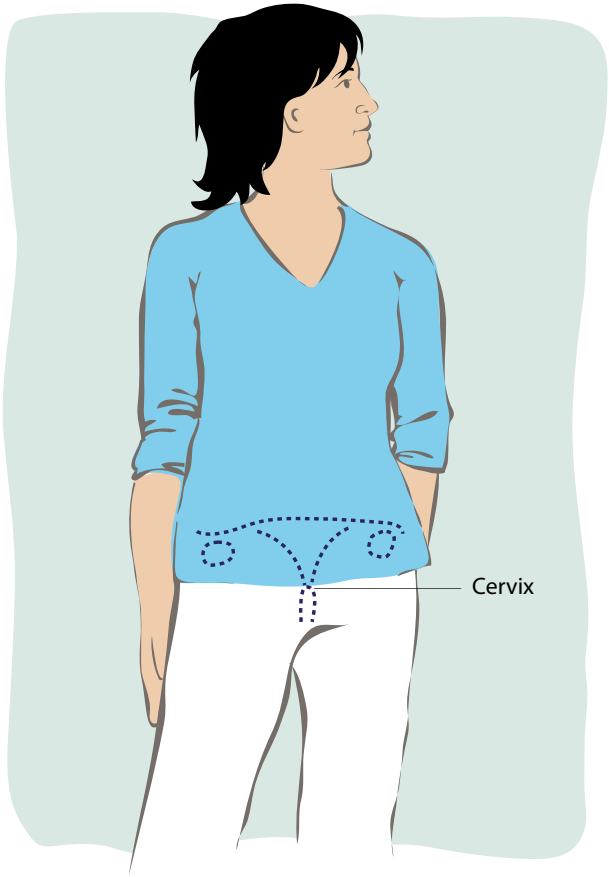
Cervical cancer was the fourth leading cause of cancer death in GCT#3 females. It ranked fifth among other First Nations females and 12th among other females in Ontario. Death from cervical cancer was higher in GCT#3 females. Almost two-thirds (63 percent) of GCT#3 females diagnosed with cervical cancer survived five years or longer. A similar percentage of other First Nations females (55 percent) and other Ontario females (68 percent) with cervical cancer survived five years or longer.

What is cervical cancer?

The cervix is the narrow opening at the bottom of a woman's uterus (womb), which makes up part of the female reproductive system. The cervix connects the uterus to the vagina and widens during childbirth to allow a baby to pass through. Cervical cancer starts when cells in the cervix change, grow out of control and group together to form a tumour, or lump. These cell changes can then lead to pre-cancerous lesions and, if left untreated, cervical cancer. It may take years for cervical cancer to grow, and there are often no symptoms early on. Most cases of cervical cancer are seen in younger women (those under age 50). When abnormal, pre-cancerous cells on the cervix are found and treated early, cervical cancer can be prevented.

Symptoms

There are many cervical cancer symptoms (for a full list search for cervical cancer at **cancer.ca**), which can also be caused by other health conditions. People experiencing any unusual symptoms should visit a doctor or other healthcare provider to discuss. Some of the earlier symptoms of cervical cancer include pale, watery, pink, brown or bloody discharge from the vagina between periods, unusually long or heavy periods, bleeding after having sex, bleeding or bloody discharge from the vagina after menopause, pain during sex or foul-smelling discharge from the vagina. Examples of late symptoms include difficulty urinating, loss of bladder control (called incontinence), blood in the urine, difficulty having a bowel movement, urine or feces leaking from the vagina, pain in the pelvic area or lower back that may go down one or both legs, swelling of the legs, bone pain and fatigue.



Risk factors

The risk factors for cervical cancer described in this section are exposures, behaviours or individual characteristics that affect someone's risk of developing this disease. Although they are not described in detail here, factors that individuals have little control over, such as access to care, community infrastructure and the lasting effects of colonialism, are as important as or more important than individual risk factors to determining someone's likelihood of getting cancer.

Some of the factors for cervical cancer include:

- **Human papilloma virus (HPV):** HPV is a common infection that is spread from person to person, usually through sexual contact. In most cases, HPV causes no symptoms and HPV infections often go away on their own. However, in some cases, infection with HPV can cause cervical cancer. All women who get cervical cancer will have had an HPV infection at some point in their past that did not clear up on its own. Because HPV is an infection spread through sexual contact, being sexually active increases a woman's risk of getting HPV and, as a result, cervical cancer.[7]
- **Smoking cigarettes:** Smoking can also increase cervical cancer risk in women who have HPV. HPV infections often go away on their own without treatment, but the damage caused to cells by smoking cigarettes increases the risk of HPV staying in the body and can lead to the development of cervical cancer in the future.
- **Giving birth:** Women who have given birth have a higher risk of cervical cancer.[7]

Some factors that can protect against the risk of cervical cancer include:

- **HPV immunization:** Having the HPV vaccine protects against the types of HPV that can cause cervical cancer. Children are eligible for HPV vaccination through school-based programs.
- **Cancer screening:** Cervical cancer screening using the Pap test can lower a woman's risk of cervical cancer. Regular Pap testing can prevent cervical cancer by finding abnormal cells that could become cancer if left untreated.[24]
- **Older age at first birth:** Women who give birth to their first child at an older age can have a lower risk of cervical cancer.

Factors described in this section that can increase the risk of cervical cancer

- Human papillomavirus (HPV)
- Smoking cigarettes
- Giving birth
- Oral contraceptives

Factors described in this section that can reduce the risk of breast cancer

- HPV immunization
- Cancer screening
- Older age at first birth

Cervical cancer screening

Cervical cancer is almost entirely preventable with regular screening, and appropriate and timely follow-up of abnormal cells.

The Ontario Cervical Cancer Screening Program (OCSP) started in 2000 as a province-wide initiative to reduce the incidence and mortality of cervical cancer. The OCSP recommends cervical screening for women ages 21 and 69 every three years if they are or have ever been sexually active. Screening can stop at age 70 in women who have been regularly screened and have had three or more normal tests in the previous 10 years.

The Screen for Life coach is a bus that travels across the northwestern Ontario region (including some GCT#3 communities) to make cancer screening services more accessible and convenient. The coach offers breast, cervical and colorectal cancer screening. One of the coach's services is handing out fecal occult blood test (FOBT) kits to people ages 50 to 74. The coach is often accessible from locations near GCT#3 communities. Please visit the Screen for Life website for additional information and schedules: http://www.tbrhsc.net/programs-services/regional-cancer-care/cancer-screening/screen-for-life/

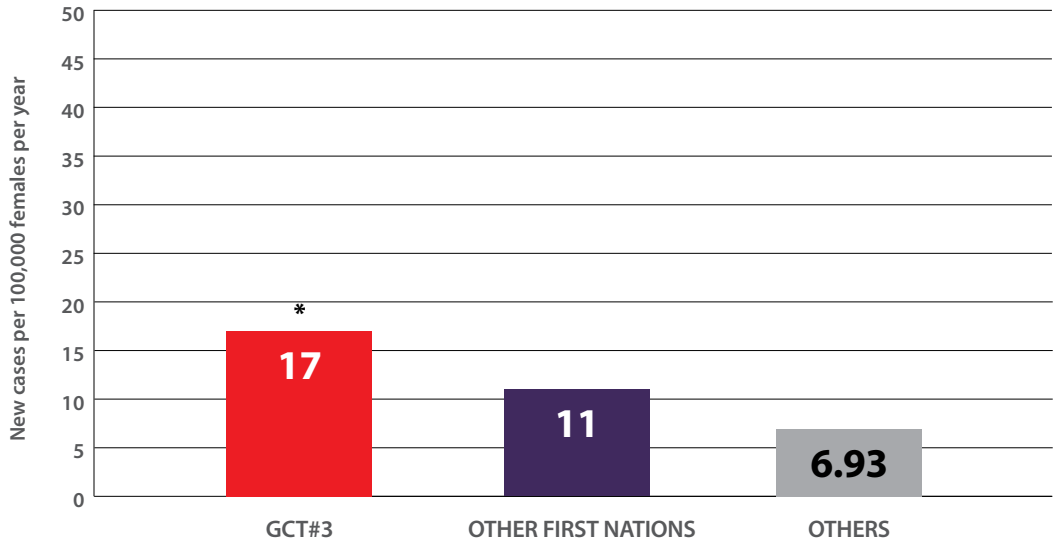
Cervical cancer incidence (new cases)

Cancer incidence is the number of people who are newly diagnosed with cancer in a specific population over a set period of time. The higher the incidence rate in a population, the more common the disease. For a more detailed explanation of incidence, visit cancercare.on.ca/measuringcancerFNIM.

Cervical cancer incidence (new cases) (Figure 30)

- From 1991 to 2010, about 17 cases of cervical cancer per 100,000 GCT#3 females were diagnosed each year.
- GCT#3 females had a higher incidence of cervical cancer than other females in Ontario.

FIGURE 30: Cervical cancer incidence (new cases) in GCT#3 females, other First Nations and other females in Ontario, all ages, 1991–2010



Notes: * Indicates that incidence for GCT#3 females is significantly **higher** than for other females in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

Having HPV is one of the main risk factors for cervical cancer. HPV is an infection spread through sexual contact. Being sexually active increases a woman's risk of getting HPV and as a result, cervical cancer. Having the HPV vaccine protects against the types of HPV that can cause cervical cancer. Children enrolled in school are eligible for HPV vaccination through school-based programs free of charge, starting in Grade 7 until Grade 12. Children not enrolled in school are eligible to catch up missed doses through their local public health centre.

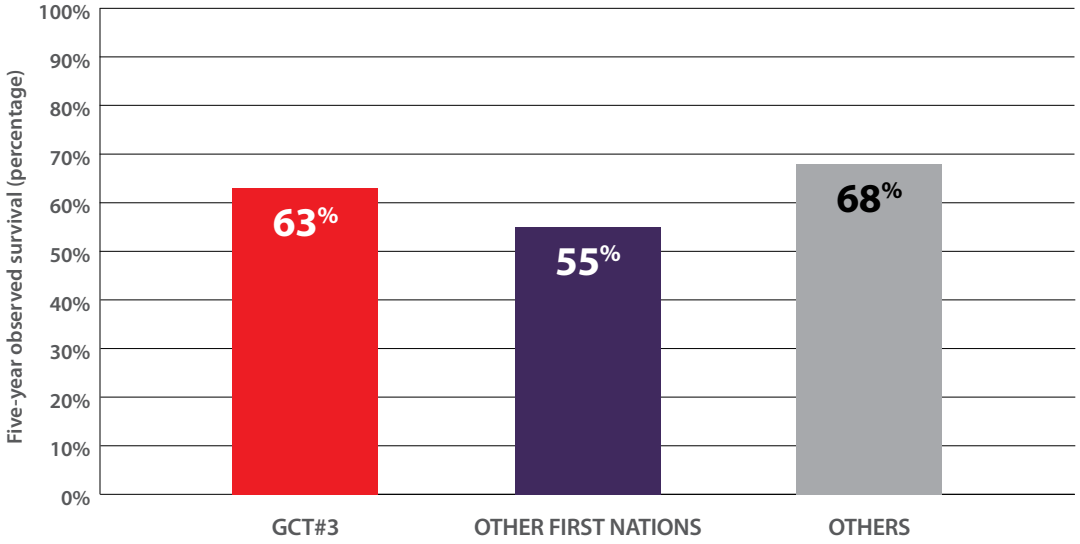
Cervical cancer survival (chances of living after diagnosis)

Cancer survival is the percentage of people still alive for a set time period after being diagnosed with cancer (usually five years). Survival improves when more cancers are caught early—before they spread to other parts of the body—and when there are improvements in cancer treatment that help people with cancer live longer. For a more detailed explanation of survival, visit cancercare.on.ca/measuringcancerFNIM.

Cervical cancer survival (Figure 31)

- About 65 percent of GCT#3 females survived five years or longer after a cervical cancer diagnosis.
- Cervical cancer survival was similar for GCT#3 females and other females in Ontario.

FIGURE 31: Five-year cervical cancer survival in GCT#3 females, other First Nations and other females in Ontario, ages 15–74 at diagnosis, 1991–2010



Notes: Age-standardized to the International Cancer Survival Standard population.
Data sources: Indian Registration System, Ontario Cancer Registry

The Ontario Cervical Screening Program recommends cervical screening for women ages 21 and 69 every three years if they are or have ever been sexually active. Screening can stop at age 70 in women who have been regularly screened and have had three or more normal tests in the previous 10 years.

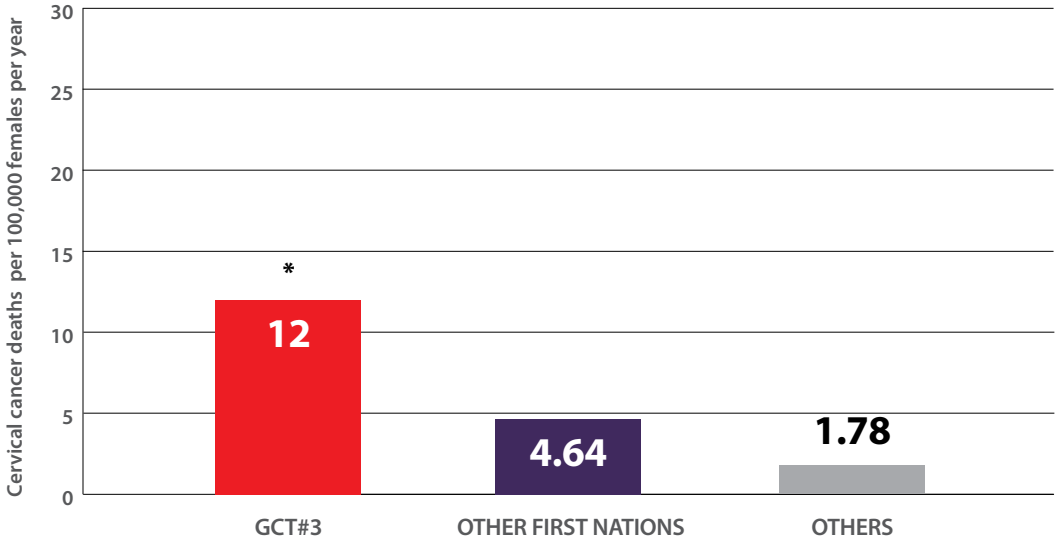
Cervical cancer mortality (deaths)

Mortality is the number of deaths in a population over a set period of time. Cancer mortality is lower when fewer people are being diagnosed with cancer or when more people are living longer after a cancer diagnosis. For a more detailed explanation of mortality, visit cancercare.on.ca/measuringcancerFNIM.

Cervical cancer mortality (Figure 32)

- From 1991 to 2010, about 12 cervical cancer deaths per 100,000 GCT#3 females occurred each year.
- GCT#3 females had higher cervical cancer mortality than other females in Ontario.

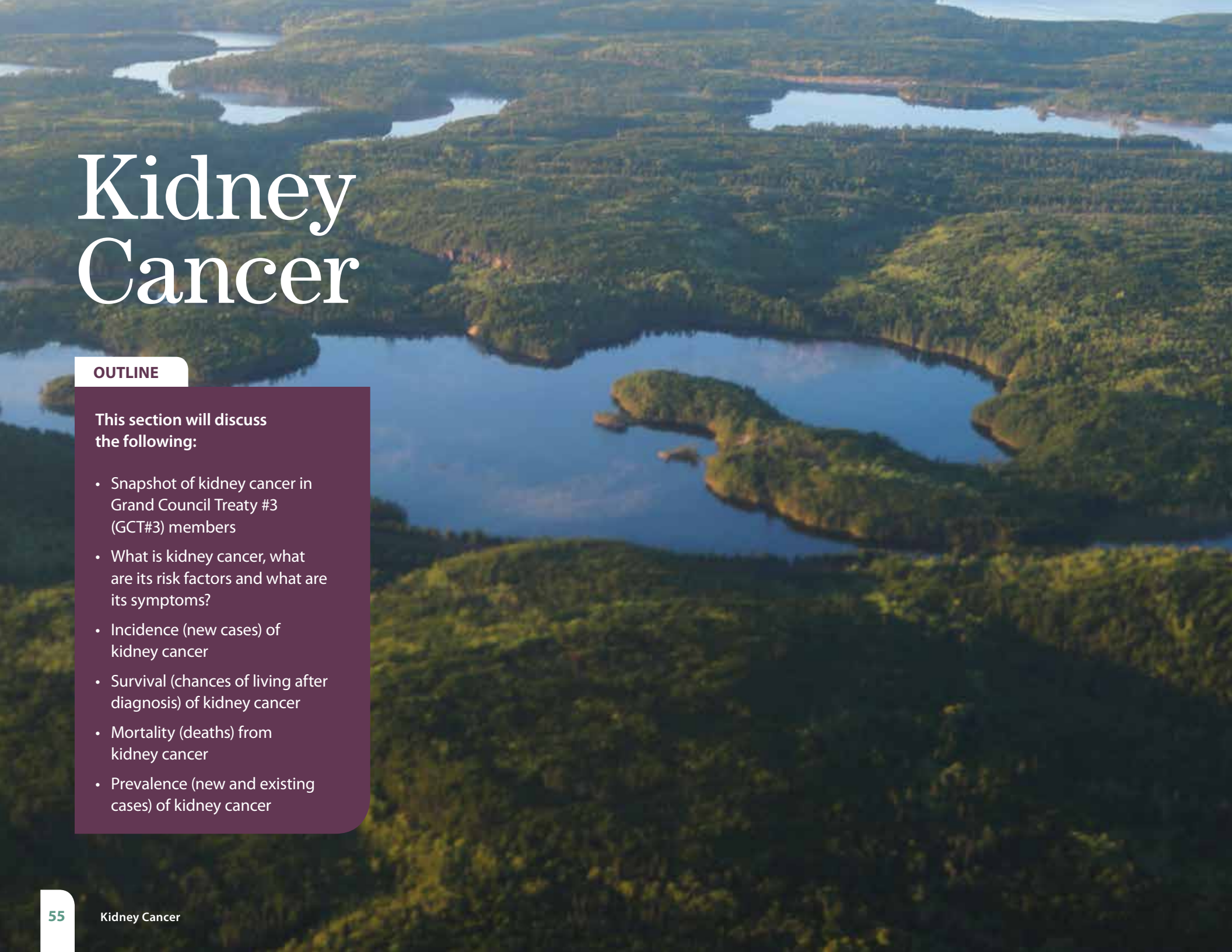
FIGURE 32: Cervical cancer mortality (deaths) in GCT#3 females, other First Nations and other females in Ontario, all ages, 1991–2010



Notes: * Indicates that mortality for GCT#3 females is significantly **higher** than for other females in Ontario.
Age-standardized to the 1960 World Standard.
Data sources: Indian Registration System; Ontario Cancer Registry

Participation in cervical cancer screening can help reduce cervical cancer mortality.

Kidney Cancer



OUTLINE

This section will discuss the following:

- Snapshot of kidney cancer in Grand Council Treaty #3 (GCT#3) members
- What is kidney cancer, what are its risk factors and what are its symptoms?
- Incidence (new cases) of kidney cancer
- Survival (chances of living after diagnosis) of kidney cancer
- Mortality (deaths) from kidney cancer
- Prevalence (new and existing cases) of kidney cancer

Snapshot of kidney cancer in GCT#3 members

From 1991 to 2010, kidney cancer was the sixth most common cancer among GCT#3 members in Ontario, accounting for 17 cases in the same time period. It ranked fifth among other First Nations and was much less common among others in Ontario (12th overall). GCT#3 females had higher incidence of kidney cancer than other females in Ontario and higher mortality (but not statistically significant). Three out of five GCT#3 members diagnosed with kidney cancer survived five years or longer (61 percent).

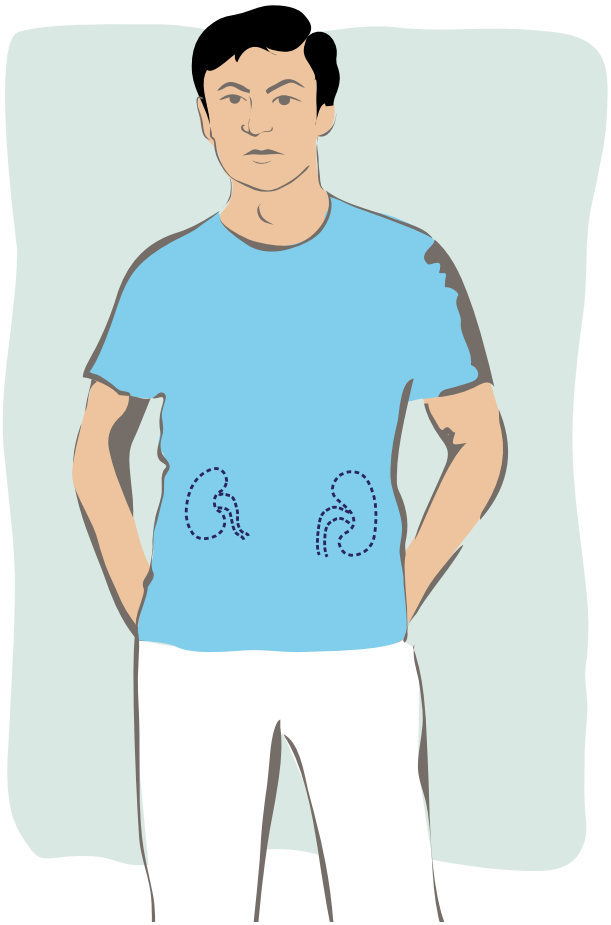
What is kidney cancer?

The kidneys are part of the urinary system, which includes the bladder, ureters, urethra and kidneys. There are two kidneys in the abdomen that are responsible for removing waste from the body, filtering blood and making urine. Kidney cancer starts when cells in a kidney change, grow out of control and group together to form a tumour, or lump. There are a number of reasons that normal kidney cells become cancerous. As with many other cancers, the most common reason kidney cells change is age. The older someone gets, the more their cells lose the ability to repair damage over time.

It may take years for kidney cancer to grow and it often does not cause symptoms early on. When kidney cancer is found and treated early, before it has spread to other parts of the body, survival can be very good. Surviving kidney cancer also depends on what type of kidney cancer someone has—some types grow faster than others.

Symptoms

There are many kidney cancer symptoms (for a full list, search for kidney cancer at **cancer.ca**), which can also be caused by other health conditions. People experiencing any unusual symptoms should visit a doctor or other healthcare provider to discuss. Some of the earlier symptoms of kidney cancer include blood in the urine, pain in the back and side of the abdomen, a lump that can be felt in the abdomen, and swelling in the legs and ankles. Examples of late symptoms include high blood pressure, fatigue, night sweats, paleness and a general feeling of discomfort or illness (called malaise) caused by having low levels of red blood cells (anemia).



Risk factors

The risk factors for kidney cancer described in this section are exposures, behaviours or other individual characteristics that affect someone's risk of developing this disease. Although they are not described in detail here, factors that individuals have little control over, such as access to care, community infrastructure and the lasting effects of colonialism, are as important as or more important than risk factors to determining someone's likelihood of getting cancer.

Some risk factors for kidney cancer include:

- **Age:** Kidney cancer increases with age, especially after age 50.
- **Smoking cigarettes:** Smoking cigarettes can increase the risk of kidney cancer.[8]
- **Excess body weight:** Being overweight or obese can increase kidney cancer risk.[8]
- **High blood pressure:** High blood pressure is also a common risk factor for other chronic conditions (e.g., heart disease) and is typically high in First Nations people.[25, 26]
- **Radiation:** Being exposed to high levels of medical radiation (e.g., having radiotherapy for a different type of cancer) can increase the risk of developing kidney cancer.[8]

Factors described in this section that can increase the risk of kidney cancer

- Smoking cigarettes
- Excess body weight
- High blood pressure
- Radiation

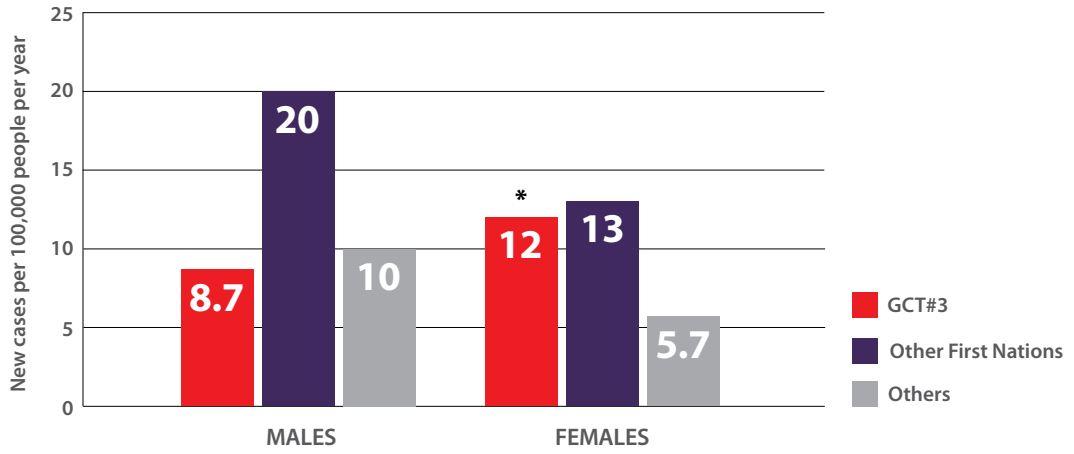
Kidney cancer incidence (new cases)

Cancer incidence is the number of people who are newly diagnosed with cancer in a specific population over a set period of time. The higher the incidence rate in a population, the more common the disease. For a more detailed explanation of incidence, visit cancercare.on.ca/measuringcancerFNIM.

Kidney cancer incidence (new cases, by sex) (Figure 33)

- From 1991 to 2010, about nine cases of kidney cancer per 100,000 GCT#3 males and 12 cases per 100,000 GCT#3 females were diagnosed each year.
- Among males, GCT#3 members and other people in Ontario had a very similar incidence of kidney cancer. Other First Nations males in Ontario had a much higher incidence of kidney cancer (about 20 cases per 100,000 people per year).
- GCT#3 females and other First Nations females had a higher incidence of kidney cancer than other females in Ontario.

FIGURE 33: Kidney cancer incidence (new cases) in GCT#3 members, other First Nations and other people in Ontario, all ages, 1991–2010



Notes: * Indicates that incidence for GCT#3 members is significantly **higher** than for other people in Ontario.
Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System; Ontario Cancer Registry

Cigarette smoking can increase the risk of kidney cancer. This risk drops after quitting smoking.

Regular check-ups with a healthcare provider can help catch cancer earlier.

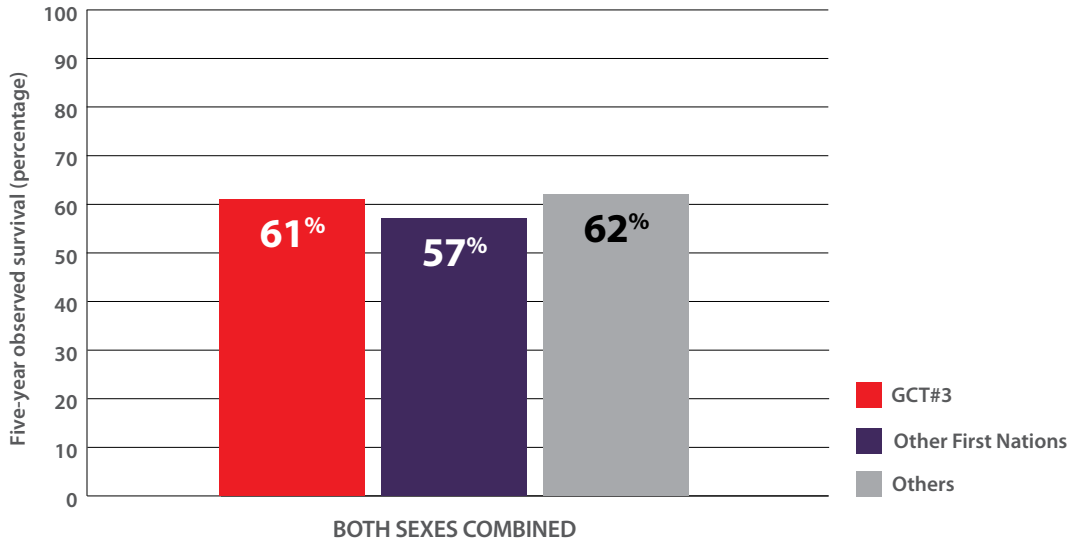
Kidney cancer survival (chances of living after diagnosis)

Cancer survival is the percentage of people still alive for a set time period after being diagnosed with cancer (usually five years). Survival improves when more cancers are caught early—before they spread to other parts of the body—and when there are improvements in cancer treatment that help people with cancer live longer. For a more detailed explanation of survival, visit cancercare.on.ca/measuringcancerFNIM.

Kidney cancer survival (chances of living after diagnosis) (Figure 34)

- Nearly two-thirds (61 percent) of GCT#3 members diagnosed with kidney cancer survived five years or longer.
- All groups had similar chances of living after a kidney cancer diagnosis.

FIGURE 34: Kidney cancer survival in GCT#3 members, other First Nations and other people in Ontario, age 15–74, 1991–2010



Notes: Age-standardized to the International Cancer Survival Standard population (ages 15–74).
Data sources: Indian Registration System, Ontario Cancer Registry

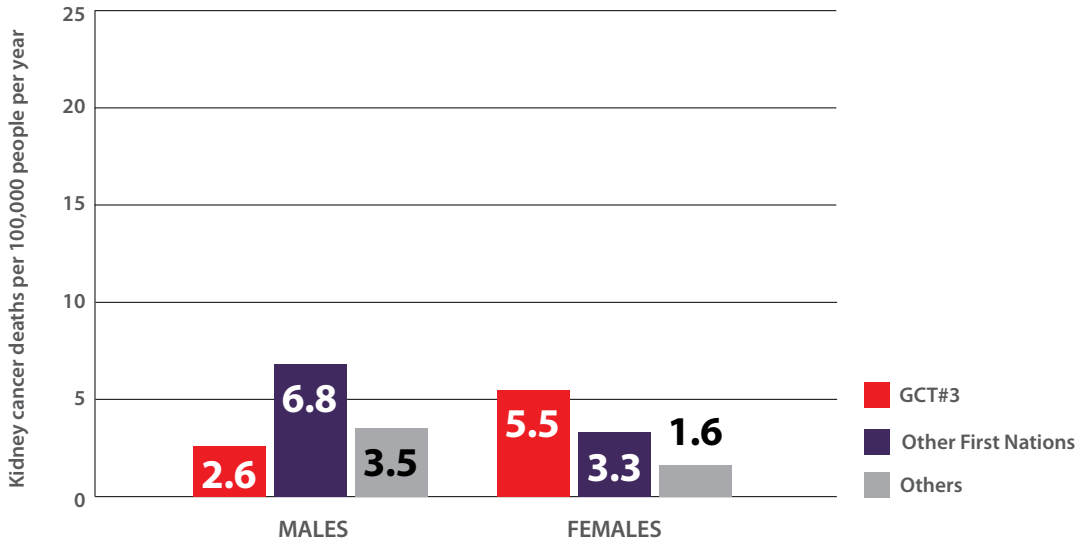
Kidney cancer mortality (deaths)

Mortality is the number of deaths in a population over a set period of time. Cancer mortality is lower when fewer people are being diagnosed with cancer or when more people are living longer after a cancer diagnosis. For a more detailed explanation of mortality, visit cancercare.on.ca/measuringcancerFNIM.

Kidney cancer mortality (deaths, by sex) (Figure 35)

- From 1991 to 2010, about three kidney cancer deaths per 100,000 GCT#3 males and six deaths per 100,000 GCT#3 females occurred each year.
- Among males, kidney cancer mortality was highest for other First Nations in Ontario; mortality was similar for GCT#3 males and other males in Ontario.
- Kidney cancer mortality was higher for GCT#3 females than other females in Ontario, although the difference was not statistically significant.

FIGURE 35: Kidney cancer mortality in GCT#3 members, other First Nations and other people in Ontario, all ages, 1991–2010



Notes: Age-standardized to the 1960 World Standard population.
Data sources: Indian Registration System; Ontario Cancer Registry

Kidney cancer prevalence (new and existing cases)

Cancer prevalence is defined as the number of people living with a past diagnosis of cancer in a set time period. A high prevalence of any given cancer might be explained by a high incidence (very common) and/or high survival (more likely to live long after being diagnosed). For a more detailed explanation, visit cancercare.on.ca/measuringcancerFNIM.

Kidney cancer prevalence (new and existing cases)

- As of January 1, 2011, there were nine GCT#3 people who had been living with a diagnosis of kidney cancer in the previous 10 years (i.e., sometime from 2001 to 2010).

People can learn about their risk for kidney cancer by taking a short online quiz. Visit **mycanceriq.ca** for more information.

Summary and Conclusions

In this section, we summarize the results for cancer incidence, mortality, survival and prevalence separately because they each have distinct implications for planning health programs and setting priorities for cancer control.

While this report presents patterns of cancer statistics and relevant existing programs, it can also be used as a starting point for asking more research questions aimed at understanding and improving the cancer experience for Grand Council Treaty #3 (GCT#3) community members. Communities that want to should continue to build their research capacity and create research questions that are meaningful to them – questions that will help in the development of optimal approaches for cancer prevention, surveillance, screening and access to care.

Incidence (new cases) and related resources

From 1991 to 2010, GCT#3 males and females had a higher incidence of colorectal cancer than other males and females in Ontario. GCT#3 females also had a higher incidence of cervical and kidney cancers.

Many of the cancer types commonly diagnosed in GCT#3 members (and in other people in Ontario) are influenced by behavioural risk factors, such as smoking commercial tobacco, drinking alcohol, eating an unhealthy diet and physical inactivity. Reducing behavioural risk factors for cancer will have the biggest impact on lowering cancer incidence. Policies and programs often target these factors; however, someone's likelihood of getting or surviving cancer is also strongly influenced by other factors, including colonialism, racism, access to healthcare systems and community infrastructure. These factors strongly influence the health of First Nations people and are rooted in the historical, political, social and economic contexts that generations of First Nations people have lived through. Therefore, these factors are important to consider when planning effective health programs.[27, 28]

Cancer Care Ontario recently released recommendations for the Government of Ontario on reducing chronic disease in First Nations, Inuit and Métis that focused on the big four behavioural chronic disease risk factors: tobacco, alcohol, diet and physical activity. This document, *Path to Prevention— Recommendations for Reducing Chronic Disease in First Nations, Inuit and Métis*, was developed through dedicated focus groups with First Nations, Inuit and Métis communities, including representatives from six GCT#3 communities. The recommendations recognize that cancer control initiatives should be managed by the communities themselves, and must respect the rights of First Nations to determine their own policies. Although the recommendations are aimed at the Government of Ontario, their implementation will require whole-of-government, multi-sectoral solutions to successfully reduce health inequities and improve access to infrastructure, resources and services. Cancer Care Ontario has begun work on implementing the recommendations of Path to Prevention in collaboration with partner organizations, including the GCT#3 Health Council.

Currently, there is no information on the impact of behavioural risk factors on GCT#3 community members. For example, there is no data to accurately estimate how many GCT#3 community members smoke cigarettes, drink alcohol, are overweight or obese, or are physically active. More work is needed to understand the cancer experience. Communities that want to should continue to build their research capacity and create research questions that are meaningful to them.

There are certain programs and policies which help promote health and may reduce the risk of cancer.

The Aboriginal Tobacco Program (ATP) is a key prevention program that is offered and led by Cancer Care Ontario. The ATP works closely with GCT#3 communities to respectfully address commercial tobacco use. Programming is designed to enhance knowledge, build capacity and empower communities with the skills and tools needed to address commercial tobacco cessation, prevention and protection. It works with the Smoke-Free Ontario objectives, while respecting the role of traditional tobacco. The ATP provides culturally appropriate information through workshops and events, including combined smoking cessation and Ultimate Frisbee workshops for youth, adult prevention and cessation programming, and training for community healthcare providers. To date, the ATP Tobacco Wise Leads have worked directly with 13 GCT#3 communities. For further information on the ATP, please contact a Tobacco-Wise Lead at **tobaccowise@cancercare.on.ca.**

Having the human papillomavirus (HPV) vaccine protects against the main types of HPV that can cause a number of different kinds of cancer (including cervical) and genital warts. In Ontario, the HPV vaccine is currently offered through school-based programs free of charge to all boys and girls in Grade 7.[28] On reserves, HPV vaccination for teenagers is the responsibility of the First Nations and Inuit Health Branch of Health Canada. Government efforts to ensure equitable access to HPV vaccination for adolescents across the province and increase uptake of the HPV vaccine should be considered a priority because HPV infection has been associated with a number of cancers, including cervical.

Cervical cancer is almost entirely preventable with regular screening, appropriate and timely follow-up of abnormal screening test results and human papillomavirus immunization. Therefore, increasing participation in cervical cancer screening can lower the incidence of cervical cancer in GCT#3 women. Cancer screening programs are described in more detail below.

Mortality (deaths), survival (chances of living after diagnosis) and related resources

Colorectal and cervical cancer mortality was higher among GCT#3 members, while cancer survival was poorer among First Nations than other people in Ontario (but not statistically significant).

Early detection of cancer reduces mortality and improves survival. Having regular check-ups with a healthcare provider can help to catch cancer early, when treatment is easier and has a better chance at being successful. Lowering incidence by reducing exposure to risk factors will also lower mortality (fewer people diagnosed means fewer people will die of the disease).

Cancer screening is an example of how early detection can reduce mortality and improve survival by catching cancer at an early stage. Unlike colorectal and breast cancer screening, cervical cancer screening can detect pre-cancerous changes, and can therefore prevent cancer from developing.

Cancer Care Ontario coordinates province-wide screening for colorectal, breast and cervical cancers, and is moving towards fully organized and integrated screening for all three cancers to improve effectiveness. Organized screening involves activities such as sending letters to eligible Ontarians inviting or reminding them to get screened. Screening is only effective if people participate regularly during the recommended intervals and are followed up adequately.

Access to cancer screening and health services in First Nation communities—especially for those in northern isolated regions—remains an ongoing challenge. The North West Local Health Integration Network (LHIN), which is the region encompassing GCT#3 territory, typically has lower screening participation for breast, cervical and colorectal cancers than the rest of Ontario.(29) The Screen for Life mobile coach visits communities every year to improve accessibility to cancer screening services. In November 2016, the Coach Lead and Regional Medical Radiation Technologist visited 12 First Nations communities in GCT#3 territory to discuss the Screen for Life coach services and provide cancer screening education, which included screening campaigns such as Pap-A-Palooza for cervical cancer and Mammathon for breast cancer. The Screen for Life coach had a condensed 2016 travel season, so First Nations communities were invited to travel to the coach in a central location instead of the coach travelling directly to the communities.

Cancer Care Ontario has distributed cancer screening fact sheets and toolkits (see the resource list at the end of this report). The screening fact sheets and toolkits are educational resources with large and descriptive visuals to help explain and understand

cancer screening procedures. Community members can visit their health staff who have been trained to use the toolkits.

The Screen for Life coach is a bus that travels across the northwestern Ontario region (including some GCT#3 communities) to help make cancer screening services more accessible and convenient. The coach offers breast, cervical and colorectal cancer screening. GCT#3 (and other) communities that cannot be reached by the coach can often access it from locations nearby. Please visit the website for additional information and schedules: **tbrhsc.net/programs-services/regional-cancer-care/screen-for-life/.**

Prevalence (new and existing cases) and related resources

On January 1, 2011, there were 139 GCT#3 members living with a past diagnosis of cancer. Just over half of these people had been diagnosed in the previous five years (i.e., from 2005 to 2010) and were likely still receiving treatment. A little less than half of these people had been diagnosed over five years before and might have been considered cancer free.

The Aboriginal Navigators and the Tools for the Journey are helpful resources for people who have been diagnosed with cancer.

Once a diagnosis of cancer is made, GCT#3 community members have access to an Aboriginal Navigator. There are 10 Aboriginal Navigators across the province. These professionals provide culturally appropriate support to First Nations, Inuit and Métis people and their families throughout their cancer experience. Navigators help facilitate and coordinate access to cancer services and resources, and work to address the cultural and spiritual needs of people with cancer and their families. They can help provide a better understanding of the health and treatment programs offered, and can help with coping emotionally, psychologically and physically. The Aboriginal Navigator for the North West region (including GCT#3 communities) can be contacted through the Northwest Regional Cancer Program at **807-684-7200**.

After a successful course of cancer treatment, it is possible to start getting symptoms again. People experiencing symptoms should always consult a healthcare provider or Aboriginal Navigator.

Cancer Care Ontario has also developed a culturally sensitive and relevant end-of-life and palliative care resource, called *Tools for the Journey*, to help support people with cancer and their families or community members through this difficult time. This toolkit provides information on understanding a diagnosis, what to expect during treatment, how caregivers can get support for grief and loss, and tips for effectively communicating with healthcare providers.

Next Steps

This report marks an important milestone in our work to improve the health status, outcomes and health system experience for Grand Council Treaty #3 (GCT#3) members in Ontario.

The Grand Council Treaty #3 Health Council and Cancer Care Ontario partnered to develop this report and aim to continue to make progress on the following calls to action:

- Develop culturally tailored and community-led cancer prevention resources and programs that emphasize the four main behavioural risk factors for cancer: commercial tobacco, alcohol, diet (inadequate vegetable and fruit intake) and physical inactivity.
- Develop culturally and geographically appropriate educational tools and recommendations for adaptations to Cancer Care Ontario's screening programs to ensure coverage of GCT#3 members.
- Develop a strategy for increasing the future availability of this type of data (including updated time periods) to continue to accurately determine cancer burden in GCT#3 communities, and evaluate the value and success of community-led cancer control programs in reducing the burden of cancer.

Resource Summary

All resources can be provided in print and bulk for community distribution at no cost. Visit **cancercareontario.ca** for electronic copies.

CANCER EDUCATION AND PREVENTION

Cancer 101: Share a simple and illustrative video about cancer narrated by Stan Wesley on Cancer Care Ontario's YouTube Channel.

Cancer 101 Toolkit: Culturally appropriate information about cancer, risk factors and post-diagnosis. Contact Partnership Liaison Officer for copies.

Comic: A comic for First Nations, Inuit and Métis youth that will provide education and awareness about cancer. Contact Partnership Liaison Officer for copies.

My CancerIQ: Cancer risk assessment and personalized action plans. Visit **mycanceriq.ca**

Aboriginal Tobacco Program: For smoking cessation, protection and prevention, contact Cancer Care Ontario's Tobacco Wise Lead.

How we measure cancer in First Nations, Inuit and Métis populations: Tool to help First Nations, Inuit and Métis planners, policy makers and healthcare staff looking at cancer reports understand what cancer statistics mean, and how to use them in health planning and priority setting. Visit **cancercare.on.ca/measuringcancerFNIM**

CANCER SCREENING

Cancer Screening Fact Sheets and Cancer Screening Toolkit: Screening information on breast, cervical and colorectal cancer for First Nations.

The Screen for Life Coach: Bus that travels across northwestern Ontario to help make cancer screening services more accessible and convenient. Contact 1-800-461-7031.

END-OF-LIFE CARE

Tools for the Journey: Culturally sensitive and relevant end-of-life and palliative care resource.

REPORTS

Aboriginal Cancer Strategy III: Thorough document explaining the goals and cancer strategy for the Aboriginal Cancer Control Unit.

Cancer in First Nations in Ontario: Risk Factors and Screening: A report on cancer risk factors and screening in the on-reserve First Nations, off-reserve First Nations and non-First Nations population in Ontario.

Path to Prevention—Recommendations for Reducing Chronic Disease in First Nations, Inuit and Métis: Report providing 22 recommendations for the Government of Ontario on reducing exposure to risk factors in First Nations, Inuit and Métis communities.

Environmental Burden of Cancer in Ontario: Report released by Cancer Care Ontario assessing the burden of cancer from environmental pollutants in the province.

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- Jeannie Simon, Aboriginal Navigator
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  Phone: 807-684-7200 ext. 4324
- Screen for Life Coach
  Phone: 807-684-7777 or 1-800-461-7031
- Susan Bale, Regional Aboriginal Cancer Lead Assistant , Northwest Regional Cancer Program
  Email: bales@tbh.net or
  Phone: 807-684-7200

Appendix A: Glossary

Body mass index: A measure of weight adjusted for height, calculated as weight in kilograms divided by height in metres squared (kg/m2). It is the most common measure used to assess overall body fatness.

Cancer incidence: The number of people who are newly diagnosed with cancer in a specific population over a set period of time. The higher the incidence rate in a population, the more common the disease.

Cancer mortality: The number of deaths in a population over a set period of time. Mortality is lower when fewer people are being diagnosed or when more people are living longer after a cancer diagnosis.

Cancer prevalence: The number of people living with a past diagnosis of cancer in a set time period. A high prevalence of any given cancer might be explained by a high incidence (i.e., the cancer is very common) and/or high survival (i.e., someone is more likely to live long after being diagnosed).

Cancer survival: The percentage of people still alive for a set time period after being diagnosed with cancer (usually five years). Survival improves when more cancers are caught early—before they spread to other parts of the body—and when there are improvements in cancer treatment that help people with cancer live longer.

Diagnosis: Identifying the disease based on the symptoms someone is experiencing.

Particulate air pollution: Small particles that are less than 2.5 micrometers in diameter and are capable of being inhaled deeply into the lungs due to their small size. Sources of particulate air pollution include motor vehicles, industrial facilities (e.g., smelters), power plants, residential fireplaces and wood stoves, agricultural burning and forest fires.

Radon: An invisible, odorless, tasteless gas that seeps up through the ground and diffuses into the air. Radon can enter homes through cracks in floors, walls or foundations, and collect indoors. Basement and first floors typically have the highest radon levels because of their closeness to the ground.

Record linkage: A process of connecting two or more data files together to combine different kinds of information about a population not available in any one file.

Statistically significant: The likelihood that the differences between two groups is caused by something other than random chance.

Appendix B: Methodology

In accordance with the Grand Council Treaty #3 (GCT#3) resolution # CA-14-14, this report provides aggregate level estimates of cancer burden (e.g., incidence, mortality, survival and prevalence) to GCT#3 communities in Ontario.

The development of this report was guided by the First Nations principles of OCAP® (Ownership, Control, Access and Possession)—a set of standards that establishes how First Nations data should be collected, protected, used or shared. A partnership agreement between Cancer Care Ontario and the GCT#3 advisory group indicated the scope of the project, how the partners would work together and how the report would be shared with GCT#3 communities.

Process

The main source of cancer information is the Ontario Cancer Registry—a secure data file maintained by Cancer Care Ontario that includes all newly diagnosed cancers and deaths after a cancer diagnosis in people living in Ontario. There are strict rules in place to protect the privacy of this personal health information. The Ontario Cancer Registry provides a lot of useful information about cancer, but there is no way to know whether someone diagnosed with cancer identifies as First Nations (or GCT#3 members) from the cancer registry information alone. There is also no information about people's exposure to risk factors—the Ontario Cancer Registry does not include information about how people lived (e.g., what they ate, whether they smoked) before getting cancer.

To identify First Nations people in Ontario who have cancer, the Indian Registration System (IRS) (a data file of all First Nations people who are registered under the Indian Act) was connected to the Registered Persons Database (RPDB) (a list of all people with Ontario health insurance numbers) and the Ontario Cancer Registry through a process called record linkage. Combined, these datasets make up a group of people representing registered First Nations people in Ontario and registered First Nations people who have cancer. Within the IRS, the band name was used to identify First Nations people living in GCT#3 territories. Their cancer statistics were calculated and are presented in this report.

Limitations

The aim of the two record linkages was to capture information on all registered First Nations people in Ontario with a diagnosis of cancer; however, there are several limitations to the ability of these linkages to do so. The RPDB and Ontario Cancer Registry do not capture First Nations people who have had no contact with the Ontario health system. In addition, cancer services accessed outside Ontario are not included in the RPDB and Ontario Cancer Registry. However, if a cancer was diagnosed in the province of Manitoba for an individual with an Ontario Health Insurance Plan number, this cancer would be included.

A further limitation of this work is that the statistics do not go beyond the year 2010. Although these data are a little out of date, cancer patterns generally do not change dramatically year over year. These estimates provide a good basis for identifying priorities for prevention policies and programs.

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Acknowledgments

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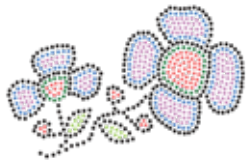

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