Alberta Health Services

2012 Report on Cancer Statistics in Alberta

Breast Cancer

Surveillance & Reporting

CancerControl AB

February 2015

Acknowledgements

This report was made possible through Surveillance & Reporting, Cancer Measurement Outcomes Research and Evaluation (C-MORE), CancerControl AB, Alberta Health Services, and the many contributions of individuals across Alberta Health Services as well as external agencies and individuals.

The authors wish to thank individuals working in the following AHS departments and partner agencies for their contributions to this report: Alberta Cancer Registry; Population, Public and Aboriginal Health; Alberta Health and Statistics Canada. Contributions included provision of information, analysis and interpretation, and assistance with consultation sessions and communication of the report.

Suggested Citation:

Surveillance & Reporting: *2012 Report on Cancer Statistics in Alberta.* Edmonton: CancerControl AB, Alberta Health Services, 2015.

For More Information:

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Purpose of the Report

Surveillance & Reporting, a specialized team within Cancer Measurement Outcomes Research and Evaluation (C-MORE), Alberta Health Services, actively contributes to Changing our Future: Alberta's Cancer Plan to 2030. As well, Surveillance & Reporting keenly contributes to the goal of making Alberta a place where most cancers are prevented, more cancers are cured, and suffering is reduced. This is accomplished in part by conducting cancer *surveillance* through the collection, integration, analysis, and dissemination of cancer-related data and information.

The report is designed to provide comprehensive and detailed information regarding cancer in Alberta. It will help support health professionals, researchers and policy makers in the planning, monitoring and evaluation of cancer-related health programs and initiatives. It will also be a useful education tool for the general public and media.

Navigating the Report

This document provides information on female breast cancer (see **Appendix** for cancer definitions) statistics in Alberta. Details about other individual cancer types are available within separate documents. The words highlighted in *dark blue* are terms described in detail in the Glossary of Terms within the **Appendix** document.

Data Notes

In this document, the term "cancer" refers to *invasive cancers* unless otherwise specified. It is important to note that this document contains both actual and estimated data; distinctions are made where applicable. The numbers published in this report should be considered provisional, as a few cases and deaths may be registered in subsequent years. The data in this report reflect the state of the Alberta Cancer Registry as of July 14, 2014.

For detailed descriptions about data sources and how they affect data presented in this report, please see the **Appendix**.

Summary

- Breast cancer is the most commonly diagnosed cancer in females. Approximately **1 in 8** women will develop invasive breast cancer within their lifetime.

- Survival for females diagnosed with breast cancer is generally good and has improved over time. Five-year relative survival for breast cancer was approximately **90%** for those diagnosed between 2010 and 2012. This means that those diagnosed in 2010 to 2012 are about 90% as likely to be alive 5 years after their diagnoses as women of the same age who have not been diagnosed with cancer.

- Generally, cancers diagnosed in earlier stages (I & II) will receive less invasive treatment and have better survival. More than **80%** of breast cancer cases are diagnosed in stages I and II. Three year relative survival for stage I and II is 100% and 98%, respectively.

- Since breast cancer is the most common cancer in Albertan females and survival is good it is the most prevalent type of cancer in females. As of December 31, 2012, approximately **27,800** Albertan females were alive who had previously been diagnosed with breast cancer.

- In 2012, there were **2,333** new cases of breast cancer in Albertan women and **385** deaths due to the disease. Between 1992 and 2012 the age standardized incidence rates for female breast cancer **have remained stable** and the mortality rates have decreased. It is estimated there will be approximately **2,650** cases of breast cancer diagnosed in women in 2017.

- Breast cancer incidence in females remains low until about the age of 25, increasing until it peaks at age 75, after which rates decline. There were no significant geographic variations in female breast cancer incidence and mortality across the five Alberta Health Zones.

- Potential years of life lost (PYLL) is the number of years of life lost when a person dies prematurely from any cause, based on their life expectancy. Breast cancer in females in 2012 had the third highest number of potential years of life lost at **7,876**.

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* Year range represents the period over which the most recent significant trend was observed.

Demography

Changes in demography in Alberta (aging of the population and population growth) contributed far more new cases of breast cancer in females over the last two decades compared to the reduction in the breast cancer rate. From 2003 to 2017, the change in breast cancer rate reduced the annual number of new cases (**Figure 3-1**).

Figure 3-1: Trends in New Cases Breast Cancer Attributed to Aging Population, Population Growth and Change in Breast Cancer Rate, Females, Alberta, 1992-2017
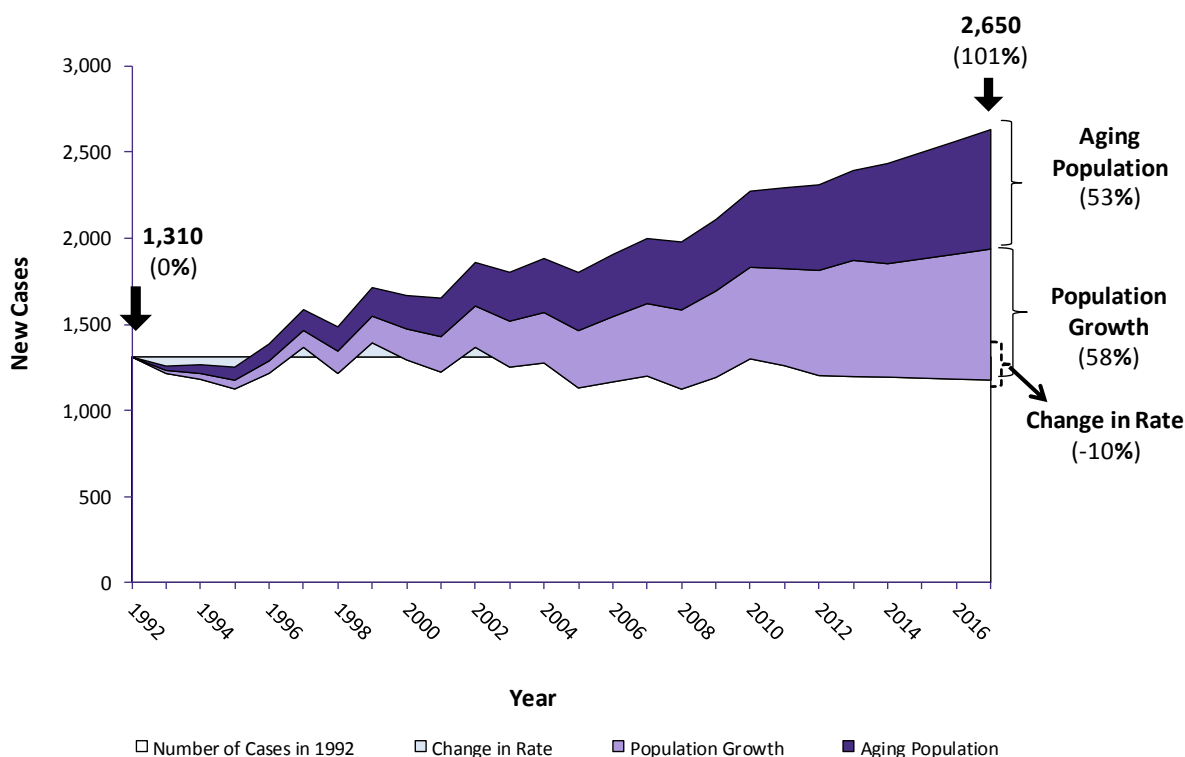
Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health

The horizontal black line indicating 1,310 new cases in **Figure 3-1** represents the number of female breast cancer cases that occurred in 1992. The line at the top of the dark-purple shaded area of the graph represents the number of new cases that actually occurred between 1992 and 2012, projected to 2017. Between these two lines, the three coloured areas reflect the increase in female breast cancer cases due to the impact of rate change, population growth and aging population.

The light blue shaded area (lower than the horizontal black line and overlapped by the light purple shaded area) represents the total number of new female breast cancer cases that would have occurred each year if the cancer incidence rates alone had changed but the population had remained the same as in 1992. This will account for approximately 10% total decrease in new female breast cancer cases in 2017.

The light purple shaded area (middle) represents the number of new female breast cancer cases that would have occurred each year if the population alone had grown larger but the population age

distribution had remained the same as in 1992. This will account for approximately 58% of the total increase in new female breast cancer cases in 2017.

The dark purple shaded area (top) represents the number of new female breast cancer cases attributed to increases in the older adult population - the aging population. This will account for approximately 53% of the total increase in new female breast cancer cases in 2017.

Probability of Developing or Dying from Breast Cancer

The **probability of developing or dying of cancer** measures the risk of an individual in a given age range developing or dying of cancer, and is conditional on the person being breast cancer-free prior to the beginning of that age range.

It is important to note that the probabilities of developing or dying of cancer represent all of Alberta's population on average and should be interpreted with caution at the individual level as the probabilities will be affected by the risk behaviours and exposures of the individual. In addition, someone diagnosed with cancer has a higher probability of developing another cancer in the future.[1]

Table 3-1: Probability of Developing Breast Cancer by Age, Females, Alberta, 2008-2012

Age Group	Females
Lifetime Risk (all ages)	1 in 8
0 - 20	Less than 1 in 10,000
20 - 30	1 in 1,588
30 - 40	1 in 237
40 - 50	1 in 70
50 - 60	1 in 43
60 - 70	1 in 29
70 - 80	1 in 26
80+	1 in 23

Data Source: Alberta Cancer Registry, Alberta Health Services

The probability of developing breast cancer increases with age (**Table 3-1**). Approximately 1 in 8 females will develop invasive breast cancer in their lifetime.

On a population basis the probability of developing breast cancer by the end of the age range for a breast cancer-free individual at the beginning of the age range are shown in **Table 3-1**. For instance, a breast cancer-free female at age 40 has a 1 in 70 chance of developing breast cancer by the time she is 50. Male breast cancer is much rarer than female breast cancer and is not reported here.

Table 3-2: Probability of Dying from Breast Cancer by Age, Females, Alberta, 2008-2012

Age Group	Females
Lifetime Risk (all ages)	1 in 33
0 - 20	Less than 1 in 10,000
20 - 30	Less than 1 in 10,000
30 - 40	1 in 2,437
40 - 50	1 in 650
50 - 60	1 in 329
60 - 70	1 in 187
70 - 80	1 in 122
80+	1 in 53

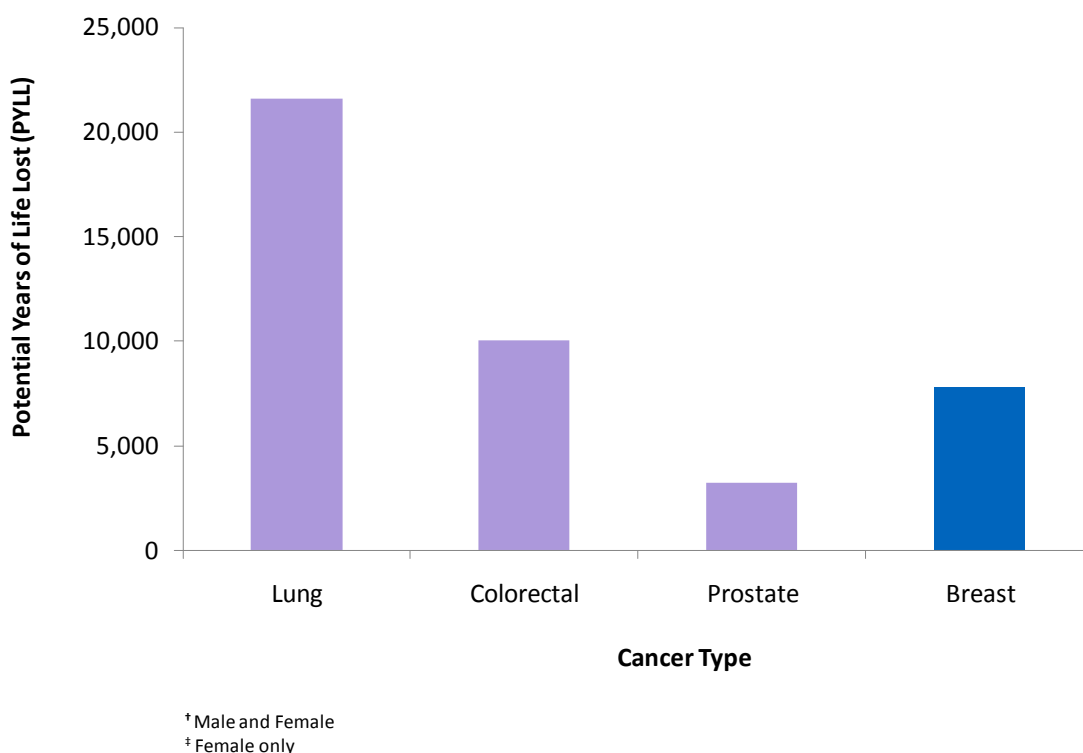**Data Source**: Alberta Cancer Registry, Alberta Health Services

The probability of dying from breast cancer varies by age (**Table 3-2**). Approximately 1 in 33 females will die of invasive breast cancer, whereas male breast cancer is much less common.

On a population basis the probability of a cancer-free individual at the beginning of the age range dying from breast cancer by the end of the age range are shown in **Table 3-2**. For example, a breast cancer-free female at age 40 has a 1 in 650 chance of dying from breast cancer by the time she is 50.

Potential Years of Life Lost

One frequently used measure of premature death is *potential years of life lost (PYLL)*. PYLL due to cancer is an estimate of the number of years that people would have lived had they not died from cancer. PYLL due to cancer has been calculated by multiplying the number of deaths in each age group and the absolute difference between the mid-point age of an age group and the age-specific life expectancy. The age-specific life expectancy is calculated by determining the age to which an individual would have been expected to live had they not died from cancer. PYLL is one way to measure the impact, or burden, of a disease on a population.

Figure 3-2: Potential Years of Life Lost (PYLL) from Breast Cancer[‡] Compared with Lung[†], Colorectal[†], and Prostate Cancers, Alberta, 2012

[†] Male and Female
[‡] Female only

Data Source: Alberta Cancer Registry, Alberta Health Services; Statistics Canada

In 2012, **7,876** potential years of life were lost due to female breast cancer, which constitutes 8.5% of PYLL for all cancers (**Figure 3-2**). While breast cancer survival is relatively high, it is the most common cancer diagnosis in females, resulting in a higher number of potential years of life lost.

Prevalence

The *prevalence* of a disease is defined as the number of people alive who had been previously diagnosed with that disease.

Limited-duration breast cancer prevalence represents the number of people alive on a certain day who had previously been diagnosed with breast cancer within a specified number of years (e.g. 2, 5, 10 or 20 years) while complete breast cancer prevalence represents the proportion of people alive on a certain day who had previously been diagnosed with breast cancer, regardless of how long ago the diagnosis was.[2]

In this section of the report, both limited-duration and complete breast cancer prevalence are presented; the latter describing the number of people alive as of December 31, 2012 who had ever been diagnosed with breast cancer.

Prevalence is a useful indicator of the impact of cancer on individuals, the healthcare system and the community as a whole. Although many cancer survivors lead healthy and productive lives, the experience can have a strong impact on the physical and emotional well-being of individuals and their families. The cancer experience can also result in the continued use of the healthcare system through rehabilitation or support services, as well as loss of work productivity that can affect the whole community.

As of December 31, 2012, approximately **27,800** Albertans were alive who had previously been diagnosed with breast cancer (**Table 3-3**). In addition, there were **4,350** Albertans alive who had been diagnosed with breast cancer within the previous two years. The two year time period is significant because most definitive cancer treatments will occur within two years of diagnosis.

Table 3-3: Limited-Duration and Complete Prevalence for Breast Cancer, Both Sexes, Alberta, 2012

Duration	Prevalence (#)
2-Year	4,350
5-Year	9,750
10-Year	16,450
20-Year	23,950
Complete (Ever Diagnosed)	27,800

Data Source: Alberta Cancer Registry, Alberta Health Services

Breast Cancer Incidence and Mortality

Introduction

Incidence counts are the number of new cancer cases diagnosed during a specific time period in a specific population. In this section of the report, incidence counts refer to the number of new breast cancer diagnoses in Alberta residents in a calendar year. Incidence rates are the number of new cancer cases diagnosed per 100,000 in the population in a specific time period.

Mortality counts describe the number of deaths attributed to cancer during a specific period of time in a specific population. In this section of the report, mortality refers to the number of deaths due to breast cancer in Alberta residents in a calendar year, regardless of date of diagnosis. Mortality rates are the number of deaths per 100,000 in the population in a specific time period.

In order to compare cancer incidence or cancer mortality over time or between populations, *age-standardized incidence rates (ASIRs)* or *age-standardized mortality rates (ASMRs)* are presented. These are weighted averages of *age-specific rates* using a standard population. These rates are useful because they are adjusted for differences in age distributions in a population over time, which permits comparisons of cancer incidence or mortality among populations that differ in size, structure and/or time period. ASIRs and ASMRs give the overall incidence and mortality rates that would have occurred if the population of Alberta had been the same as the standard population. In this report the Canadian 1991 standard population is used.

Three-year moving averages are used to smooth out year-to-year fluctuations so that the underlying trend may be more easily observed. They are calculated based on aggregating three years of data. Age-standardized incidence rates (ASIRs) and age-standardized mortality rates (ASMRs) are presented as three-year moving averages; therefore, information can only be presented for 1993-2011. This smoothing of trends is especially important when the number of cancer cases per year is relatively small, where year-to-year variability can be quite large.

Incidence and mortality can be affected by the implementation of public health prevention or screening strategies that either prevent disease or find cancer in its early *stages* when treatment is generally more successful, the development of cancer treatment programs that may impact chances of survival and research innovations.

The following figures show incidence and mortality trends in Alberta. Separate analyses for both incidence and mortality are shown in subsequent sections. The statistical significance* of the trends was determined by using Joinpoint[3] and is described in the text accompanying each graph. Joinpoint models are based on yearly rates; hence there may be slight differences in the rates presented in the text (from Joinpoint model) and the graphs (where ASIRs and ASMRs are shown as three-year moving averages).

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* Throughout this report, the use of the word significant refers to statistical significance at an alpha level of 0.05 (i.e. 95%CI).

Figure 3-3: Age-Standardized Incidence Rates (ASIRs)[*†] and Mortality Rates (ASMRs)[*†] with 95% Confidence Intervals (CI) for Breast Cancer, Females, Alberta, 1992-2012
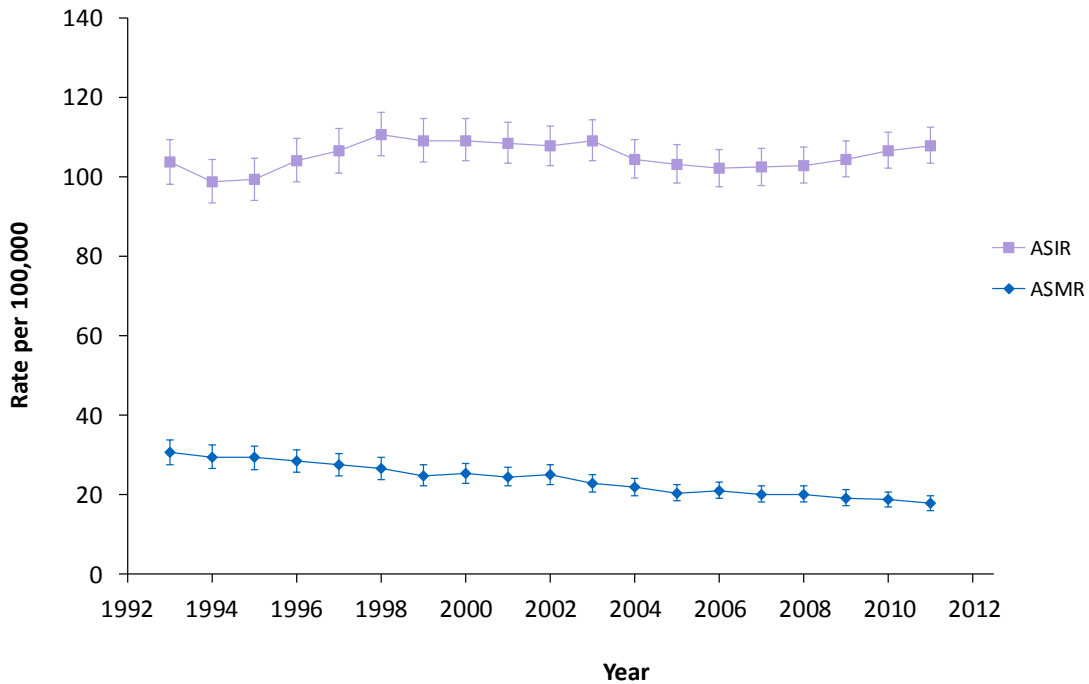
[*] Three-year moving average.
[†] Standardized to 1991 Canadian population.

Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health

Female breast cancer ASIRs did not change significantly between 1992 and 2012 (**Figure 3-3**). In 2012, the ASIR for female breast cancer was 107.6 per 100,000 female population.

Mortality rates for female breast cancer are lower than incidence rates. Female breast cancer ASMRs decreased significantly since 1992 (**Figure 3-3**). Between 1992 and 2012 breast cancer ASMRs decreased by 3.0% annually. In 2012, the ASMR for female breast cancer was 16.6 per 100,000 female population.

Breast Cancer Incidence

The following four figures (**Figures 3-4** to **3-7**) provide information on breast cancer incidence in female Albertans. The number of new cancer cases in Alberta is affected not only by changes in the underlying risk of developing breast cancer, but also by the changes in the age structure and growth of the population. In order to compare trends over time, age-standardized incidence rates (ASIRs) are also provided.

In **Figure 3-4** observed age standardized incidence rates are shown for 1992 to 2011 (three-year moving average), and *projected* rates for 2012 to 2017, and observed numbers of new breast cancer cases are shown for the years 1992 to 2012 and projected numbers for 2013 to 2017.

The projected cancer numbers were calculated by applying the estimated age-specific cancer incidence rates to the projected age-specific population figures provided by Alberta Health.[4] These were observed up to 2011 (due to the use of three-year moving averages) and estimated for 2012 to 2017. Caution should be exercised when comparing Canada[5] and Alberta rates as Canadian rates are yearly rates while Alberta rates are three-year moving averages.

The estimated breast cancer incidence rates were calculated by extrapolating the historical trends in age-specific rate based on data from 1987 to 2011.

Cancer *stage* is an important factor in determining treatment and *prognosis*; generally, the earlier the diagnosis, the better the outcome. The American Joint Committee on Cancer (AJCC) classification defines cancer stage based on the knowledge that cancers of the same anatomic site and histology share similar patterns of growth and similar outcomes. The Alberta Cancer Registry started to record the stage at diagnosis in 2004 using the collaborative staging system which is based on AJCC, 6th Edition.[6]

Figure 3-7 provides information on the proportion of new cases diagnosed at each stage in three cohorts: 2004-2006, 2007-2009 and 2010-2012. Proportional and multiplicative odds models[7] are employed to analyze the annual change of cancer stage distribution.

Figure 3-4: Actual and Projected Number of New Cases and Age-Standardized Incidence Rates (ASIRs)[*†] for Breast Cancer, Females, Alberta, 1992-2017
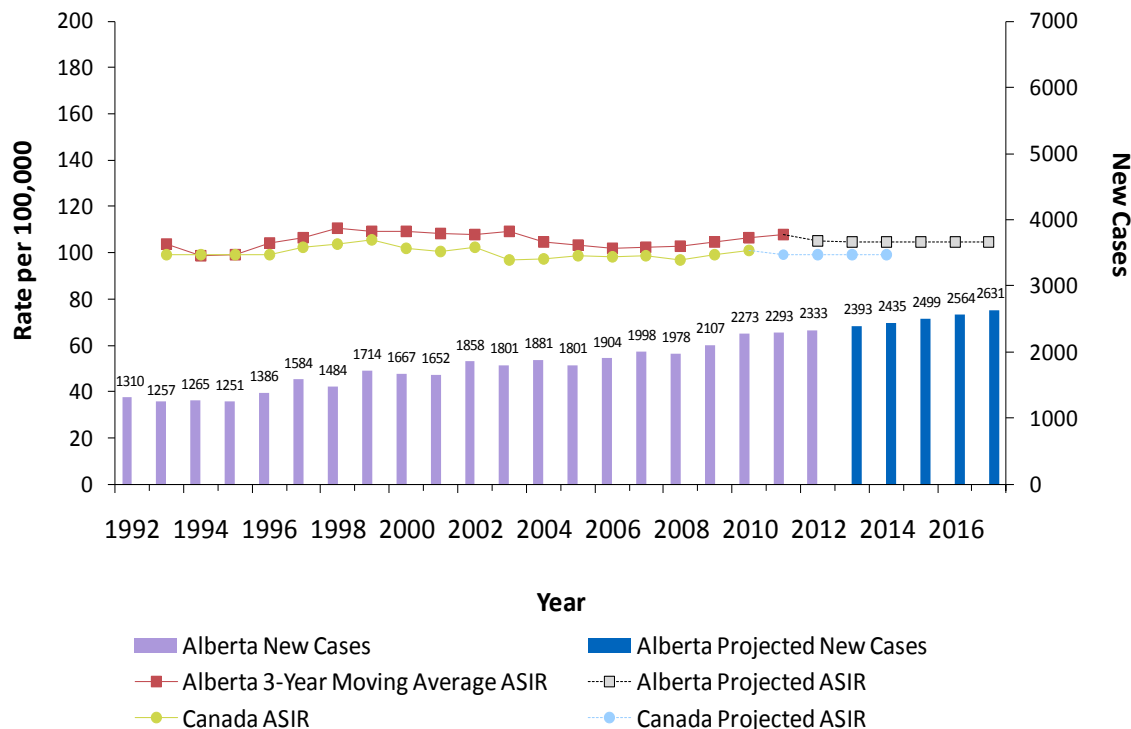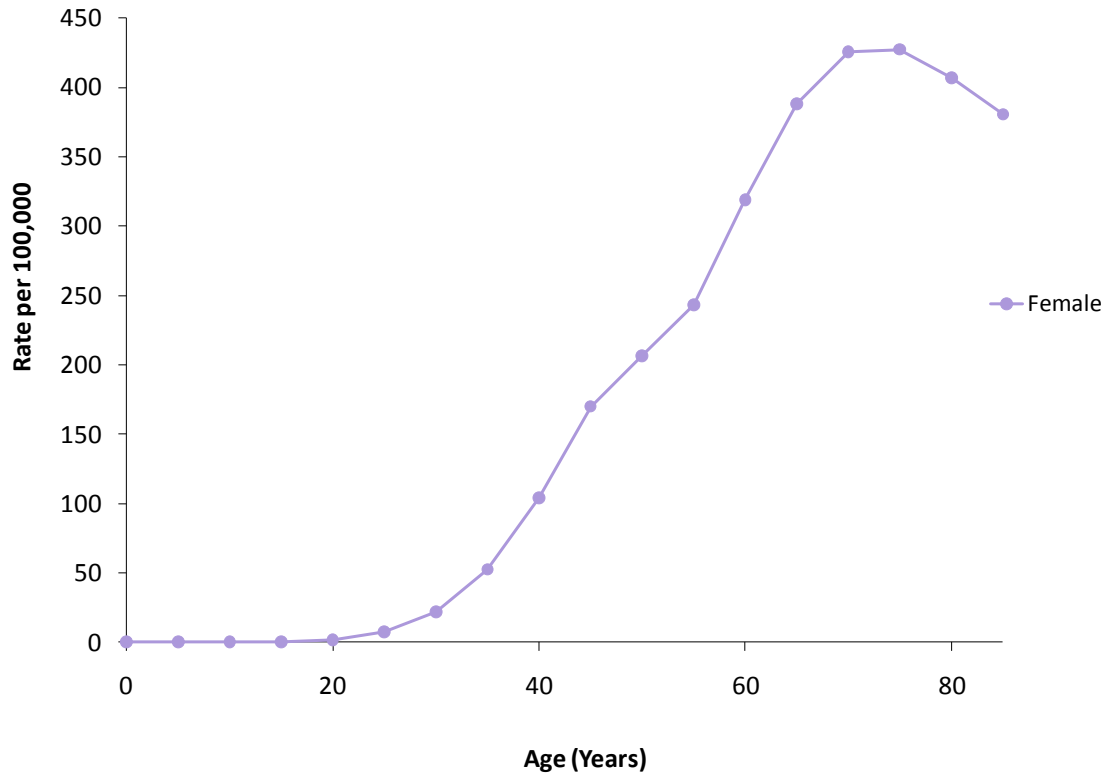

* Three-year moving average.
† Standardized to 1991 Canadian population.

Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health; Canadian Cancer Society

In 2012, 2,333 cases of breast cancer were diagnosed in Alberta (**Figure 3-4**). This was almost twice as many cases as diagnosed in 1992 due to the increasing size and age of the population. ASIRs for breast cancer in Alberta were generally higher than ASIRs in Canada.

It is estimated that 2,650 cases of breast cancer will be diagnosed in Alberta in 2017.

Figure 3-5: Age-Specific Incidence Rates for Breast Cancer, Females, Alberta, 2008-2012

Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health

Breast cancer incidence rates in females remain low until about the age of 25, at which point they begin to increase, peaking at age 75 (**Figure 3-5**). The highest breast cancer incidence rates occur in the older age groups.

Figure 3-6: Age-Standardized Incidence Rates (ASIRs)[*†] with 95% Confidence Intervals (CI) for Breast Cancer, Ages <50, 50-69, and 70+, Females, Alberta, 1992-2012
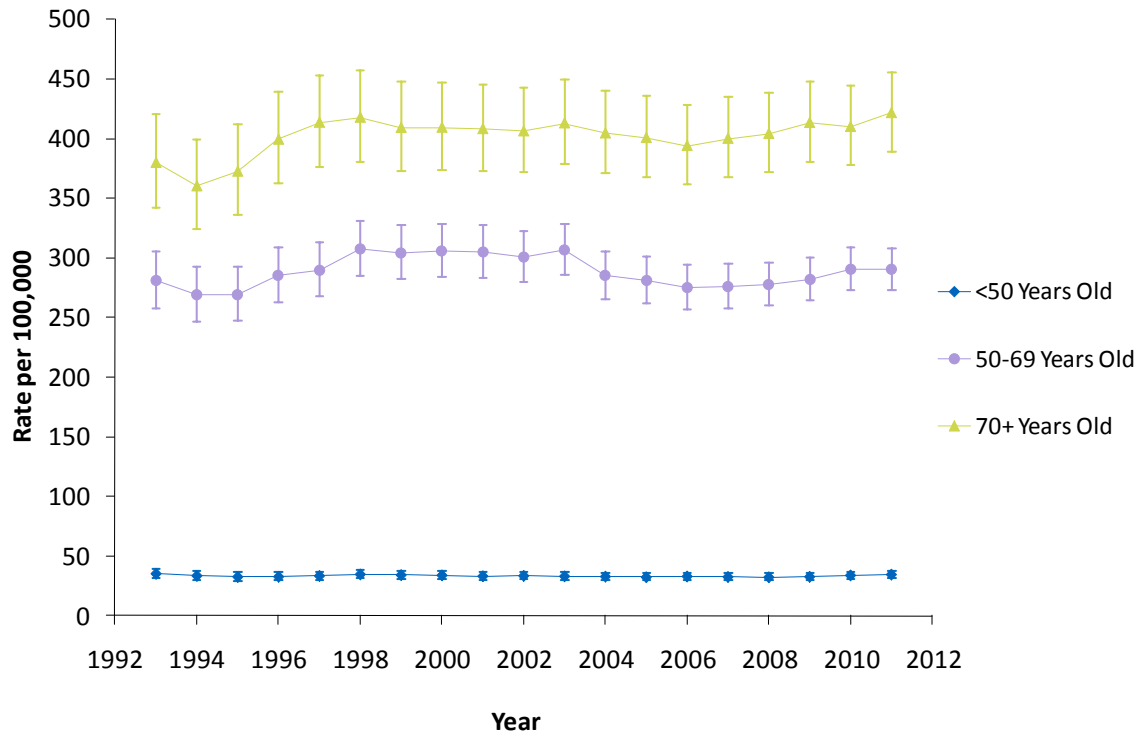

[*] Three-year moving average.
[†] Standardized to 1991 Canadian population.

Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health

Age-standardized breast cancer incidence rates for females differ across age groups, increasing with age (**Figure 3-6**).

Incidence rates for all the age groups (<50 years, 50-69 years and 70+ years) did not significantly change over the period of 1992 to 2012.

Figure 3-7: Relative Distribution of New Cases by Stage at Diagnosis and Cohort for Breast Cancer, Females, Alberta, 2004-2006, 2007-2009, 2010-2012

Stage at Diagnosis

■ 2004-2006   ■ 2007-2009   ■ 2010-2012
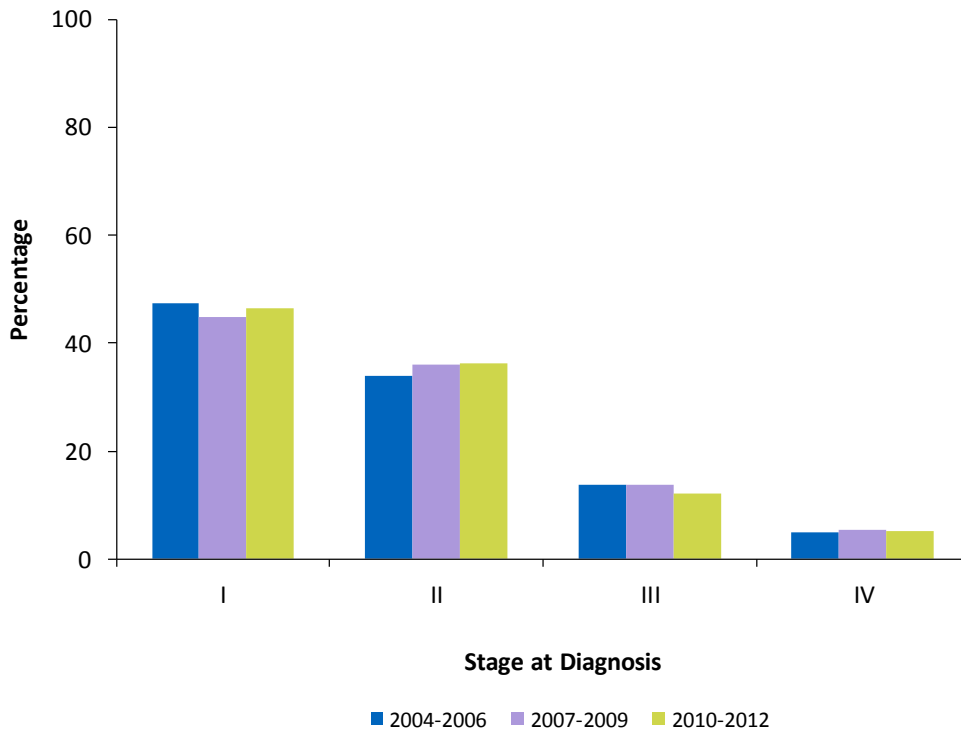
* Stage at diagnosis based on AJCC 6th Ed.; Stage 0 was combined with Stage I.

More than 80% of breast cancer cases were diagnosed at stage I or II (**Figure 3-7**). Over the 9 years from 2004 to 2012, a small but significant improvement in early detection of breast cancer was observed.

Breast Cancer Mortality

The following three figures (**Figures 3-8** to **3-10**) provide information on breast cancer mortality in Alberta. The number of deaths in Alberta is affected not only by changes in the underlying risk of dying from breast cancer, but also by the changes in the age structure and growth of the population. In order to compare trends over time, age-standardized mortality rates (ASMRs) are also provided.

In **Figure 3-8** observed age standardized mortality rates are shown for 1992 to 2011, and *projected* rates for 2012 to 2017, and observed numbers of breast cancer deaths are shown for the years 1992 to 2012 and projected numbers for 2013 to 2017.

The projected numbers of cancer deaths were calculated by applying the estimated age-specific cancer mortality rates to the age-specific population figures provided by Alberta Health[4]. These were observed up to 2011 (due to the use of three-year moving averages) and estimated for 2012-2017. Caution should be exercised when comparing Canada[5] and Alberta rates as Canadian rates are yearly rates while Alberta rates are three-year moving averages.

The estimated breast cancer mortality rates were calculated by extrapolating the historical trends in age-specific rate based on data from 1987 to 2011.

Figure 3-8: Actual and Projected Number of Deaths and Age-Standardized Mortality Rates (ASMRs)[*][†] for Breast Cancer, Females, Alberta, 1992-2017
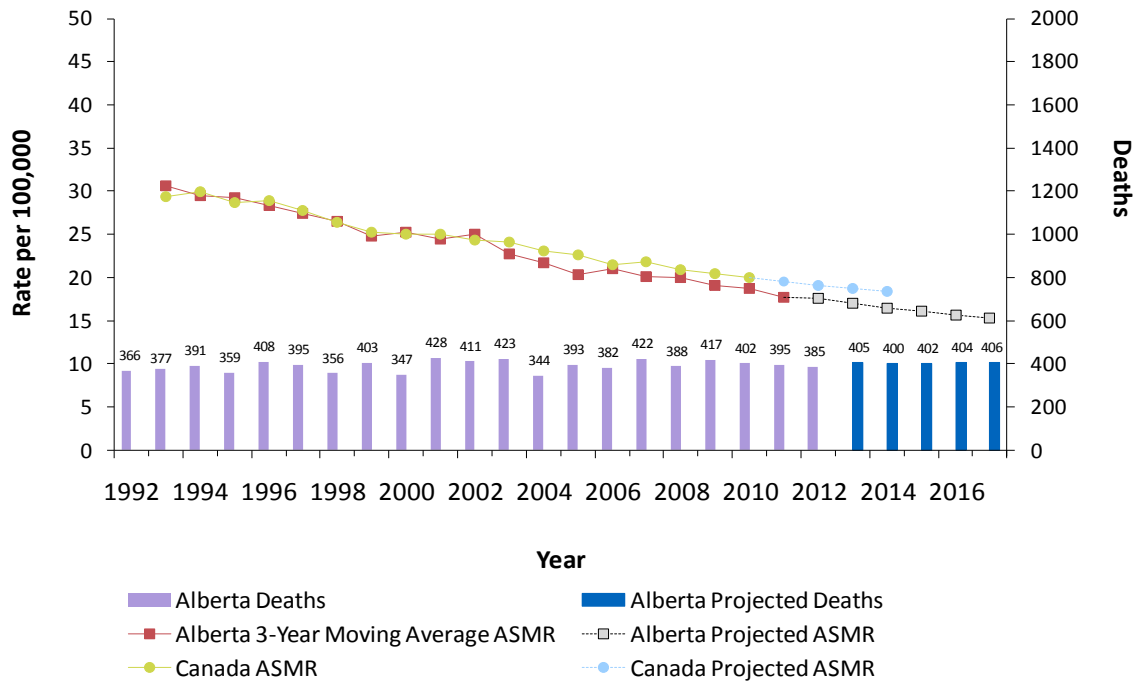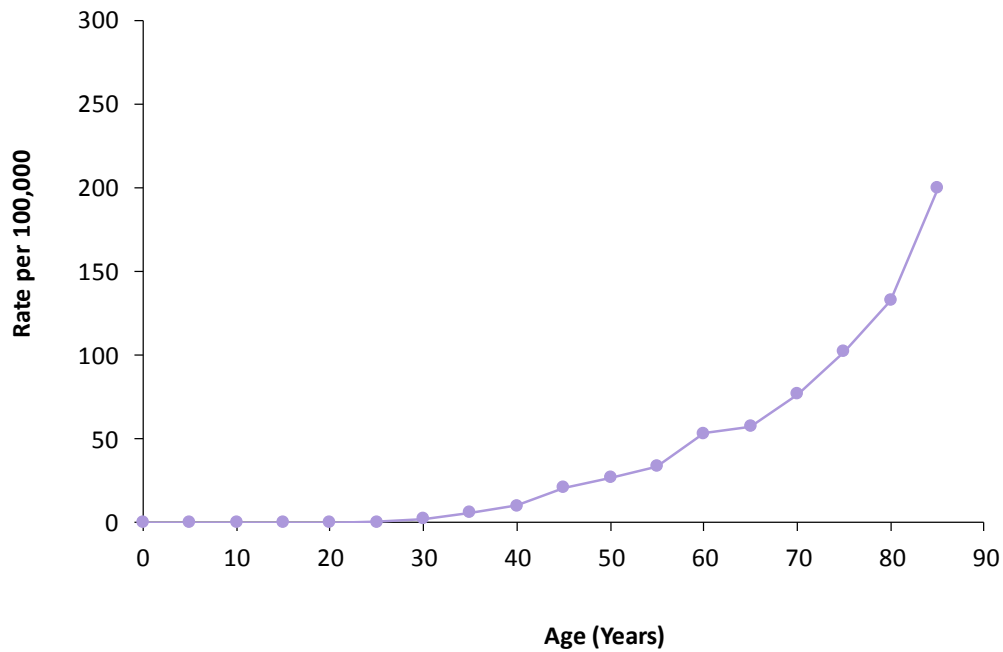

*Three-year moving average.
†Standardized to 1991 Canadian population.

Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health; Canadian Cancer Society

In 2012, 385 females died of breast cancer in Alberta (**Figure 3-8**). ASMRs for breast cancer in Alberta were generally similar to ASMRs in Canada over the period 1993 to 2002 then slightly lower than ASMRs in Canada.

It is estimated that 410 females will die from breast cancer in Alberta in 2017.
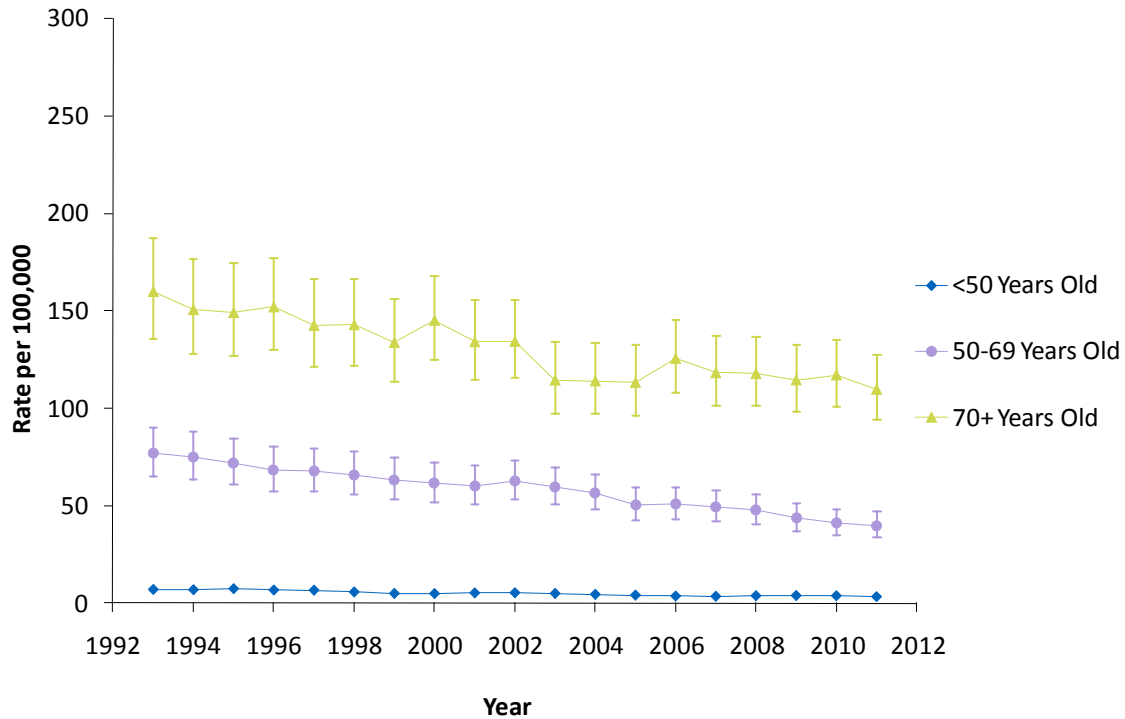
Figure 3-9: Age-Specific Mortality Rates for Breast Cancer, Females, Alberta, 2008-2012

Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health

Female breast cancer mortality rates remain low until about the age of 35 and begin to increase gradually thereafter (**Figure 3-9**). The highest breast cancer mortality rates in females occur in the older age groups.

Figure 3-10: Age-Standardized Mortality Rates (ASMRs)[*†] with 95% Confidence Intervals (CI) for Breast Cancer, Ages <50, 50-69, and 70+, Females, Alberta, 1992-2012

[*] Three-year moving average.
[†] Standardized to 1991 Canadian population.

Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health

Age-standardized breast cancer mortality rates vary over time and with age (**Figure 3-10**).

Mortality rates for breast cancer in the <50, 50-69, and 70+ age groups significantly decreased between 1992 and 2012 corresponding to a decrease of 4.2%, 3.4% and 2.1% annually, respectively.

Like breast cancer incidence rates, mortality rates in females under 50 years of age remained low throughout the period.

Breast Cancer Survival

Cancer survival ratios indicate the proportion of people who will be alive at a given time after they have been diagnosed with cancer. Survival is an important outcome measure and is used for evaluating the effectiveness of cancer control programs.

Survival depends on several factors including the cancer type (most importantly site, stage and morphology at diagnosis), sex, age at diagnosis, health status and available treatments for that cancer. While *relative survival ratios* (RSRs) give a general expectation of survival over the whole province, these ratios may not apply to individual cases. Individual survival outcomes depend on the stage at diagnosis, treatment and other individual circumstances.

Relative survival ratios are estimated by comparing the survival of cancer patients with that expected in the general population of Albertans of the same age, sex and in the same calendar year[8]. In this section of the report, RSRs are standardized by the age structure in the standard population (i.e. all persons who were diagnosed with that cancer in Canada between 1992 and 2001) to permit RSRs to be compared over time, independent of differences in age distribution of cancer cases.

RSRs are estimated by the *cohort method*[8] when complete follow-up data (e.g., at least five years of follow-up to estimate five-year rate) after diagnosis are available. For recently diagnosed cases, whose complete follow-up data are not available, the up-to-date estimates are computed using the *period method*[9]. However, comparison between cohort and period RSRs should be interpreted with caution because of the two different methods used to derive the respective ratios.

The relative survival ratio is usually expressed as a percentage (%) and the closer the value is to 100%, the more similar the survival pattern is to the general population.

Figure 3-11: Age-Standardized One, Three and Five-Year Relative Survival Ratios with 95% Confidence Intervals (CI) for Breast Cancer, Females, Alberta, 1992-1994^, 1998-2000^ and 2004-2006^, 2010-2012*
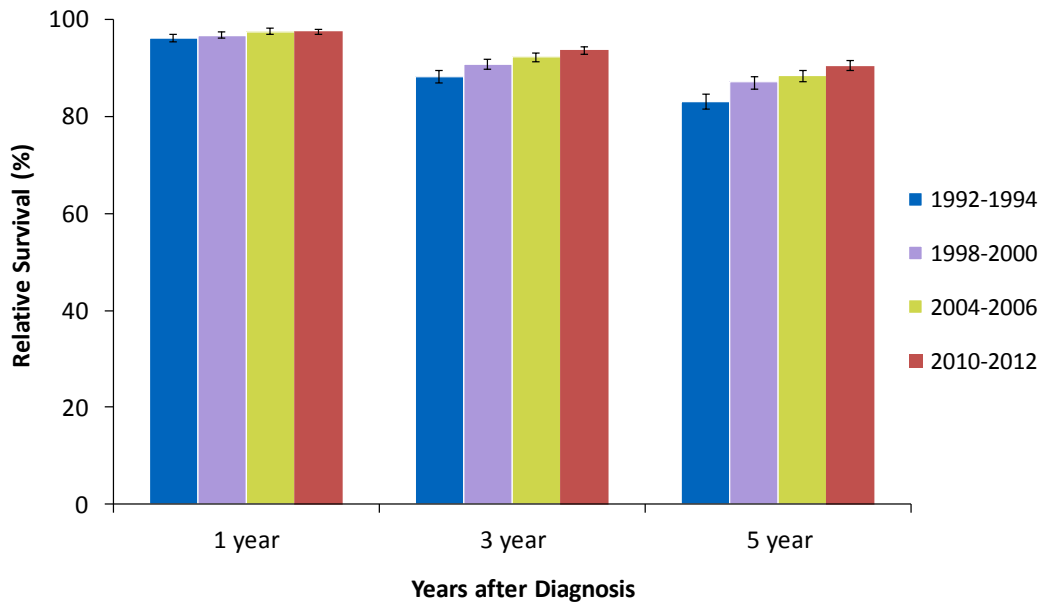
^ Ratios calculated by cohort method, where complete follow-up data are available.
* Ratios calculated by period method, where complete follow-up data are not available.

Data Source: Alberta Cancer Registry, Alberta Health Services; Statistics Canada

The five-year relative survival ratio for females diagnosed with breast cancer in the period 2010-2012 is estimated to be 90%.

The five-year relative survival ratio for females diagnosed with breast cancer in Alberta has improved in 2010-2012 compared to those diagnosed in the 1992-1994 cohort years (**Figure 3-11**).

Table 3-4: One-, Two- and Three-Year Relative Survival Ratios[†] (%) for Breast Cancer* by Stage, Female, Alberta, 2009-2012.

Stage[‡]	Number of Cases	One-year Survival Rate (95% CI)	Two-year Survival Rate (95% CI)	Three-year Survival Rate (95% CI)
I	3523	100 (100, 100)	100 (100, 100)	100 (100, 100)
II	2664	100 (100, 100)	99 (98, 100)	98 (97, 99)
III	1010	97 (95, 98)	91 (89, 93)	86 (83, 88)
IV	394	68 (63, 72)	51 (45, 56)	39 (33, 44)

[†] Ratios calculated by period method, where complete follow-up data are not available.
* Inclusion criteria: First-primary invasive cancer and age 15 to 99 years at diagnosis.
[‡] The staging method changed in 2010 (from AJCC 6 to AJCC 7), so caution should be used when comparing to data from previous reports.

Data Source: Alberta Cancer Registry, Alberta Health Services; Statistics Canada

Cancer *stage* (extent or severity of cancer) at diagnosis affects survival. Those diagnosed at an earlier stage have better survival than those diagnosed at a later stage.

The majority of females were diagnosed with early stage breast cancer (Stage I or II) and have a similar survival pattern as the general population for the first three years. The three-year relative survival ratio for those diagnosed at stage IV is much lower (39%) than that for those at stage I and II (**Table 3-4**).

Geographic Variation

The geographic variation section illustrates how the observed rates in each health zone compare with the provincial average. It also compares each zone to the rest of Alberta (excluding the zone of interest). The age standardized incidence and mortality rates for each zone and the respective "rest of Alberta" groupings are presented with their corresponding 95% *confidence intervals*[10].   The overall age standardized incidence and mortality rates for all of Alberta are presented with their corresponding 95% confidence intervals as horizontal lines on each graph. Any observed differences in rates may be due to several factors such as regional differences in:
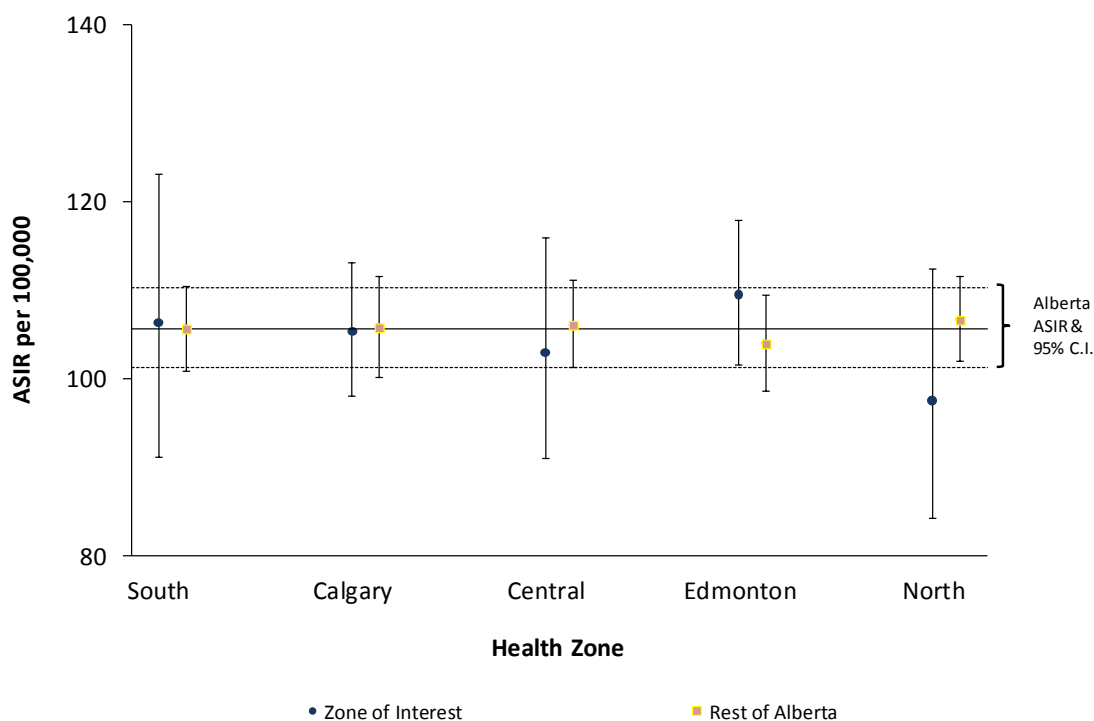
- individual risk factors
- prevention efforts
- cancer screening
- diagnostic activity
- access to cancer care.[11]

Figure 3-12: Five Health Zones in Alberta, 2012
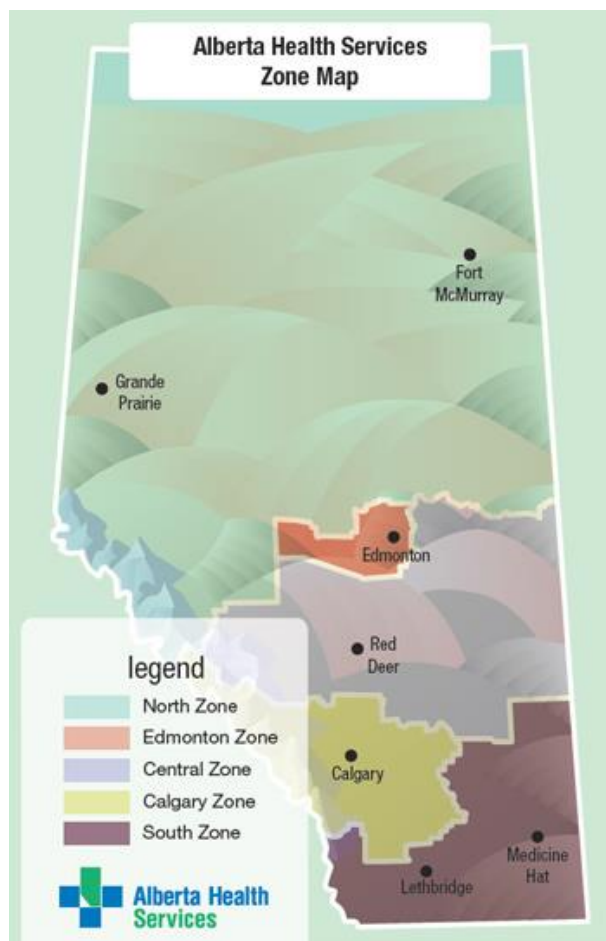
Source: Alberta Health Services

Figure 3-13: Age-Standardized Incidence Rates (ASIRs)† and 95% Confidence Intervals (CI) by Zone for Breast Cancer, Females, Alberta, 2008-2012
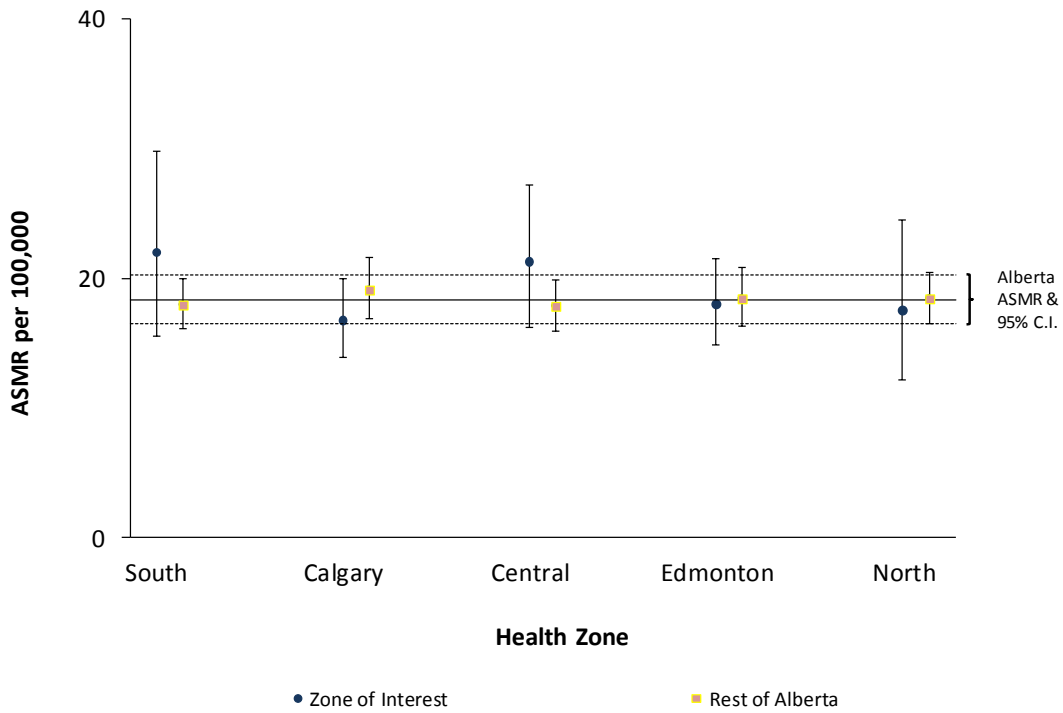

† Standardized to 1991 Canadian population for age-specific rates in 2008-2012.

Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health

There is no evidence that female breast cancer ASIRs in the zones are higher or lower than the provincial average or the "rest of Alberta" (excluding the zone of interest) (**Figure 3-13**).

Figure 3-14: Age-Standardized Mortality Rates (ASMRs)† and 95% Confidence Intervals (CI) by Zone for Breast Cancer, Females, Alberta, 2008-2012

† Standardized to 1991 Canadian population for age-specific rates in 2008-2012.

Data Source: Alberta Cancer Registry, Alberta Health Services; Alberta Health

There is no evidence that breast cancer ASMRs in the zones are higher or lower than the provincial average or the "rest of Alberta" (excluding the zone of interest) (**Figure 3-14**).

Further Information

Further information is available on a separate document, the **Appendix**:

Appendix 1: Glossary of Terms
Appendix 2: Cancer Definitions
Appendix 3: Data Notes

References

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