

# Incidence of Breast Cancer in Younger Women: A Canadian Trend Analysis

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## Abstract

**Purpose:** Breast cancer (BC) incidence is increasing globally. Age-specific BC incidence trend analyses are lacking for women under age 50 in Canada. In this study, we evaluate the incidence trends in breast cancer in women under age 50 in Canada and compare them with corresponding trends among women 50 to 54. **Methods:** BC case counts were obtained from the National Cancer Incidence Reporting System (1984-1991) and the Canadian Cancer Registry (1992-2019) both housed at Statistics Canada. Population data were also obtained from Statistics Canada. Annual female BC age-specific incidence rates from 1984 to 2019 were derived for the following age groups: 20 to 29, 30 to 39, 40 to 49, 40 to 44, 45 to 49, and 50 to 54. Changes in trends in age-specific BC incidence rates, if any, and annual percent changes (APCs) for each identified trend, were determined using JoinPoint. **Results:** Statistically significant increasing trends in BC incidence rates were noted for almost all age groups: since 2001 for 20 to 29 (APC=3.06%,  $P<.001$ ); since 2009 for 30 to 39 (APC=1.25%,  $P=.007$ ); since 1984 for both 40 to 49 (APC=0.26%,  $P<.001$ ) and 40 to 44 (APC=0.19%,  $P=.011$ ), increased since 2015 for 40 to 49 (APC=0.77%,  $P=.047$ ); and since 2005 for 50 to 54 (APC=0.38%,  $P=.022$ ). Among women 45 to 49 there was a non-significant increase since 2005 (APC=0.24,  $P=.058$ ). Statistically significant average annualized increases in BC incidence rates were observed for each age group studied. **Conclusions:** Examining age-specific incidence rates formed a more complete picture of BC time trends with significant increasing trends in the incidence of BC among women in their 20s, 30s, 40s, and early 50s. A greater awareness regarding the increasing number of cases of BC in women younger than 50 is critical to allow for earlier diagnosis with its resultant reduced mortality and morbidity.

## Résumé

**Objectif:** L'incidence du cancer du sein (CS) augmente dans le monde. Au Canada, aucune analyse de tendance de l'incidence du CS en fonction de l'âge chez les femmes âgées de moins de 50 ans n'a été menée à ce jour. Dans cette étude, nous évaluons les tendances de l'incidence du cancer du sein chez des femmes âgées de moins de 50 ans au Canada et les comparons aux tendances correspondantes chez les femmes âgées de 50 ans à 54 ans. **Méthodes:** Les décomptes de cas de CS ont été tirés du Système national de déclaration des cas de cancer (1984-1991) et du Registre canadien du cancer (1992-2019), tous deux hébergés par Statistiques Canada. Les données de population proviennent également de Statistiques Canada. Des taux d'incidence annuelle de CS chez les femmes en fonction de l'âge pour la période entre 1984 et 2019 ont été produits pour les groupes d'âge suivants: 20 ans à 29 ans, 30 ans à 39 ans, 40 ans à 49 ans, 40 ans à 44 ans, 45 ans à 49 ans et 50 ans à 54 ans. Le cas échéant, les modifications de tendances des taux d'incidence du CS en fonction de l'âge et les variations annuelles en pourcentages (APC) pour chaque tendance identifiée ont été déterminées au moyen de JoinPoint. **Résultats:** Des tendances à la hausse significatives sur le plan statistique des taux d'incidence du CS ont été enregistrées dans presque tous les groupes d'âge: depuis 2001, pour les 20 ans à 29 ans (APC=3,06 %,  $P<0,001$ ); depuis 2009 pour les 30 ans à 39 ans (APC=1,25 %,  $P=0,007$ ); depuis 1984 pour – à la fois – les 40 ans à 49 ans (APC=0,26 %,  $P<0,001$ ) et les 40 ans à 44 ans (APC=0,19 %,  $P=0,011$ ), depuis 2015 pour les 40 ans à 49 ans (APC=0,77 %,  $P=0,047$ ); et depuis 2005 pour les 50 ans à 54 ans (APC=0,38 %,  $P=0,022$ ). Parmi les femmes de 45 à 49 ans, il n'y a eu d'augmentation non significative depuis 2005 (APC=0,24,  $P=0,058$ ). Des augmentations significatives de l'incidence moyenne des taux de BC ont été observées pour chaque groupe d'âge étudié. **Conclusions:** L'examen des taux d'incidence spécifiques à l'âge a permis de dresser un tableau plus complet des tendances temporelles de l'incidence de la BC chez les femmes de 20, 30, 40 et début 50 ans. Une plus grande conscience quant au nombre croissant de cas de BC chez les femmes de moins de 50 ans est essentielle pour permettre un diagnostic plus précoce et ainsi réduire la mortalité et la morbidité.

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$P=0,022$ ). Il y a eu une augmentation non significative chez les femmes âgées de 45 ans à 49 ans depuis 2005 ( $APC=0,24$ ;  $P=0,058$ ). Des augmentations moyennes annualisées significatives sur le plan statistique des taux d'incidence du CS ont été observées dans le cas de chaque groupe d'âge étudié. **Conclusions:** L'examen des taux d'incidence en fonction de l'âge a créé un tableau plus complet des tendances du CS au fil des années; l'on observe des tendances à la hausse significatives de l'incidence du cancer du sein chez les femmes dans la vingtaine, la trentaine, la quarantaine et au début de la cinquantaine. Une plus grande sensibilisation concernant le nombre croissant de cas de CS chez les femmes de moins de 50 ans est essentielle en vue de permettre un diagnostic plus précoce et donc une baisse de la morbidité et de la mortalité qui en résultent.

## Keywords

breast neoplasms, incidence, Canada, age of onset, pre-menopause, breast cancer, screening mammography

## Introduction

Breast cancer (BC) is the most commonly diagnosed cancer among women. It is estimated that BC cases will comprise 25.6% of the 144 900 cancer cases among Canadian women in 2023, accounting for more diagnoses than the next 2 most common cancers, lung (13.7%) and colorectal (9.2%), combined.<sup>1</sup> Among women 30 to 49, BC cases are estimated to comprise an even higher percentage (36%) of the total cancer cases, more than the next 4 most diagnosed cancers combined in this age group, thyroid 14%, colorectal, melanoma, and cervix, 6% each.<sup>1</sup> BC is the leading cause of cancer death among women 30 to 49, accounting for 28.3% of cancer deaths in this age range in 2022; amongst all causes of death, it ranked second only to accidental deaths (unintentional injuries).<sup>2</sup> For all ages combined, BC (13.8% of cancer deaths in 2022) is the second most common cause of cancer death among females, behind only lung cancer (23.9%).<sup>2</sup>

Globally, the incidence of BC has increased by 20% since 2008.<sup>3</sup> The age standardized incidence rate (ASIR) of BC in women in Canada (excluding Quebec) increased from 116.3/100 000 in 1984 to 133.9/100 000 in 1991.<sup>1</sup> Since 1991, however, the ASIR has decreased very slowly (annual percent change [APC]=−0.1%) to 130.6/100 000.<sup>1</sup>

The Canadian age-standardized mortality rate (ASMR) for female BC has also decreased, from 41.2/100 000 in 1984 to 22.5/100 000 in 2020.<sup>1</sup> The ASMR for BC in Canadian females decreased by an average annualized percent change (AAPC) of −1.7% from 1984 to 2020, with APC decreases of −0.7% between 1984 and 1994, followed by −2.4% between 1994 and 2011, and −1.5% between 2011 and 2020.<sup>1</sup>

Since the late 1980s, early detection of BC has been adopted in population-based organized screening programs. In Canada, BC screening programs were established in all jurisdictions except Nunavut between 1988 and 2004, most by 1992.<sup>4</sup> BC screening programs have typically included ages 50 to 74, with some jurisdictions including women ages 40 to 49. Women diagnosed with BC in their 40s outside of the recommended screening ages 50 to 74 have been shown in Canada to have higher proportions of advanced stage disease

than women in their 50s<sup>5</sup> and to have lower 10-year net survival.<sup>6</sup> The recent increase in incidence in BC in younger women noted in the USA was a factor in prompting the United States Preventive Services Task Force (USPSTF) to recommend lowering the age of initiation of screening to 40.<sup>7</sup> In this study, we evaluate the incidence trends in breast cancer in women under age 50 in Canada and compare them with corresponding trends among women 50 to 54.

## Methods

### Data Source

Case counts for 1992 to 2019 were obtained from the Canadian Cancer Registry (CCR) file released May 16, 2023<sup>8</sup>; case counts from 1984 to 1991 were obtained from the CCR's predecessor, the National Cancer Incidence Reporting System (NCIRS). For the CCR data, breast cancer cases were defined as site code C50<sup>9,10</sup> based on the International Classification of Diseases for Oncology, Third Edition.<sup>11</sup> For the NCIRS data, they were defined as either code 174 or 175 according to the International Statistical Classification of Diseases and Related Health Problems, Ninth Revision (ICD-9).<sup>12</sup> Population data were from Statistics Canada.<sup>13</sup>

### Inclusions and Exclusions

Only primary invasive BC cases were considered—ductal carcinoma in situ (DCIS) cases were not included. The International Agency for Research on Cancer (IARC) rules<sup>14</sup> for multiple primaries were used wherever possible. More detail is provided elsewhere.<sup>8</sup> It was necessary to impute case counts for the province of Quebec for the 2018 and 2019 data years because cases diagnosed in Quebec from 2018 onward had yet to be submitted to the Canadian Cancer Registry. For this purpose, pre-existing projected counts derived as part of an independent manuscript regarding the projected estimates of cancer in Canada in 2024 were used.<sup>15</sup> Death certificate only cases for the province of Manitoba were also imputed for the 2013 to 2018 data years using methodology commonly employed in Canadian Cancer Statistics publications.<sup>1</sup>

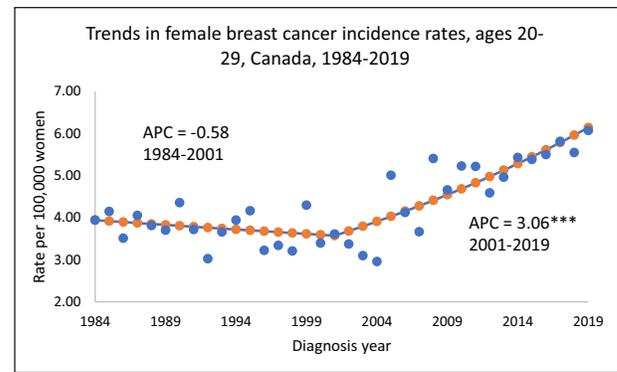
**Analyses**

Annual female BC age-specific incidence rates from 1984 to 2019 were derived for the following age groups: 20 to 29, 30 to 39, 40 to 44, 45 to 49, 40 to 49, and 50 to 54. Five-year age groups were used to provide a more refined assessment of the time trends, except for women in their 20s and 30s, for whom 10-year age groups were used due to the relative scarcity of cases among the very young. Changes in trends in age-specific BC incidence rates, if any, and annual percent changes (APCs) for each identified trend, were determined using JoinPoint.<sup>16</sup> The software fits a piecewise linear regression model that assumes a constant rate of change in the logarithm of the annual incidence rate.<sup>17</sup> To match decisions employed in recent Canadian Cancer Statistics publications,<sup>1,18</sup> 1984 was chosen as the initial data year of analysis, and the minimum time span on which to report a trend was set at 5 years. In order to compare with a key statistic cited by the USPSTF,<sup>19</sup> an APC corresponding to the BC incidence rate among women in their 40s for the period from 2015 to 2019 was also calculated. *P* values correspond to 2-sided tests of the null hypothesis that the APC is zero, with a significance level of .05. Where statistically significant trends were observed in the most recent period, relative differences over the period were determined using rates covering 5 years. Summary changes in age-specific BC incidence rates over the full study period were examined through both average annual percent changes (AAPC), and absolute and relative differences in 5-year cumulative incidence rates between 1984 and 1988 and 2015 and 2019. This study was a secondary analysis of nationally de-identified data collected by Statistics Canada, and as such, ethics approval was not required.

**Results**

The rate of diagnosis of BC among women in their 20s increased at an annualized rate of 3.06% (*P* < .001) between 2001 and 2019 (Figure 1, Table 1). Since 2009, the BC incidence rate among women in their 30s has also been increasing (APC = 1.25%; *P* = .007) (Figure 2). From 1984 to 2019 there was also an increase in the BC incidence rate among women 40 to 44 (APC = 0.19%; *P* = .011) and although the magnitude was smaller, it extended over the entire study period (Figure 3). Among women 45 to 49, a positive trend value of 0.24% per year since 2003 did not achieve statistical significance (*P* = .058) (Figure 4). However, a significant increase in BC incidence of 0.38% per year since 2005 (*P* = .022) was observed among women 50 to 54 (Figure 5). In both the 45 to 49 and 50 to 54 age groups, incidence rates increased into the mid-to-late 1990s (*P* < .01), then decreased into the mid 2000s—significantly so among women 50 to 54 (APC = -2.47; *P* = .004).

Statistically significant average annualized increases in BC incidence rates were observed for each age group studied. AAPC estimates for 1984 to 2019 ranged from 0.19% (*P* = .011) among women 40 to 44, to 1.28% (*P* = .001) among women 20 to 29 (Table 2). Among women in their early 40s,



**Figure 1.** Trends in female breast cancer incidence rates, ages 20 to 29, Canada, 1984 to 2019.

Source: Canadian Cancer Registry (1992-2019) and National Cancer Incidence Reporting System (1984-1991) at Statistics Canada.

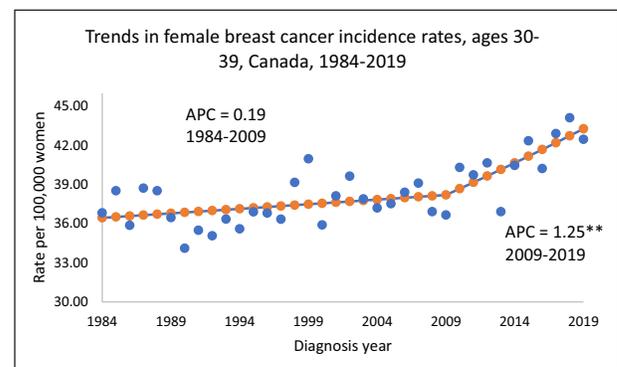
Note: APC = annual percent change.

\**P* < .05. \*\**P* < .01. \*\*\**P* < .001.

**Table 1.** Trends in Age-Specific Female Breast Cancer Incidence Rates, Selected Age Groups, Canada, 1984 to 2019.

Age group	Trend period	Annual percent change (95% confidence limits)	<i>P</i> -value
20-29	1984-2001	-0.58 (-1.8, 0.7)	.344
20-29	2001-2019	3.06 (2.0, 4.1)	<.001
30-39	1984-2009	0.19 (-0.1, 0.4)	.124
30-39	2009-2019	1.25 (0.4, 2.1)	.007
40-49	1984-2019	0.26 (0.2, 0.4)	<.001
40-44	1984-2019	0.19 (0.0, 0.3)	.011
45-49	1984-1994	1.24 (0.6, 1.9)	.001
45-49	1994-2003	-0.58 (-1.3, 0.2)	.128
45-49	2003-2019	0.24 (-0.0, 0.5)	.058
50-54	1984-1999	2.04 (1.6, 2.4)	<.001
50-54	1999-2005	-2.47 (-4.0, -0.9)	.004
50-54	2005-2019	0.38 (0.1, 0.7)	.022

Source: Canadian Cancer Registry (1992-2019) and National Cancer Incidence Reporting System (1984-1991) at Statistics Canada.

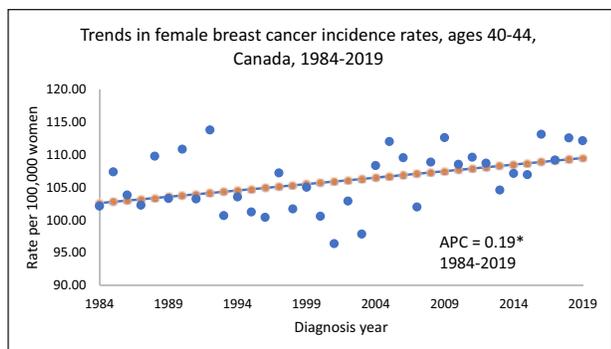


**Figure 2.** Trends in female breast cancer incidence rates, ages 30 to 39, Canada, 1984 to 2019.

Source: Canadian Cancer Registry (1992-2019) and National Cancer Incidence Reporting System (1984-1991) at Statistics Canada.

Note: APC = annual percent change.

\**P* < .05. \*\**P* < .01. \*\*\**P* < .001.

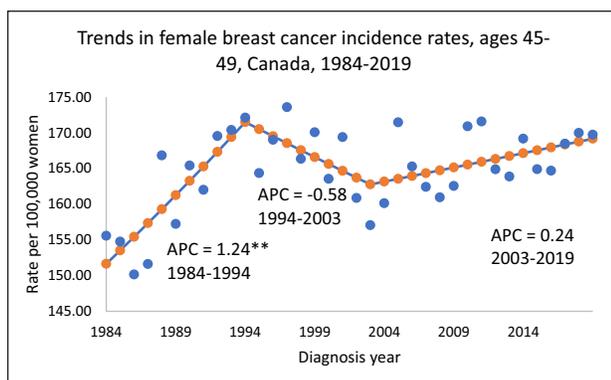


**Figure 3.** Trends in female breast cancer incidence rates, ages 40 to 44, Canada, 1984 to 2019.

Source. Canadian Cancer Registry (1992-2019) and National Cancer Incidence Reporting System (1984-1991) at Statistics Canada.

Note. APC=annual percent change.

\* $P < .05$ . \*\* $P < .01$ . \*\*\* $P < .001$ .

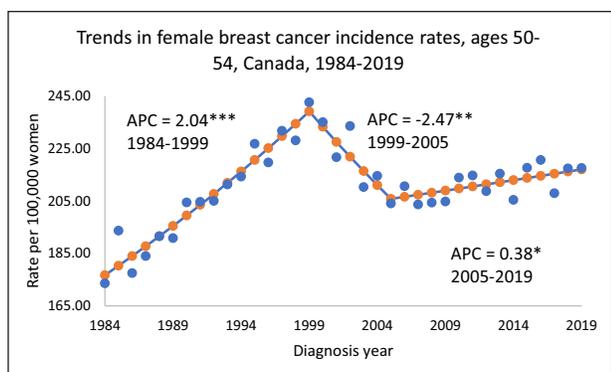


**Figure 4.** Trends in female breast cancer incidence rates, ages 45 to 49, Canada, 1984 to 2019.

Source. Canadian Cancer Registry (1992-2019) and National Cancer Incidence Reporting System (1984-1991) at Statistics Canada.

Note. APC=annual percent change.

\* $P < .05$ . \*\* $P < .01$ . \*\*\* $P < .001$ .



**Figure 5.** Trends in female breast cancer incidence rates, ages 50 to 54, Canada, 1984 to 2019.

Source. Canadian Cancer Registry (1992-2019) and National Cancer Incidence Reporting System (1984-1991) at Statistics Canada.

Note. APC=annual percent change.

\* $P < .05$ . \*\* $P < .01$ . \*\*\* $P < .001$ .

the BC incidence rate of 110.8 per 100 000 women for 2015 to 2019 represented a 5.4% increase since 1984 to 1988 (Table 2). Corresponding incidence rate increases of 45.5% and 12.5% were recorded among women in their 20s and 30s, respectively. For these 2 age groups the increases have predominantly occurred in more recent years—56.8% among women in their 20s since 2001 to 2005 and 9.2% among women in their 30s since 2009 to 2013 (data not shown).

A statistically significant increasing trend in the BC incidence rate from 2015 to 2019 was detected among women 40 to 49 (APC=0.77%;  $P = .047$ ) (data not shown). A singular trend was noted for the entire study period (APC=0.26%;  $P < .001$ ) for this age group.

## Discussion

This study provides up-to-date long-term incidence trends for BC in Canada among women younger than 50 from 1984 to 2019, with comparison to those 50 to 54. Statistically significant increasing average trends over the entire study period were observed in all age groups studied. Significant increasing rates of BC were also noted for the most recent trend periods in all age groups studied, except among women 45 to 49 ( $P = .058$ ). The magnitude of these increasing trends was greatest among women in their 20s and 30s. Among women in their 40s, the BC incidence rate was found to be statistically significantly increasing by 0.77% per year ( $P = .047$ ) for the 2015 to 2019 period.

Our study builds on earlier Canadian work on this topic,<sup>20,21</sup> by disaggregating age groups to allow for a more granular understanding of BC incidence trends in younger women, and by considering several more years of recent data. One previous Canadian study which examined female BC incidence trends up to 2015 reported a statistically significant increase among women diagnosed in their 20s, but stable rates among women in their 30s and 40s.<sup>21</sup> A study examining broader age groups over the same period reported a statistically significant increasing APC of 0.66% since 2000 among women 20 to 39 at diagnosis, but no significant increase among women 20 to 49.<sup>20</sup>

An increased incidence of invasive BC since 2004 was observed in the USA. Most recently, it has increased 1% per year among women 20 to 49, and 0.4% per year among women 50 years and older from 2010 to 2019.<sup>19</sup> Incidence rates in Canada are lower than those observed in the US, with approximately 20 to 30 fewer cases per 100 000 women aged 40 to 54.<sup>22</sup> Lower Canadian incidence rates may be due to factors such as lifestyle and the racial makeup of population.<sup>23</sup> In the USA, changes in body mass index, and number of births were found to correlate with the increased incidence of breast cancer.<sup>24</sup> The use in the USA of SEER multiple primary rules, which are less restrictive than the IARC rules about what constitutes a new primary cancer case, likely also plays a role.

As there are no screening programs for women in their 20s and 30s, changes in the incidence of BC in these women would not be related to screening practices. Rather, increasing BC rates may reflect an interplay of lifestyle, reproductive,

**Table 2.** Age-Specific Female Breast Cancer 5-Year Incidence Rates, and Average Annual Percent Changes, Selected Age Groups, Canada, 1984 to 2019.

Age group (y)	Incidence rate (per 100 000)		Difference: 2015-2019 vs 1984-1988		Average annual percent change: 1984-2019	
	1984-1988	2015-2019	Absolute (per 100 000)	Relative (%)	Estimate	P-value
20-29	3.9	5.7	1.8	45.5	1.28	.001
30-39	37.7	42.4	4.7	12.5	0.49	.001
40-49	127.8	139.4	11.6	9.1	0.26	<.001
40-44	105.2	110.8	5.6	5.4	0.19	.011
45-49	156.0	167.5	11.6	7.4	0.31	.031
50-54	184.0	216.2	32.2	17.5	0.59	.001

Source. Canadian Cancer Registry (1992-2019) and National Cancer Incidence Reporting System (1984-1991) at Statistics Canada.

Note. Absolute and relative differences are based on unrounded incidence rates.

environmental, and genetic etiologies.<sup>19</sup> The American Cancer Society attributes increasing BC rates in women to behavioural risk factors such as lack of childbirths, older age at first birth, excess body weight (postmenopausal), physical inactivity, and alcohol consumption, all of which have been increasing in the USA.<sup>19,24,25</sup> In the Nurses Health Study, a prospective study of alcohol intake found an 11% increased risk of BC with the consumption of 10 g of alcohol per day between menarche and first pregnancy.<sup>26</sup> Another cohort study of women ages 30 to 55 years found an 8% increase in risk associated with 10 g of alcohol ingested per day between ages 18 and 40, adjusting for consumption after age 40.<sup>27</sup> Reproductive factors such as earlier age of menarche, the use of oral contraceptives, nulliparity or decreased fertility rates, late age at first birth and decreased breastfeeding may also be contributing to higher rates of BC in both pre-menopausal and menopausal women.<sup>20</sup> Indeed, the average age at first birth in Canada has increased from 23.5 in 1966 to 31.6 in 2022, and the average fertility rate has fallen from 2.26 births per women in 1970 to 1.4 births in 2020.<sup>28</sup> The decrease in the protective effects of pregnancy and breastfeeding, paired with increased exogenous and endogenous oestrogens may increase exposure of breast tissue to the proliferative effects of oestrogens which have been linked to elevated BC risk.<sup>29</sup>

Incidence rates in women 40 years and older may also be impacted by screening activities.<sup>22,30</sup> When screening programs were implemented in the 1980s and 1990s cancer incidence increased mostly for women 50 years and older.<sup>19</sup> In Canada, a complex interplay of national guidelines and provincial and territorial screening programs may impact trends in breast cancer incidence. Organized mammography screening programs were implemented between 1988 and 2004, with the majority in place by 1992. Inclusion of women 40 to 49 varied by jurisdiction and recommendations for screening varied over time. In 2001, the Canadian Task Force on Preventive Health Care (CTFPHC) guidelines suggested that women 40 to 49 could be screened; however, the CTFPHC recommended against screening these women in 2011. This change resulted in reduced screening participation for women

in their 40s after 2011, even in jurisdictions where screening for these women continued.<sup>5</sup> Although BC rates among women in their 40s, and especially in their 50s, were increasing prior to the initiation of breast screening programs, there was a continued increase in incidence noted until 1999, which could be consistent with expected increase in identification of early-stage disease seen with screening. Increases in the incidence in women 40 to 49 after 2001 may have been partially attributable to changes in screening policies; however, the continued increasing incidence of BC among women 40 to 49 in the absence of recommendations to screen after 2011 more likely reflects those factors noted in women in the 30s: lifestyle and reproductive factors, or the progressively more multicultural nature of Canadian society, given that non-white women have an earlier peak age of BC diagnoses.<sup>31</sup>

Similarly, the significant decrease in incidence for women 50 to 54 from 1999 to 2005 might have been related to the introduction of screening for women 40 to 49, and ongoing increases in incidence from 2005 to 2019 may be related to the reduced screening of women in their 40s after 2001. This is supported by the finding that BC incidence in women in the 50s was shown to be lower in Canadian provinces with organized screening programs for women in their 40s compared to those that did not.<sup>6</sup> Changes in incidence rates in women 50 to 54 may also be related to patterns around hormone replacement therapy (HRT) use. In 1995, Colditz reported on the increased risk of BC among postmenopausal women using HRT.<sup>32</sup> The Women's Health Initiative study was stopped prematurely in 2002 after noting an increased risk of BC in women taking HRT.<sup>33</sup> Subsequent studies found that 1 out of 50 women who had taken HRT for 5 years starting at age 50 would develop BC, half in the first 5 years of use and half within the 15 years post cessation of HRT.<sup>34</sup> Increased incidence rates in women 50 to 54 from 1984 to 1999 may reflect increased use of HRT, with a decline in BC incidence noted from 1999 to 2005 as public awareness around potential harms of HRT increased and HRT use declined.

Although incidence data were available for the 2020 diagnosis year, they were not included in the analyses due to the

potential confounding influence that COVID-19 may have had on incidence with increased delayed diagnosis due to cessation of screening activities and lack of access to healthcare during the pandemic.<sup>30,35</sup> Inclusion of 2020 data could have resulted in a downward bias on actual underlying incidence trends. Another limitation is that the DCIS was not assessed and any changes in the incidence of DCIS might have had an impact on the incidence of invasive cancers.

## Conclusion

This study illustrates the importance of examining age-specific incidence rates, in addition to all ages summary measures, to

form a more complete picture of BC time trends. Significant recent increasing trends in the incidence of BC among women in their 20s, 30s, and 40s were observed which were not evident in overall incidence patterns. The 45.5% and 12.5% increases in the incidence rate among Canadian women in their 20s and 30s respectively since 1984 is concerning and merits greater attention. While the BC incidence rates noted in women 40 to 49 can be used to inform screening guidelines for these women, the incidence of BC in women under age 40 remains insufficient to justify BC screening. A greater awareness amongst individuals and clinicians alike regarding the increasing number of cases of BC in women younger than 50 is critical to allow for earlier diagnosis with its resultant reduced mortality and morbidity.

## Appendix

**Table A1.** Female Breast Cancer Age-Specific Annual Incidence Rates, Selected Age Groups, Canada, 1984 to 2019.

Diagnosis year	Age group (y)					
	20-29	30-39	40-49	40-44	45-49	50-54
1984	3.94	36.83	126.55	102.13	155.57	173.60
1985	4.15	38.52	128.76	107.38	154.76	193.69
1986	3.51	35.87	124.51	103.84	150.15	177.51
1987	4.05	38.73	123.92	102.28	151.62	183.97
1988	3.81	38.53	134.77	109.78	166.83	191.51
1989	3.70	36.47	126.89	103.31	157.23	190.81
1990	4.35	34.11	134.66	110.86	165.41	204.44
1991	3.72	35.49	129.01	103.23	162.01	204.66
1992	3.02	35.07	139.09	113.80	169.55	205.02
1993	3.66	36.35	132.91	100.68	170.40	211.26
1994	3.94	35.60	135.61	103.54	172.12	214.28
1995	4.16	36.90	130.97	101.24	164.36	226.80
1996	3.22	36.81	132.84	100.42	169.02	219.66
1997	3.34	36.34	138.26	107.22	173.60	231.74
1998	3.21	39.17	131.85	101.70	166.35	228.06
1999	4.29	40.97	135.51	105.02	170.08	242.61
2000	3.39	35.90	130.33	100.58	163.55	235.04
2001	3.61	38.13	131.03	96.38	169.40	221.68
2002	3.37	39.64	130.69	102.90	160.87	233.53
2003	3.09	37.90	126.45	97.86	157.05	210.27
2004	2.95	37.20	133.49	108.35	160.14	214.53
2005	5.01	37.53	141.09	112.02	171.47	204.05
2006	4.12	38.40	137.30	109.55	165.28	210.58
2007	3.66	39.11	132.70	102.00	162.43	203.66
2008	5.40	36.92	135.96	108.88	160.96	204.36
2009	4.66	36.67	139.10	112.63	162.56	204.79
2010	5.22	40.31	141.96	108.53	170.91	213.87
2011	5.22	39.74	142.55	109.62	171.58	214.69
2012	4.59	40.66	138.27	108.72	164.88	208.73
2013	4.96	36.92	135.38	104.59	163.87	215.41
2014	5.43	40.47	139.01	107.15	169.19	205.39
2015	5.38	42.36	136.45	106.96	164.91	217.63
2016	5.50	40.23	139.33	113.14	164.69	220.61
2017	5.81	42.91	139.16	109.20	168.48	207.96
2018	5.55	44.12	141.37	112.59	169.99	217.39
2019	6.07	42.47	140.76	112.16	169.74	217.57

Source. Canadian Cancer Registry (1992-2019) and National Cancer Incidence Reporting System (1984-1991) at Statistics Canada.

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