COMPOUNDING DISADVANTAGE:

A COMMUNITY REPORT ON THE IMPACTS OF COVID-19 ON IMMIGRANTS LIVING WITH CANCER

BACKGROUND

People living with cancer are at a clinical vulnerability in the context of the COVID-19 pandemic. Thus, immigrants and refugees living with cancer are at the intersection of social and clinical disadvantages in the context of COVID-19 infection and prognosis. However, there is no literature that examines compounding disadvantages and increased risk of COVID-19 for this group. Understanding the interaction between COVID-19, immigration, and cancer care is essential for developing targeted interventions and addressing health inequities during post-pandemic recovery as well as future crises.

WHAT DID WE DO?

This population-based retrospective cohort study, aimed to explore the impact of COVID-19 on Ontario's immigrants and refugees (referred to as "immigrants" hereafter) living with cancer. We conducted a population-based retrospective cohort study using multiple linked Ontario healthcare administrative databases at ICES (previously known as the Institute for Clinical Evaluative Sciences). The specific objectives were:

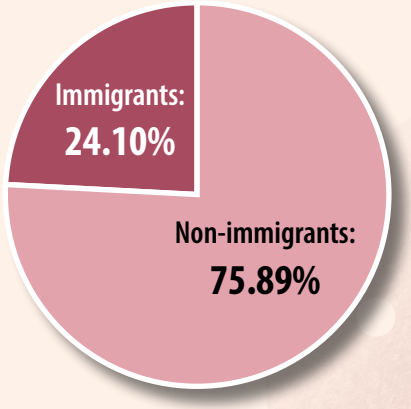
- To compare COVID-19-related outcomes (vaccination rates, diagnoses, hospitalizations, ICU admissions, and mortality) among immigrants with active cancers versus three comparison groups: immigrants without active cancer and non-immigrants with and without active cancer.
- To determine the role that sociodemographic and healthcare-related variables (e.g., sex, age, immigration status, region of origin, neighbourhood income quintile, neighbourhood marginalization index, access to primary care) play in COVID-19-related outcomes for immigrants with active cancers vs. comparison groups.

The two-year study period spanned from **March 31, 2020** to **December 31, 2021**, and corresponded to COVID-19 waves 1 – 4 (**February 26, 2020 – December 14, 2021**), and the first 16 days of wave 5 (**December 15 -31, 2021**).

Cohort Size:
10,356,878
Ontario residents aged 18 or older

Immigrants:
2,496,963 (24.10%)

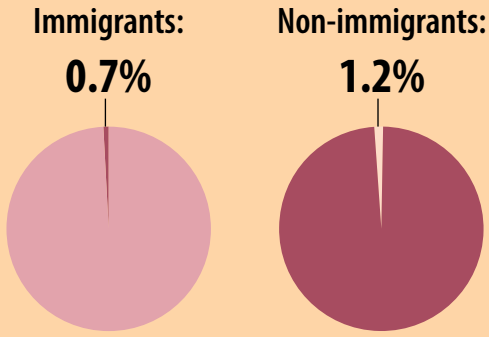
Non-immigrants
(Canadian-born/long-term residents):
7,859,915 (75.89%)



WHAT DID WE FIND?

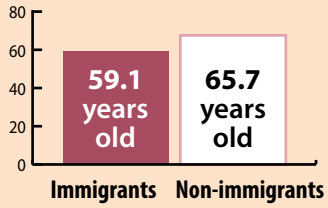
ACTIVE CANCER

16,248 (**0.7%**) immigrants were identified as having **active cancer** as opposed to 93,564 (**1.2%**) non-immigrants.



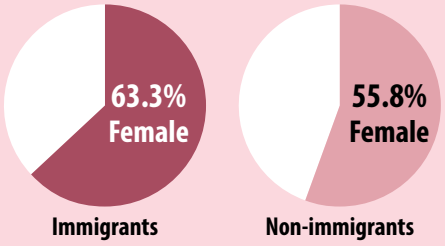
AGE

Immigrants living with cancer were significantly **younger** than non-immigrants with cancer (**59.1** vs. **65.7** years).



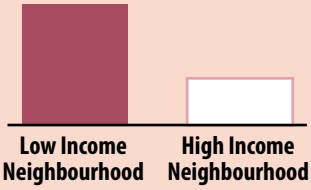
GENDER

63.3% of **immigrants with active cancer** were **female** vs. **55.8%** of non-immigrants with active cancer.



NEIGHBOURHOOD INCOME

Low income neighbourhood are **2.5 times more likely** to be hospitalized, admitted to ICU or die from COVID-19.

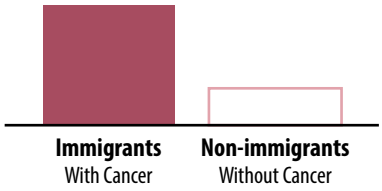


DIAGNOSIS

Immigrants living with and without cancer were **66%** and **67% more likely** to be **diagnosed** with COVID-19 than non-immigrants without cancer.

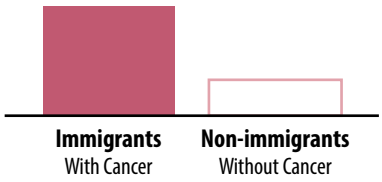
HOSPITALIZATION

Immigrants living with cancer were almost **3.3 times more likely** to be hospitalized than non-immigrants without cancer.



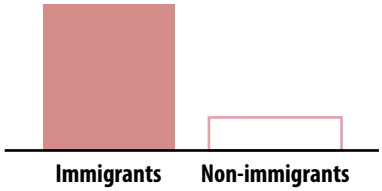
ICU ADMISSIONS

Immigrants living with cancer were almost **3 times more likely** to be admitted to ICU compared to non-immigrants without cancer.



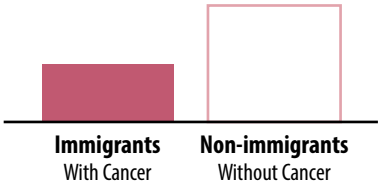
MORTALITY

The COVID-19 mortality among immigrants living with cancer was almost **4.2 times more** than non-immigrants without cancer.

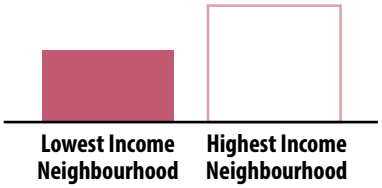


VACCINATION

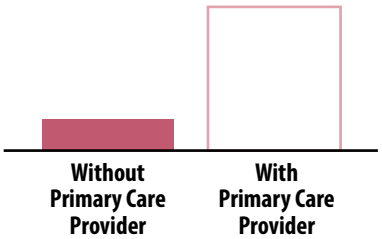
COVID-19 vaccination among immigrants living with cancer was **48% less** than non-immigrants without cancer.



Those living in the lowest-income neighbourhoods were about **38% less likely** to receive COVID-19 vaccination compared to the highest-income neighbourhoods



Those without a primary care provider were **78% less likely** to receive vaccination



RECOMMENDATIONS

1. Improve Access to Social and Economic Resources for Immigrants and Refugees with Cancer

To effectively support immigrants and refugees living with cancer during pandemics or natural/man-made crises, it is essential to ensure access to critical social and economic resources. Policymakers must prioritize upstream interventions that provide affordable housing, stable employment opportunities, educational resources, and healthcare access. These initiatives will help reduce the impact of crises like COVID-19, enabling individuals to better manage their health while minimizing exposure risks due to the inability to self-isolate, lack of income, or challenges in maintaining social distance.

2. Prioritize Proactive Primary Care Connections for Immigrants and Refugees

Health systems must prioritize proactive approaches to connect immigrants and refugees living with cancer to primary care, particularly through interprofessional team-based care. Our study underscores the vital role of primary care providers in facilitating the uptake of vaccinations and timely diagnoses. Strategies should be developed to ensure these populations have consistent access to quality primary care, thereby improving their overall health outcomes and reducing the likelihood of poor COVID-19-related consequences.

3. Enhance Cancer Screening Access Through Community Engagement for Immigrants and Refugees

To improve cancer screening access for immigrants and refugees, it is essential to implement evidence-based strategies that utilize community champions and peers to engage and educate under-screened and never-screened women. Given the higher rates of breast cancer and younger age at diagnosis among immigrant women in Ontario, targeted outreach and culturally sensitive education efforts are crucial to raise awareness about the importance of regular screening, ultimately leading to earlier detection and improved health outcomes.

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Further reading:

Vahabi M, Matai L, Damba C, Kopp A, Wong J, Rayner J, Narushima M, Tharao W, Hawa R, Janczur A, Datta G, Fung K, Lofters A. J. *Environ Sci Public Health*. 2024; 8(2): 116-132.

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