

**Key findings:**

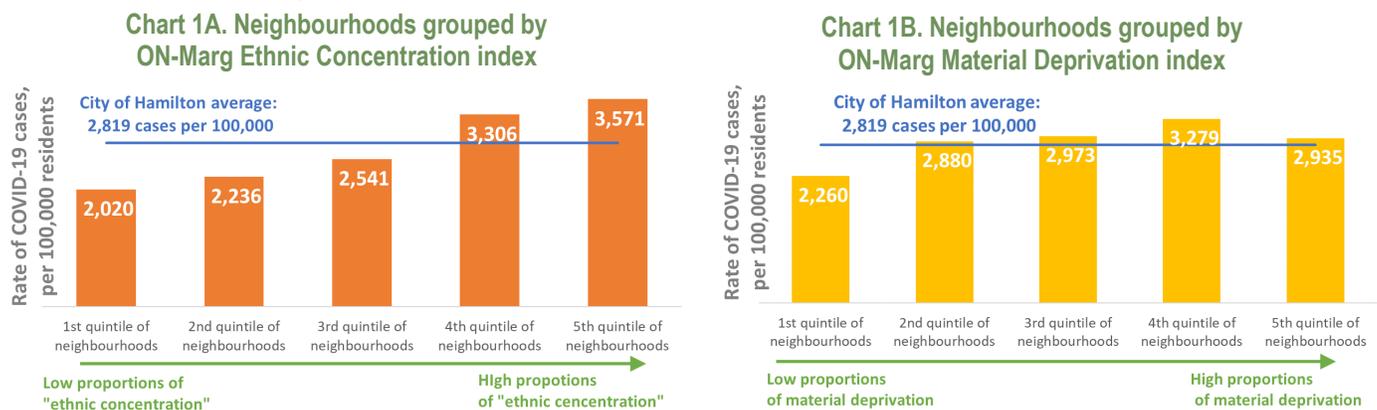
- ❖ **Neighbourhoods with high proportions of racialized residents have high rates of COVID-19 infections. Areas with low proportions of residents facing material deprivation have low rates of COVID-19 infections.**
- ❖ **Residents who identify as Arab/Middle Eastern, or West Asian, Black, and East or Southeast Asian have disproportionately been affected by COVID-19 in Hamilton.**
- ❖ **Public Health Agency of Canada's Intensifications of Inequalities model helps understand COVID-19's unequal impacts across our city and beyond.**

The SPRC's [first bulletins](#) on COVID-19 in August 2020 highlighted how the COVID-19 pandemic is taking its greatest health and economic toll on groups who experience marginalization, discrimination and inequality in our city and beyond.

To further investigate the extent of COVID-19's unequal impact in our city, charts from SPRC's 2020 COVID 19 bulletins have been updated with data up to April 19 2021 (14,235 cases). These charts show the average rate of COVID-19 infections across Hamilton's neighbourhoods. The charts divide Hamilton's 142 census tracts (neighbourhood areas) into five groups (quintiles) with each group accounting for 20% of Hamilton's population. Chart 1A groups the neighbourhoods by increasing proportion of ethnic concentration and chart 1B groups them by increasing proportion of material deprivation.

Material Deprivation and Ethnic Concentration are part of Public Health Ontario's [Ontario Marginalization Index](#), used to summarize characteristics of residents in small areas such as neighbourhood to understand inequalities in various measures of health and social well-being. Material deprivation is an index that combines census data on low income, low levels of education and high rates of disrepair of housing to summarize access residents' access to basic material needs. Ethnic concentration is an index that includes census data on the proportion of recent immigrants and proportion of people identifying as visible minorities (a term increasingly being replaced by racialized). Public Health Ontario explains that "areas that score highly on this dimension may contain a high proportion of recent immigrants or people (who may or may not be recent immigrants) identifying as 'visible minorities' or both. Generally speaking, this dimension is measuring populations who may experience marginalization related to racism and discrimination. This domain has varying — and often positive — impacts on health outcomes. Research on immigration in Ontario shows that newcomers to Canada often have better overall health outcomes, a phenomenon commonly known as the "healthy immigrant effect. At the same time, research is clear that both structural racism and anti-immigrant discrimination have profound negative impacts on individual, community and population health."

**Chart 1. Rate of COVID cases per 100,000 residents, City of Hamilton, by neighbourhoods grouped by ON-Marg index quintiles, cases as of April 19, 2021, City of Hamilton and Public Health Ontario data**



This updated chart (1A) shows that a clear racialization trend can be seen with COVID-19 rates ranging from 2,020 COVID cases per 100,000 in the neighbourhoods with the lowest concentration of racialized persons and/or recent immigrants to 3,571 COVID cases per 100,000 in the neighbourhoods with the highest proportions of these residents. This trend underscores Public Health Canada's Intensifications of Inequalities model (see next page) that helps explain disparities that racialized groups and newcomers are experiencing with COVID-19. Factors such as higher rates of

precarious jobs, low wages and over crowded housing among racialized and newcomer residents in our city are factors that contribute to these groups being affected by COVID-19 at much higher rates than other groups.

The gradient between quintile of neighbourhoods is not as stark for material deprivation (Chart 1B) as it is for ethnic concentration (Chart 1A), but the differences between the neighbourhoods with low material deprivation and high rates of material deprivation is still quite large. The most deprived neighbourhoods having almost more than 600 cases per 100,000 than the least deprived neighbourhoods. These data demonstrate that wealth is likely a protective factor against COVID-19, with neighbourhoods with the highest income and education, and good housing are seeing the lowest rates of COVID-19 infections.

The intersecting factors in PHAC's Intensification of Inequalities model are difficult to isolate in high level population data like this. For example, while provincial, national and international research confirms low income is an important factor in COVID-19 transmission, in Hamilton low-income residents are more likely to live alone than the average across the province (2016 Census). Living alone is a protective factor for COVID-19 transmission, but may exacerbate other impacts of COVID-19 when restrictions bring even more social isolation to individuals living alone. On the other hand, data provided in Bulletin 22 in this series shows an association between child poverty rates and COVID-19 infections at the neighbourhood level, indicating that the relationship between income and COVID-19 may be different for different groups living on low incomes, but not visible when low income is analysed at the aggregate level.

### Racialization and COVID-19

To further understand COVID-19 disparities faced by Hamilton's racialized communities, City of Hamilton Public Health's data on self-identified racial category of persons infected with COVID-19 is included in Chart 3. As summarized in the SPRC's Bulletin 16 [Visible Minority Residents in Hamilton](#), about 19% of Hamilton's residents identified as belonging to a visible minority in the 2016 Census. In contrast, Public Health data collected in 2020, shows 51% of residents infected with COVID-19 identified with a non-white racial group. Black residents made up 14% of respondents, followed by 12% who identified as East or Southeast Asian, and 8% who identified as Arab/Middle Eastern, or West Asian, Black.

Along with disproportionately high COVID-19 rates among these racialized groups, many of these same groups are experiencing high rates of discrimination during the pandemic. Statistics Canada reported that Chinese, Korean, Southeast Asian and Black participants were more than twice as likely as White participants to report that they had experienced discrimination during the pandemic. Recent immigrants (last 10 year arrival) more likely than established immigrants and Canadian-born participants to report experience(s) with discrimination over the course of the pandemic. ([Statistics Canada, Perceptions of personal safety among population groups designated as visible minorities in Canada during the COVID-19 pandemic](#), July 8 2020).

### Intensification of Inequalities

The Public Health Agency of Canada's (PHAC) model of "Intensification of Inequalities" explains COVID-19's multiple and intersecting factors involved in producing unequal outcomes, grouped into three key areas:

- **differential exposure**, meaning the "material circumstances of life" including inability to work from home, job security, access to paid sick leave, living conditions (number of people in the household, number of household units in residence), reliance on services such as public transit and childcare;
- **differential susceptibility**, referring to biological factors such as age, exposure to disease, underlying health issues including mental health, and behaviours such as smoking or nutrition; and
- **differential treatment**, in terms of access to and experiences with the health care system, including obstacles to accessing care such as inability to access care in one's own language, financial or logistical barriers, and access to services based on location.

Beyond this health model, a wholistic equity analysis of COVID-19 would add **differential impact of economic and social strains** on individuals based on factors such as job loss, housing insecurity, experiences of discrimination in employment and housing markets, and access to social and family support networks, among others.

The way COVID-19 magnifies existing inequalities such as race-based discrimination in labour markets and housing opportunities, further emphasizes the importance of an equitable recovery strategy to the COVID-19 pandemic such as policies promoted by the Hamilton Just Recovery Coalition ([www.justrecoveryhamilton.ca](http://www.justrecoveryhamilton.ca)). It also underscores the importance of implementing Ontario's equitable vaccination strategy which aims to reduce disparities in illness and deaths by taking into consideration social and occupational factors in COVID-19 vaccine delivery (see Bulletin 25).

Chart 2. Proportion of COVID-19 cases by self-identified racial group, City of Hamilton, March- August 2020. Data collected by City of Hamilton Public Health

