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Cost-related avoidance of oral health services

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Cost-related avoidance of oral health services

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Overview of the study

Using data from the Canadian Oral Health Survey (COHS), this study describes the characteristics of individuals who avoided visiting an oral health professional or who avoided getting recommended dental treatment because of cost. It explores how cost-related avoidance in the previous 12 months varies across age, gender and equity-seeking groups. The article also provides a detailed overview of the role of income and dental insurance in cost-related avoidance of oral health services.

- One in four (24%) Canadians avoided visiting an oral health professional in the past year because of the cost, based on data collected from November 2023 to March 2024.
- At 38%, young women aged 18 to 34 were the most likely to report cost as a barrier to avoiding a visit to an oral health professional.
- Approximately one in three (33%) racialized Canadians had avoided visiting an oral health professional because of the cost, higher than the proportion (21%) of non-racialized Canadians.
- Both income and insurance play an important role in access to dental services and care. Among those without dental insurance, 50% of individuals with an adjusted family net income (AFNI) under \$90,000 and 30% of those with an AFNI of \$90,000 or more avoided visits to an oral health professional due to cost. For those with private insurance, cost-related avoidance was 19% for individuals with an AFNI less than \$90,000 and 7% for those with an AFNI of \$90,000 or more.

Introduction

Cost is a major obstacle to accessing dental care, and subsequently, an impediment to achieving good oral health outcomes.¹ Out-of-pocket expenses for dental care are often high, particularly for those without adequate dental insurance and a lower ability to pay.² In 2001, households spent an average of \$274 on services related to dental care.³ By 2011, this rose to approximately \$341 per household, and by 2021, it reached \$461. After adjusting for inflation⁴ to 2021 dollars, the costs in 2001 and 2011 were about \$502.88 and \$447.97, respectively. This means that while part of the increase over time is due to inflation, out-of-pocket costs have fluctuated in real terms. Although costs decreased in real terms between 2001 and 2011, they have risen again since 2011. This could be due to higher fees for services, less insurance coverage, or other factors making oral health care less affordable.⁵

Previous research has found that many Canadians avoided visiting an oral health professional and/or did not obtain necessary dental care because they cannot afford it.^{6,7} Avoiding seeing an oral health professional can contribute

to the progression of preventable oral diseases, such as tooth decay and gum disease that eventually require more costly and invasive treatments.^{8,9}

In response to the need for more comprehensive data on oral health in Canada, Statistics Canada in partnership with Health Canada developed the [Canadian Oral Health Survey \(COHS\)](#). This is the first ever national survey dedicated to oral health in Canada. The COHS provides key baseline for understanding Canadians' oral health and their access to oral health care ahead of the introduction of the Canadian Dental Care Plan (CDCP).¹⁰

This study uses data from COHS to determine the prevalence of individuals who: a) avoided visiting an oral health professional in the past 12 months due to cost, or b) avoided recommended dental care in the past 12 months due to cost. It also explores how person-level characteristics, are associated with cost-related avoidance of oral health services. All results presented pertain to individuals aged 12 and older residing in private households across the 10 provinces, as data on cost-related avoidance is only available for this group.

Cost-related avoidance of oral health services

What is the Canadian Dental Care Plan?

The Canadian Dental Care Plan (CDCP) helps make the cost of dental care more affordable for eligible Canadians residents with an adjusted family net income (AFNI) of less than \$90,000. The CDCP is intended to help those who have no access to dental insurance. However, those who have dental coverage through a provincial, territorial or federal government social program, can still qualify. The plan is administered by Health Canada, with support from Employment and Social Development Canada (ESDC), through Service Canada, the Canada Revenue Agency, and Sun Life, the contracted benefits administrator.

About one in four Canadians have not visited an oral health professional in the past 12 months

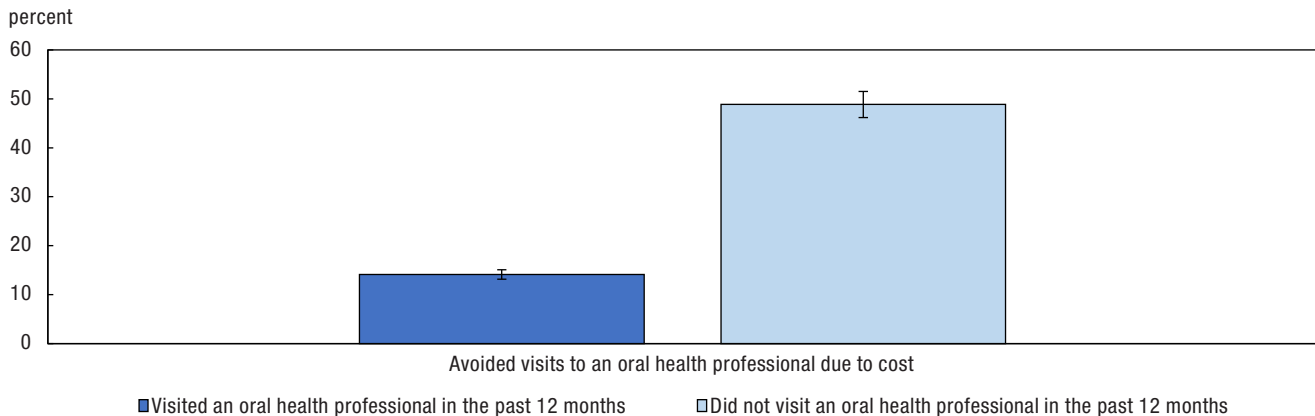
Visits to an oral health professional play an important role in maintaining optimal oral health. Despite these benefits, significant disparities in access to oral health care persist across population groups in Canada. In 2023-24, about one in four (28%) Canadians aged 12 and older reported not visiting an oral health professional in the past 12 months.

For many of these individuals, cost was a barrier. Avoidance due to cost of both visits to an oral health professional and dental care recommended by an oral health professional were reported more frequently by those who had not been to see an oral health professional recently. Among those who had not had a recent dental visit, about half (49%) said they avoided going to an oral health professional due to cost (Chart 1-A), and 34% said they avoided recommended dental treatment for the same reason (Chart 1-B).

However, even among those who did recently see an oral health professional, cost was a barrier for further visits and treatments, with 14% reporting avoiding visits due to cost (Chart 1-A) and 16% avoiding recommended care (Chart 1-B). This suggests that even though some Canadians attended a dental appointment, financial concerns led them to limit other necessary or recommended care.

Chart 1-A

Proportion of Canadians aged 12 and older, who reported avoiding visits to an oral health professional due to cost, according to recency of dental visits, Canada (excluding territories), 2023-2024



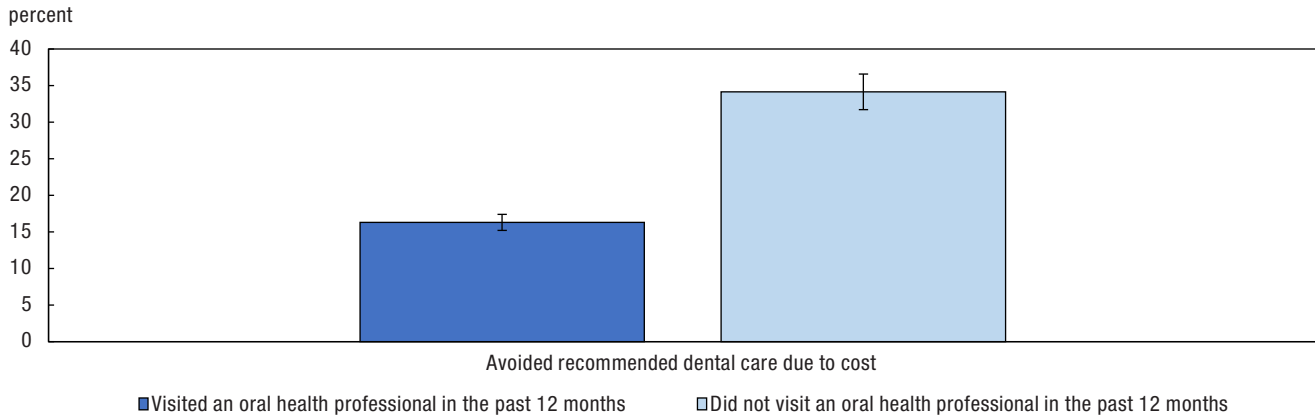
Note: Error bars represent the 95% confidence intervals.

Source: Statistics Canada, Canadian Oral Health Survey - Cycle 1, 2023-2024.

Cost-related avoidance of oral health services

Chart 1-B

Proportion of Canadians aged 12 and older, who reported avoiding any recommended dental care by an oral health professional due to cost, according to recency of dental visits, Canada (excluding territories), 2023-2024



Note: Error bars represent the 95% confidence intervals.

Source: Statistics Canada, Canadian Oral Health Survey - Cycle 1, 2023-2024.

Cost remains a major barrier to accessing dental care

Overall, 24% of Canadians aged 12 and older avoided visits to an oral health professional due to cost. This is slightly higher than the 22% previously reported in 2018¹¹ but is similar to the 24% reported in 2022.¹² Similarly, 21% of Canadians reported avoiding recommended treatment for the same reason.

While the rates of avoidance due to cost remained relatively stable over the past decade,^{13,14} the rising cost of living in Canada has likely increased the financial burden of out-of-pocket dental expenses. As a result, while the avoidance rates may not have changed significantly, the relative cost of dental care has grown, making it even harder for many Canadians to access necessary services.¹⁵

The results indicate that avoiding visits to an oral health professional due to cost varies by age, with cost-related avoidance being greatest among young adults. In 2023-24, 32% of young adults aged 18 to 34 avoided visits to an oral health professional due to cost – 4.5 times higher than adolescents aged 12 to 17 (7%), and significantly higher than adults aged 35-to-49 (24%) and those aged 50-to-64 (21%). These age-related patterns in avoidance could be related to the type of employment and insurance coverage held by young adults entering the workforce, who often find part-time, contract work or are self-employed, and are typically lacking health benefits.¹⁶

It is important to note that many provinces have programs that provide public funding for dental care for youth (aged 17 and younger)

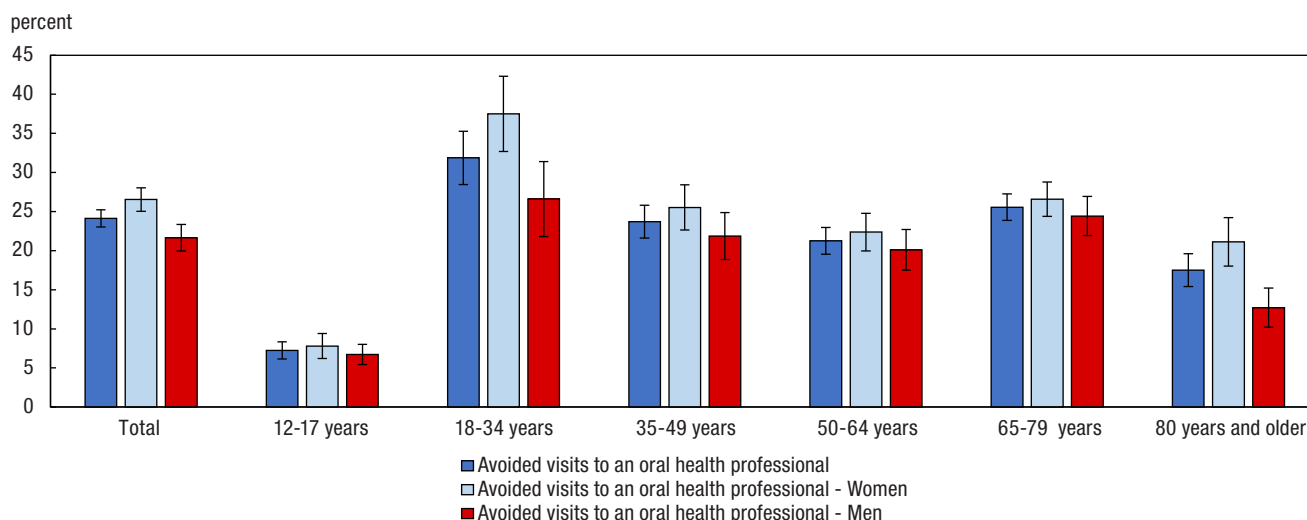
and the older population (65 years and older).¹⁷ Further, many private or employer-paid plans likely cover dependents (i.e., children). These factors may explain why avoidance due to cost is significantly lower among those aged 12 to 17 (7%) and those aged 80 years and older (18%).

Along with age, gender played a role in avoidance due to cost (Chart 2). Overall, women (27%) were more likely than men (22%) to report cost as a barrier, with young women aged 18 to 34 (38%) being most likely to avoid visiting an oral health professional because of cost. This may be because women are more likely than men to work part-time or in positions without benefits, resulting in lower access to employer-sponsored dental insurance.¹⁸

Cost-related avoidance of oral health services

Chart 2

Proportion of Canadians aged 12 and older, who reported avoiding visits to an oral health professional due to cost, by age group and gender, Canada (excluding territories), 2023-2024



Note: Error bars represent the 95% confidence intervals.

Source: Statistics Canada, Canadian Oral Health Survey - Cycle 1, 2023-2024.

Insurance and income are important determinants in dental care access

As noted in previous research,¹⁹ dental insurance is a key predictor of access to and use of dental care services. In Canada, about one-third (33%) of people over the age of 12 do not have any dental insurance.

Among those without insurance (regardless of their income level), about two out of five (45%) avoided dental visits because of cost (Table 1). This was almost four times higher than those with public and/or private insurance (12%), and nearly 2.5 times higher than those with public insurance only (18%).

In addition to insurance, income plays a crucial role in dental care access.^{20,21} Avoidance of visits to an oral health professional due to cost was more than two times higher for those with an adjusted family net income (AFNI) of less than \$90,000²² (33%), compared to those with an AFNI of \$90,000 or more (12%).

Table 1

Proportion of Canadians aged 12 and older, who reported avoiding visits to an oral health professional or recommended dental care due to cost, Canada (excluding territories), 2023-2024

Income and insurance status	Avoided visits to an oral health professional due to cost			Avoided recommended dental care due to cost		
	Percent	95% confidence interval		Percent	95% confidence interval	
		lower	upper		lower	upper
Total	24.1	23.0	25.2	21.5	20.4	22.6
Income status						
AFNI less than \$90,000 (ref.)	33.5	31.8	35.1	28.3	26.8	29.8
AFNI \$90,000 or more	12.1*	10.7	13.4	12.7*	11.3	14.0
Insurance status						
Have public insurance only	18.0*	14.0	22.0	19.6*	15.0	24.1
Have public and/or private insurance	12.4*	11.3	13.5	12.7*	11.7	13.7
Do not have insurance (ref.)	44.5	42.3	46.7	36.8	34.5	39.0

* Significantly different from reference category (ref.) ($p < .05$)

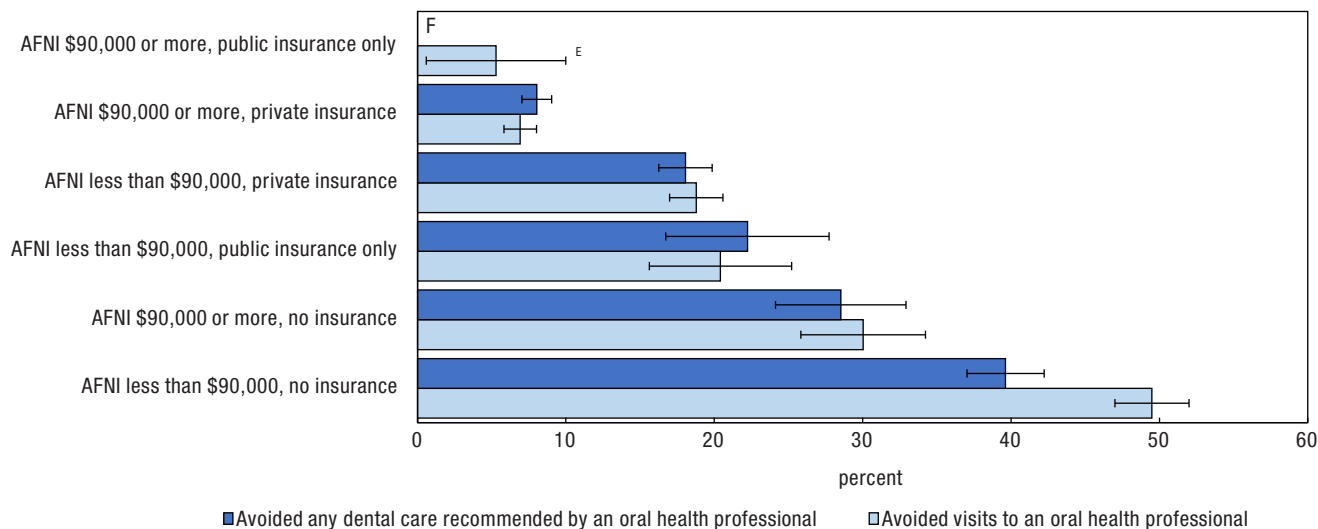
Note: The adjusted family net income (AFNI) is calculated based on ((net family income) - (universal childcare benefit) - (amount of registered Disability Savings Plan - Claimed) + (Universal Childcare Benefit - Repaid)).

Source: Statistics Canada, Canadian Oral Health Survey - Cycle 1, 2023-2024.

Cost-related avoidance of oral health services

Chart 3

Proportion of Canadians aged 12 and older, who reported avoiding visits to an oral health professional due to cost, by insurance and income, Canada (excluding territories), 2023-2024



^E Use with caution

^F Too unreliable to be published

Notes: The adjusted family net income (AFNI) is calculated based on ((net family income) – (universal childcare benefit) – (amount of registered Disability Savings Plan – Claimed) + (Universal Childcare Benefit – Repaid)). Error bars represent the 95% confidence intervals.

Source: Statistics Canada, Canadian Oral Health Survey - Cycle 1, 2023-2024.

When looking at income and insurance together, foregoing visits to an oral health professional due to cost was highest among those with a family income below \$90,000 and no dental insurance (50%), followed by those with a family income of \$90,000 or higher and no dental insurance (30%) (Chart 3). This suggests that while income and insurance are important factors associated with access to oral health care, out-of-pocket expenses is a consistent consideration for visiting an oral health professional, highlighting the need to address broader cost-related issues in oral health care access.²³

Similar patterns in cost-related avoidance were observed for getting any dental care treatment recommended by an oral health professional.

Cost-related avoidance of dental services higher among equity-seeking populations

Racialized Canadians were much more likely than non-racialized Canadians to report avoiding visits to a health professional (33% versus 21%) and avoiding recommended care (28% versus 19%) due to cost (Chart 4). These differences persisted even when considering income and insurance. That is, cost-related avoidance was consistently higher among racialized Canadians than non-racialized Canadians, including among those with lower-income regardless of whether they had insurance, as well as the insured and uninsured with higher-incomes.

Having a disability was also linked to cost-related avoidance. In 2023-24, 36% of persons with a disability avoided visits to an oral health professional due to cost, compared to 22% of people

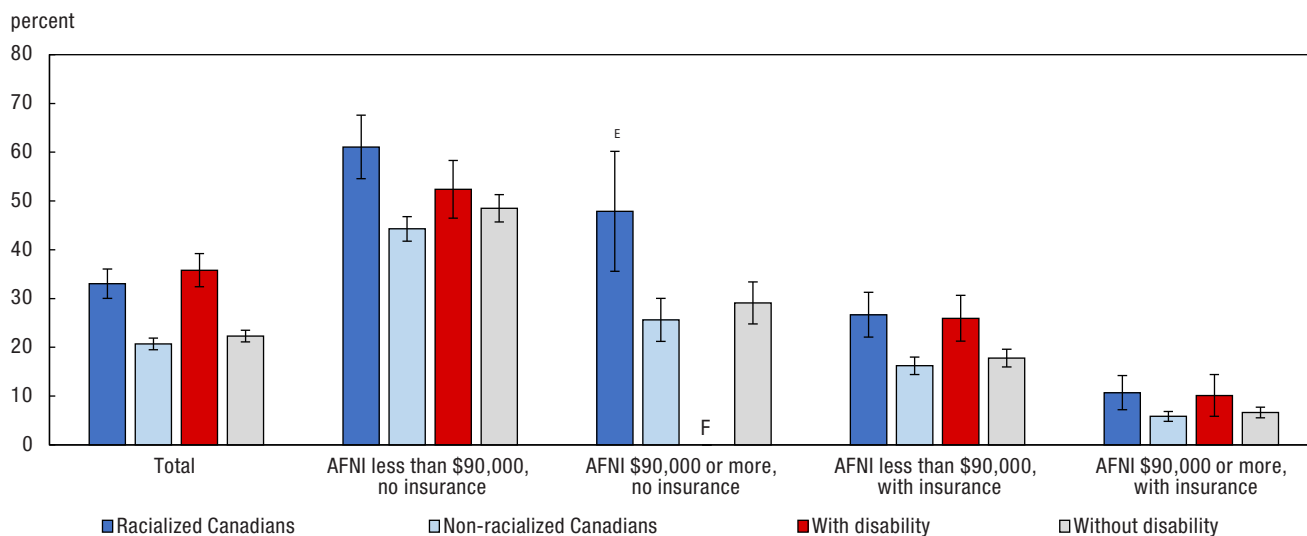
without a disability. Similarly, those with a disability were also much more likely to report cost as a barrier to obtaining recommended dental care (31%) compared to persons without a disability (20%). The differences in cost-related avoidance between persons with and without disabilities were observed in the lower-income insured population, but not in the lower-income uninsured or higher-income insured population.

It should be noted that the above differences, particularly among equity-seeking populations, do not fully account for other demographic characteristics such as age, employment, and income. However, past research has shown that cost-barriers remain higher among these populations after controlling for these factors.²⁴ More detailed analysis is needed to better understand disparities in access to dental care among equity-seeking groups.

Cost-related avoidance of oral health services

Chart 4

Proportion of Canadians aged 12 and older, who reported avoiding visits to an oral health professional due to cost, by equity seeking groups, Canada (excluding territories), 2023-2024



^E Use with caution

^F Too unreliable to be published

Notes: The adjusted family net income (AFNI) is calculated based on ((net family income) – (universal childcare benefit) – (amount of registered Disability Savings Plan – Claimed) + (Universal Childcare Benefit – Repaid)). Error bars represent the 95% confidence intervals.

Source: Statistics Canada, Canadian Oral Health Survey - Cycle 1, 2023-2024.

Nearly one-third of Canadian households avoided going to an oral health professional due to the cost

Another way to examine cost barriers to dental care is to look at avoidance patterns at the household level. By doing so, it is possible to explore how resources are shared and identify if anyone in a household, including young children, did not see an oral health professional due to cost. These results represent responses provided by the adult respondent for the entire household, rather than for each individual living in the household. (For more information, refer to the [“Data sources, methods and definitions”](#).)

Overall, about one-third (31.5%) of Canadian households reported that in the past 12 months, at least one person in the household had avoided going to an oral health professional due to cost. This is notably higher than the 24% of Canadians estimated at the individual level (Table 1), suggesting that it is not always all individuals in the household avoiding oral health visits due to cost.

Additionally, 28% of Canadian households reported that, in the past 12 months, at least one person in the household had avoided getting dental care that was recommended by an oral health professional because of the cost of care. This is also higher than the 22% of Canadians estimated at the individual level (Table 1).

The differences within households may be occurring for various reasons. First, the availability of insurance coverage may vary within a household due to the composition of the household. For example, in a family unit, dependents such as spouse or children may or may not have dental coverage. In households with unrelated family members, such as roommates, insurance coverage may also differ. Furthermore, for those with dependents (spouse or child), there may be decisions being made about who in the family gets priority for care, or priority of one treatment over another.

A look at data from the 2007-2009 Canadian Health Measures Survey (CHMS) helps to provide some additional insights. The CHMS includes some data from two persons within the same household - the majority of which were a parent and a child. When looking at the responses on avoidance due to cost, the data show that there was a much greater proportion of parent-child pairs that indicated that the parent avoided visits or care while the child did not, compared with pairs that reported the child avoided visits or care, but the parent did not. These results need to be interpreted with some caution, because as mentioned elsewhere, many government programs cover the costs for some dental care for children²⁵. However, it does confirm that differences in avoidance due to cost within the same household do exist. Further, it aligns with the differences in avoidance patterns observed between youth and adults discussed earlier in this article.

Cost-related avoidance of oral health services

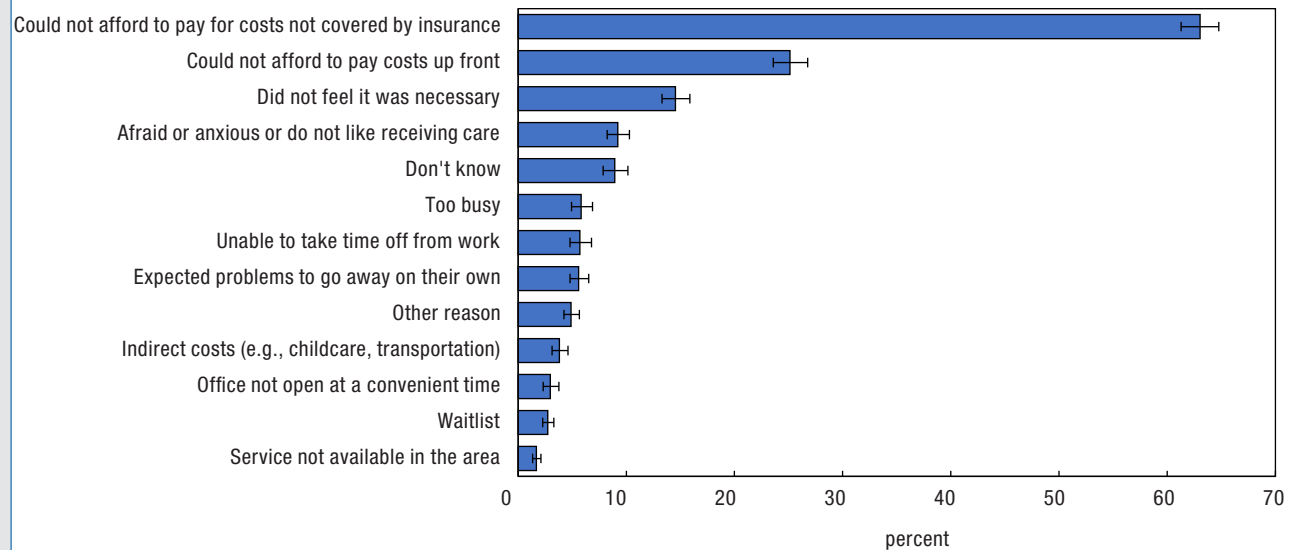
Inability to afford overall costs and inability to pay upfront costs for oral health services were the most common reasons for cost-related avoidance in Canadian households

Households that indicated cost-related avoidance of visits to an oral health professional or recommended care were asked follow-up questions on any other specific reasons for a household member not receiving dental care or treatment. Nearly two-thirds of households (63%) reported that they could not afford to pay for the cost of the services that were not covered by insurance (Chart 5). Additionally, one of every

four households (25%) reported that they could not afford to pay up-front for services and wait for reimbursement, while fewer than one in 20 households (4%) reported indirect costs of obtaining dental care, such as finding childcare or transportation.

Some other reasons that someone in the household did not get dental care or treatment in the past 12 months included: did not feel it was necessary (15%), afraid or anxious or do not like receiving care (9%), too busy (6%), unable to take time off work (6%), expected problems to go away on their own (6%), and expected problems to go away on their own (6%).

Chart 5
Other reasons that someone in the household did not get dental care or treatment, Canada (excluding territories), 2023-2024



Note: Error bars represent the 95% confidence intervals.

Source: Statistics Canada, Canadian Oral Health Survey - Cycle 1, 2023-2024.

Conclusion

Using data from the Canadian Oral Health Survey (COHS), this article examined characteristics of individuals who avoided visits to an oral health professional in the past 12 months because of the cost, as well as those who avoided recommended dental care for the same reason. Overall, one in four Canadians had avoided visits to an oral health professional in the past year because of cost. This proportion was much higher among Canadians with a family income of less than \$90,000 without dental insurance coverage (50%).

Lower-income individuals, even when insured, face greater financial barriers, leading to higher rates of avoiding dental visits and recommended care. However, avoidance patterns even among high-income, insured populations indicate that financial concerns can still affect access to care. Notably, this study underscores that cost remains a major barrier to dental care access, highlighting the complexity of the issue, particularly for equity-seeking groups like racialized individuals and people with disabilities, who face additional challenges.

Given the intricate relationship between cost-related avoidance and the associated factors (e.g., insurance

and income), more comprehensive analyses are necessary. Previous research^{26,27} has revealed these complex interactions, emphasizing the need for a deeper understanding of their associations. Future studies should aim to integrate these nuances to provide clearer insights into the factors associated with avoidance to oral health care due to cost.

Juliana Valeria Gondro is an analyst and Janine Clarke is an acting chief with the Centre for Direct Health Measures at Statistics Canada. Monica Emode is an epidemiologist and Dana Ivancevic is an analyst with the Oral Health Branch at Health Canada.

Data sources, methods and definitions

Data sources

The Canadian Oral Health Survey (COHS) is a voluntary annual household survey that collects information directly from Canadians on their oral health.

The COHS consists of Canadian households with adults aged 18 years and older living in the provinces. Where applicable, responding adults also provided information for all household members aged 17 years and younger. Analysis in this article is restricted to those aged 12 and over.

To address key oral health gaps in Canada and provide data to help inform new federal investments in dental care, including the Canadian Dental Care Plan (CDCP), Statistics Canada conducted the Canadian Oral Health Survey (COHS) in the provinces from November 2023 to March 2024. This is the first ever national survey dedicated to oral health in Canada.

It excludes people living in the territories and on reserves and in other Indigenous settlements in the provinces, as well as the institutionalized population (e.g., those living in long-term care homes).

Methods

This study provides a descriptive analysis of cost-related avoidance of oral health services among Canadians aged 12 and over. In the COHS, the questions on avoidance were asked to the responding adult as follows: “In the past 12 months, have [you / you or other household members] avoided going to an oral health professional for your dental care due to the cost of care?” and “In the past 12 months, have [you / you or other household members] avoided getting any dental care recommended by an oral health professional because of the cost of care?” Therefore, responses were only available at the household level. Person-level concepts related to avoidance were modelled using data from the Canadian Community Health Survey 2022. More information on the creation of the variable is available in the *COHS Data User Guide*.²⁸

All estimates were produced using survey weights to ensure population representativeness. The sampling variance was calculated by using 1,000 bootstrap weights. All non-response records were excluded from the analysis.

When two estimates are stated to be different, this indicates that the difference was statistically significant at a 95% confidence level (p-value less than 5%).

Definitions

Household refers to a person or group of persons who occupy the same dwelling and do not have a usual place of residence elsewhere in Canada or abroad. The dwelling may be either a collective dwelling or a private dwelling. The household may consist of a family group such as a census family, of two or more families sharing a dwelling, of a group of unrelated persons or of a person living alone. Household members who are temporarily absent on reference day are considered part of their usual household.

Private insurance includes plans through an employer (including those partially paid or sponsored by an employer), private plans (including personally purchased plans) and plans through colleges and universities.

Public dental insurance includes government-paid plans (e.g., children’s or seniors’ dental programs, the Régie de l’assurance maladie du Québec, and the Non-Insured Health Benefits program for First Nations people and Inuit, which includes individuals living on and off reserves).

Racialized populations are measured with the “visible minority” variable. The “non-racialized group” is measured with the category “Not a visible minority” of the variable, excluding Indigenous respondents. For the purpose of this study, Indigenous respondents are not part of the racialized group, nor the non-racialized group. “Visible minority” refers to whether or not a person belongs to one of the visible minority groups defined by the *Employment Equity Act*. The *Employment Equity Act* defines visible minorities as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.” The visible minority population consists mainly of the following groups: South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean and Japanese.

Indigenous populations include only those living in the provinces and living off reserve. Those living in the territories or living on reserves were not included in the target population for the survey. This is a limitation, as it excludes Indigenous communities and nations who are particularly affected by barriers to health care access.

Gender, rather than sex, is used for this analysis. Beginning in 2021, the Census asked questions about both the sex at birth and gender of individuals. While data on sex at birth are needed to measure certain indicators, as of the 2021 Census of Population, gender (and not sex) is the standard variable used in concepts and classifications. For more information on the new gender concept, see [Age, Sex at Birth and Gender Reference Guide, Census of Population, 2021](#).

Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses. In these cases, individuals in the category “non-binary persons” are distributed into the other two gender categories. Unless otherwise indicated in the text, the category “men” includes men (and/or boys), as well as some non-binary persons, while the category “women” includes women (and/or girls), as well as some non-binary persons.

The **adjusted family net income** variable was obtained by linking to tax data when possible (69%) and imputed when not available. To calculate the 2022 adjusted family net income (AFNI) from the T1 Family File of the individual, the following variables were added up ((net family income) – (universal childcare benefit) – (amount of registered Disability Savings Plan – Claimed) + (Universal Childcare Benefit – Repaid)) for all members of a family.

It should be noted that the AFNI was only available for the responding adults. For the purpose of this analysis, the AFNI of a given child was assumed to be the same as that of the adult from the same household.

Persons with a disability includes those that answered ‘yes’ to the question “Do [you/any of these persons] identify as a person with a disability?”

Notes

1. See Chari, M., et al., 2021.
2. See World Health Organisation, 2022.
3. See CIHI, 2023.
4. Inflation adjustments were calculated using the Consumer Price Index (CPI) for dental care services [Consumer Price Index, annual average, not seasonally adjusted](#). Costs were adjusted to 2021 dollars using the formula: $Adjusted\ Cost = Nominal\ Cost \times (CPI / CPI\ in\ the\ year\ of\ the\ Cost)$.
5. See Ramraj, C., et al., 2013.
6. See Thompson, B., et al., 2014.
7. See Locker and Quiñonez, 2011.
8. See Peres, Marco A., et al., 2019.
9. See Canadian Dental Association, 2017.
10. See Government of Canada, 2024.
11. See Statistics Canada, 2019.
12. See Statistics Canada, 2023a.
13. See Statistics Canada, 2019.
14. See Statistics Canada, 2023a.
15. See Statistics Canada, 2023b.
16. See Marshall, K., 2003.
17. See Farmer, J., et al., 2022.
18. See Moyser, M., 2017.
19. See Moharrami, M., et al., 2024.
20. See Levy, B., et al., 2023.
21. See Ravaghi, V., et al., 2013.
22. AFNI cut-offs were broken into two categories to align with the Canadian Dental Care Plan (CDCP) policy framework: less than \$90,000, and \$90,000 or more.
23. See Abdelrehim, M., et al., 2023.
24. See Ravaghi, V., et al., 2013.
25. See Shaw, Jodi L. and Farmer, J. W., 2015.
26. See Farmer, J., et al., 2022.
27. See Ravaghi, V., et al., 2013.
28. See Statistics Canada, 2024.

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