

# Data for Responsive Public Policy: Mind the Gap

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**DATA Conference**

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Data  
Discovery  
Better Health

Health inequalities and the social determinants of health are not a footnote to the determinants of health. They are the main issue.

Health and health inequalities tell us a great deal about the good or bad effects of social policies.

**Sir Michael Marmot**

Health

# COVID-19 has taken 'heavy toll' on female immigrants working in health care, report says



Findings should be a 'call to action' to address systemic inequities, co-author urges

 [Amina Zafar](#) · CBC News · Posted: Sep 10, 2020 4:00 AM ET | Last Updated: September 10



"Job security, it's not there at times, too, because the position is not permanent and ... there are no benefits."

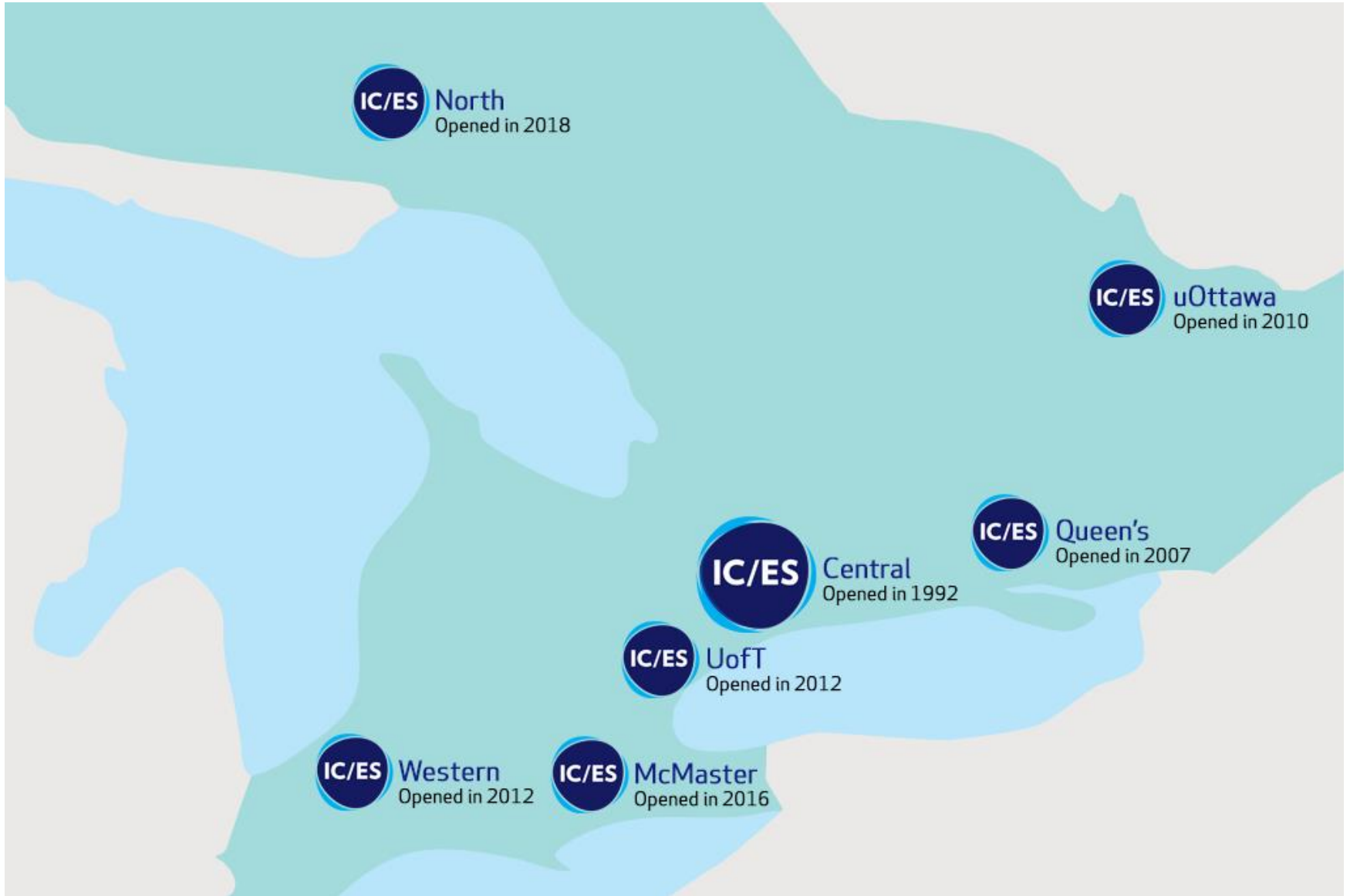
Joadel Concepcion

A new report found female immigrants, many of whom worked as caregivers, were especially hard-hit by the

# Considerations

- Existing data infrastructures and partnerships have been key to informing the COVID-19 response
  - Timely
  - Disaggregated
- Data on the social and structural determinants of health are necessary to inform Policies to reduce health inequities we have observed in COVID-19
- Local data and community engagement key to the solution
  - Important data governance conversations

# Ontario-wide research network and prescribed entity



Our researchers use a **vast** and **secure** array of data to produce evidence that improves health and health service delivery :



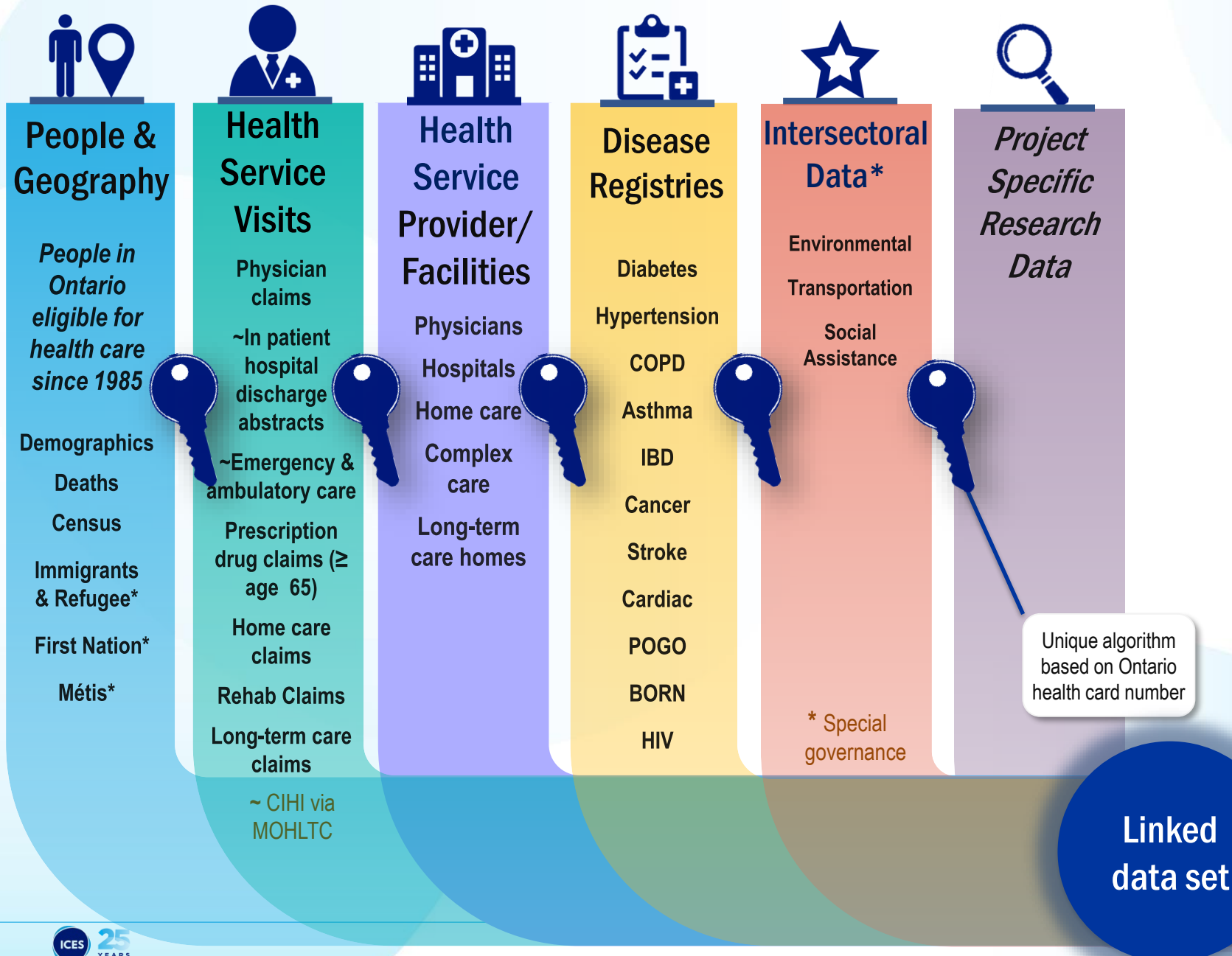
**18 billion records**  
for over **20 million Ontarians**  
(that's all health card holders past & present)

that means  
**500 billion data points**

soon expected to grow to  
**over 1 trillion**



# ICES CORE Data Repository: De-identified and Linkable



# ICES

## Research



**600** peer-reviewed publications in 2019

+

**10%** of publications published in journals with IF > 10



## Evaluation



**50+** Applied Health Research Questions (AHRQs) per year

**Evaluations, scorecards & other special projects**

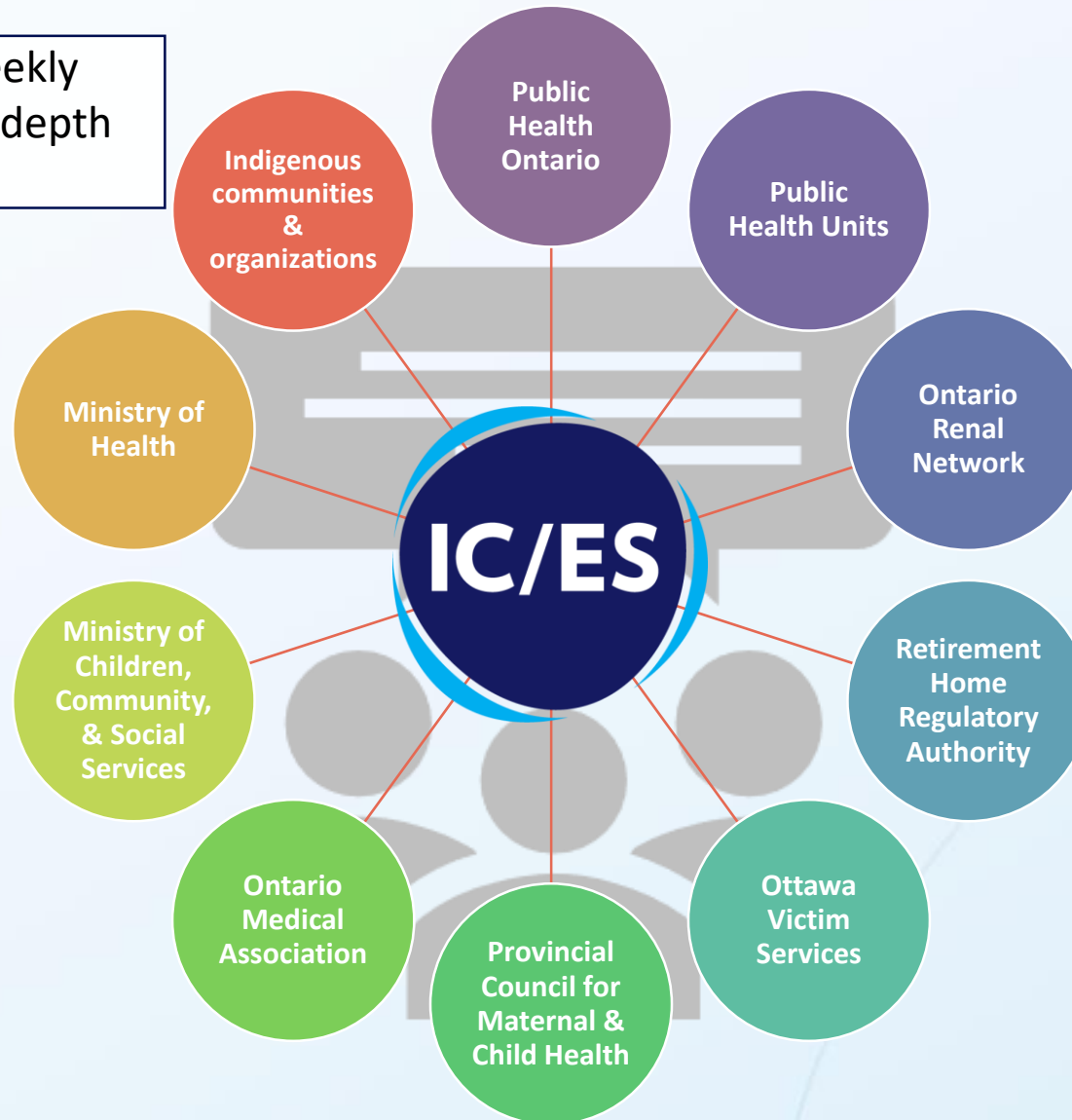
in partnership with the MOH, other ministries and provincial agencies





# Knowledge Sharing – Research & Analytics

Daily tables, Weekly reports, maps, in-depth analyses



# ICES COVID-19 Projects

## Impact to Health Services

- Drug utilization
- Surgeries & procedures
- Outpatient & virtual care
- Mental health services



## Impact to Specific Populations



- Long-term care residents
- First Nations communities
- Those with chronic conditions
- Immigrants and refugees

**COVID-19**

## Associations with Outcomes & Drugs



## Predictive Modelling



# IMPORTANT INFORMATION AND NOTICES FOR FIRST NATIONS LEADERSHIP

Information and updates distributed to First Nations communities and leadership are available for download below.  
The Chiefs of Ontario will continue to monitor and update this page as the situation continues to evolve.

## January 28, 2021 - Chiefs of Ontario Health Report 41 – COVID 19 Testing Data

There were 167 new positive results among First Nations people this week, nearly 10% less than the previous week. This is the first decrease in the weekly total of new positive results in over 6 weeks. Ontario numbers continue to decrease as well.

[Download](#)

## January 25, 2021 - Appendix 10: Case & Contact Management COVID-19 Surge Support Model

The second wave of the COVID-19 pandemic has seen sustained increases in case counts. This has made the implementation of the case and contact management (C&CM) standards identified in Ministry of Health (MOH) policy challenging for some public health units (PHUs). To support the C&CM program overall, the MOH has undertaken a number of initiatives to strengthen the program across a newly networked C&CM system.

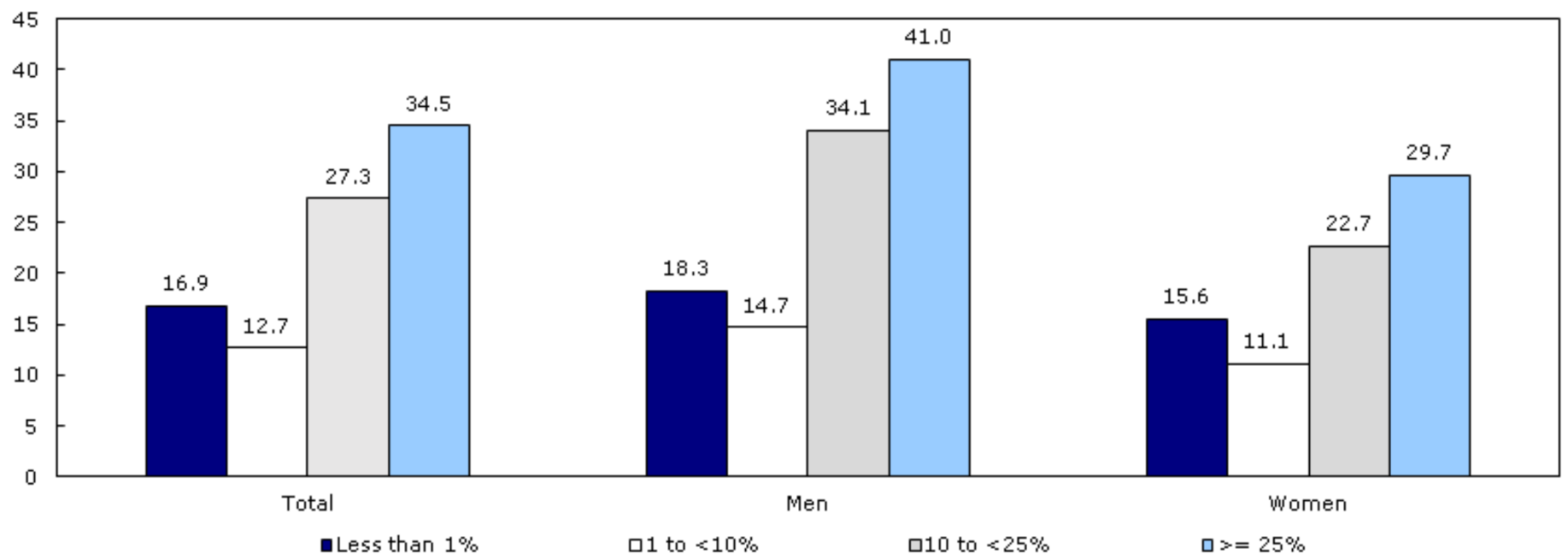
# Power of the postal code

- Many of the documented inequities have used postal code to link to Census data at the neighbourhood level
  - Income, education, household density, newcomers and ethnic diversity
- Link to communities

### Chart 1

#### Age-standardized COVID-19 mortality rates, by proportion of the neighbourhood population belonging to population groups designated as visible minorities, by sex, Canada

age-standardized mortality rate (per 100,000)



**Sources:** Data derived from provisional Canadian Vital Mortality - Death Database (2020) and the Census of Population 2016.

▼ Data table for Chart 1

# COVID-19 Testing by Neighbourhood

Data as of January 26, 2020

Data source: Applied Health Research Question (AHRQ)

# 2021 0950 080 000. Toronto: Institute for Clinical Evaluative Sciences (ICES); 2020 (see technical notes for details and acknowledgements)

\*These maps show COVID-19 testing metrics, as suggested by an individual's postal code; they do not necessarily reflect the neighbourhood in which they were tested.



Technical Notes



Excel

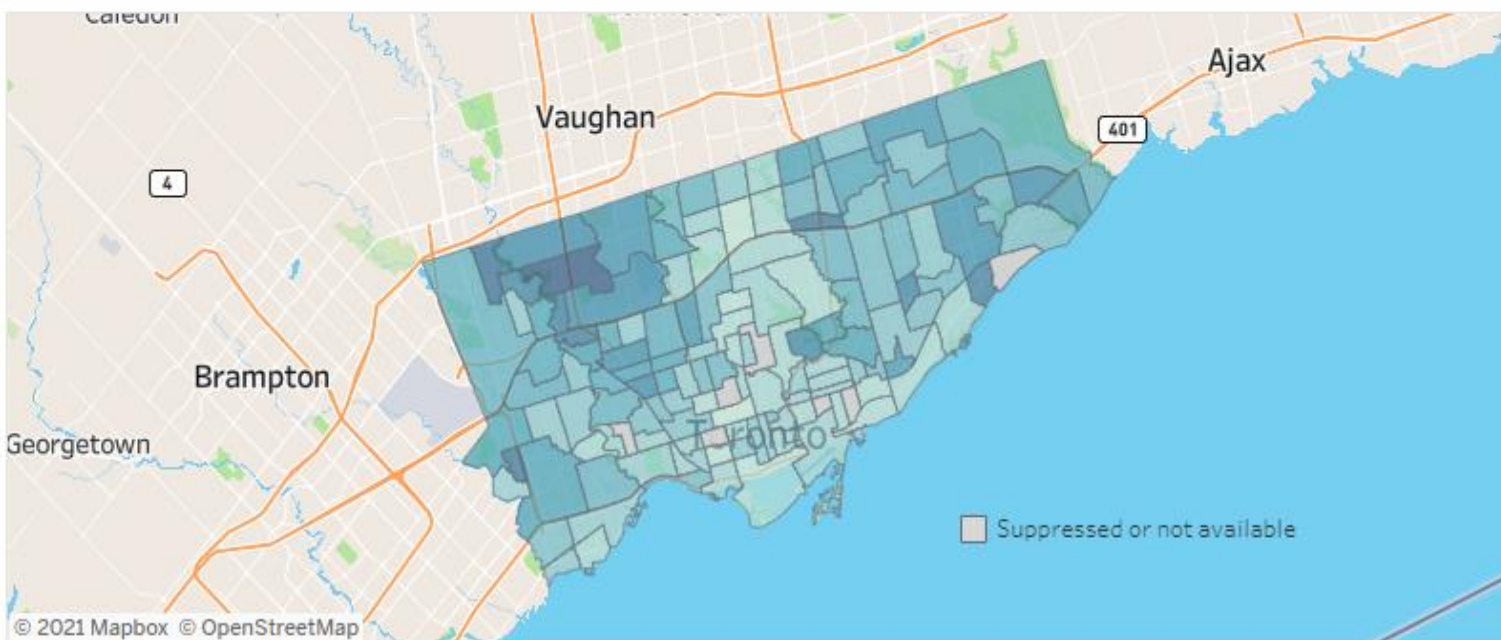


PDF

Case/Rate Maps

Testing Maps

## Map of COVID-19 Percent Positivity by Neighbourhood - Week of January 10, 2021



Map Type:

Percent Positivity

Filter by testing week:

January 10, 2021

Highlight Neighbourhood

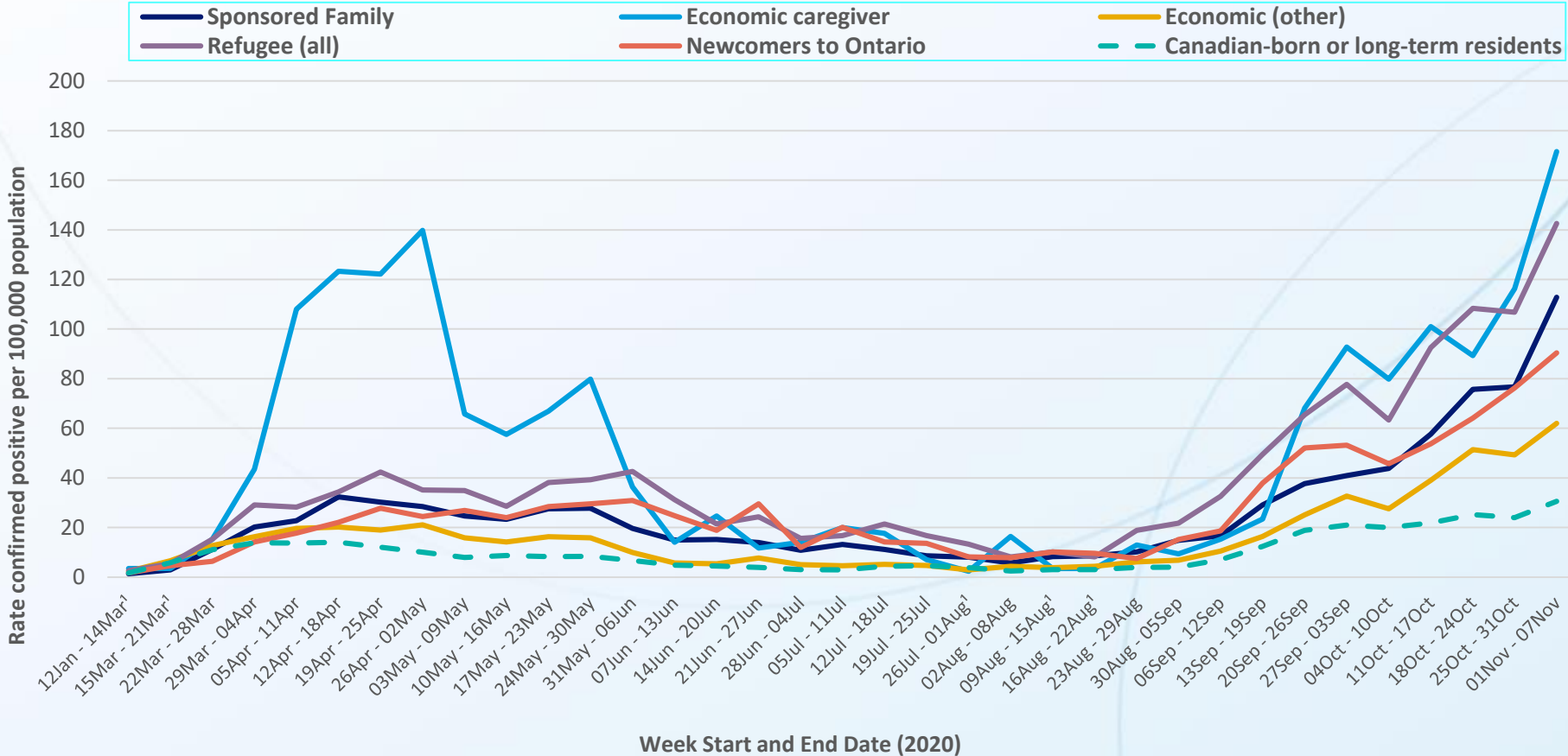
Highlight Neighbourh...

2.0%

20.1%

# Leveraging partnership with IRCC

Weekly number of individuals in Ontario confirmed positive for COVID-19 per 100,000 population, by immigration category, January 15 to November 7, 2020



Week Start and End Date (2020)

**Prior to March 14:** Exposure criteria: travel to affected area, close contact with confirmed COVID-19 case or traveler, participated in mass gathering, or laboratory exposure to COVID-19.

**March 14:** Testing restricted to those with symptoms and requiring urgent medical care, contacts of confirmed cases, health care workers with symptoms, residents of long-term care or retirement homes, and First Nations members living on reserve.

**April 10:** Expansion of proactive testing to other priority groups.

**April 22:** Enhanced testing in long-term care homes and other congregate care settings.

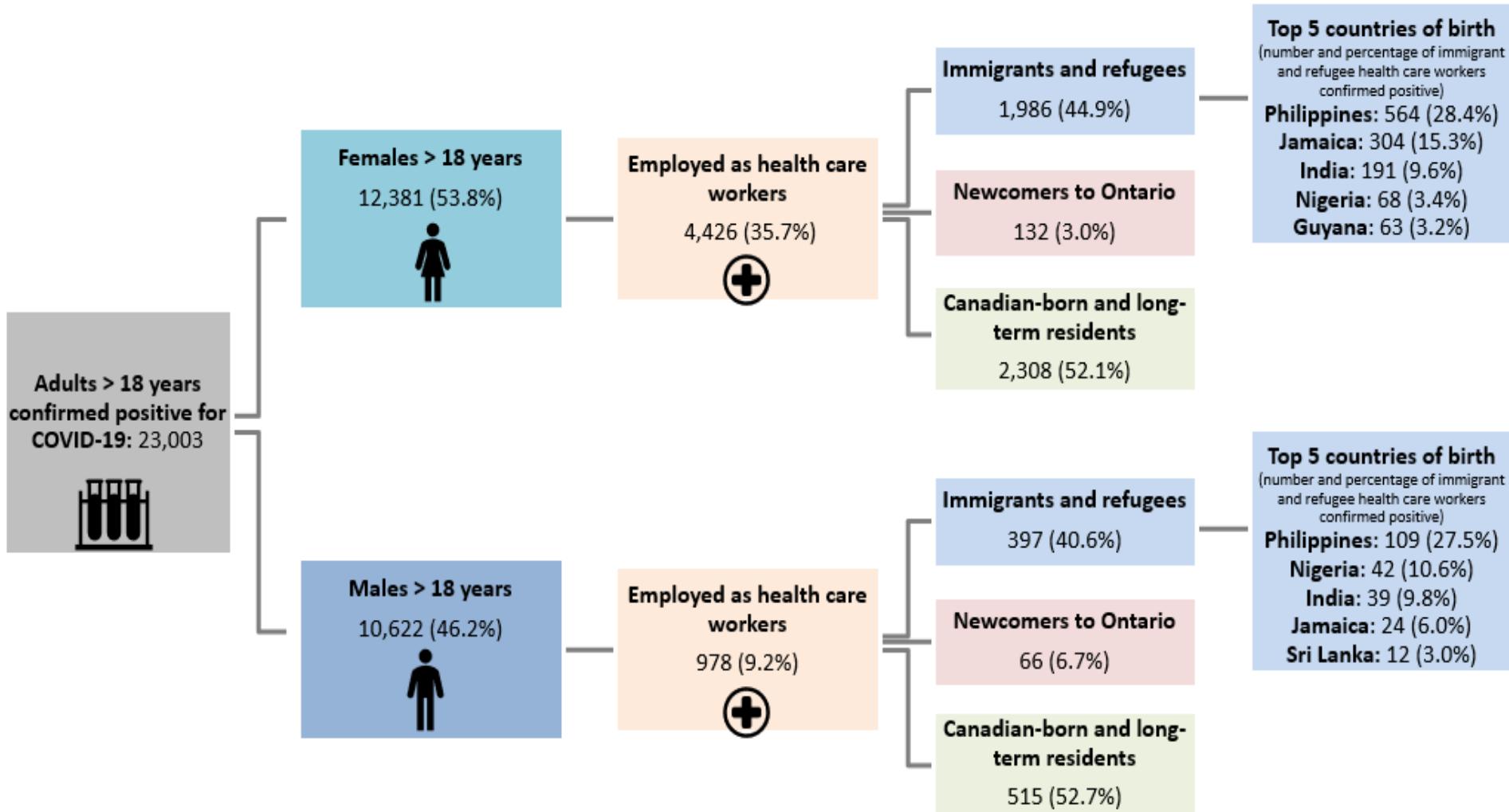
**May 28:** Expansion of testing to include asymptomatic contacts of confirmed cases in all populations and priority groups.

**September 24:** Testing restricted to symptomatic individuals and vulnerable populations only, in addition to contacts of confirmed cases.

**October 6:** COVID-19 testing by appointment only. Only symptomatic people or those in high-risk groups should be tested.

# Insights from linkages to occupational data

Overview of health care workers in Ontario confirmed positive for COVID-19, by immigration status, as of June 13, 2020



Notes: 1. Excludes long-term care residents. Immigrants and refugees are restricted to those who obtained permanent residency between 1985 and 2017. Newcomers include all those who migrated to Ontario from June 2017 onward and for whom no immigration data are available; includes both immigrants and those migrating from other provinces.



# Data at the Community level

- Separate immigrant reports for specific public health units
  - Co-created briefing notes for community engagement with newcomer organizations, settlement agencies
  - Used to target testing, vaccination strategy and advocacy
- Building capacity for communities to engage with THEIR data

# Novel coronavirus (COVID-19) Peel Health Surveillance



COVID-19 and the Social Determinants of Health:  
Race and Occupation

August 7, 2020

**In Mid-April Peel region along with other health units started collecting more detailed race, and occupation information on each case<sup>1</sup>**

**Peel population include 63% visible minority; 77% of cases were among visible minority groups**

**Covid-19 cases were most frequently reported among the following occupations: health, trades, transport, manufacturing**

**Data as a starting point for discussion with the community**

[www.peelregion.ca/coronavirus/\\_media/COVID-19-race-and-occupation.pdf](http://www.peelregion.ca/coronavirus/_media/COVID-19-race-and-occupation.pdf)



# Conclusions

- Data are important but not sufficient to move the needle on health inequities
- Many inequities will increase related to the wider repercussions from COVID-19
- Data is of communities and should serve communities
  - Models for access and governance