

**Covid-19 hot Spots, Cold Spots and  
Poverty**

**In praise of community housing**

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**Syllogism<sup>1</sup>:**

**Major premise:** Covid-19 hot spots tend to be overrepresented by people living in poverty.

**Minor premise:** Residents of community housing are some of the poorest people in the Toronto region.

**Conclusion:** Therefore, neighbourhoods with community housing<sup>2</sup> should all be hot spots.

This conclusion is wrong. Why?

Because the very first thing we need to remind ourselves is that there is **no direct connection** between the Covid-19 virus and poverty. When the virus makes contact with humans, it neither assesses their income levels nor their relative affluence. Accordingly, the relationship between poverty and the pandemic is indirect and not subject to deductive logic.

In this case, we have to base our conclusions on available relevant evidence.

From our research<sup>3</sup> and that of the Wellesley Institute,<sup>4</sup> we derived five interacting factors from the evidence that indirectly relate poverty to the pandemic. They are:

1. **Household size:** Poorer households tend to have more people.
2. **Overcrowding:** Lower-income households tend to be more overcrowded than richer ones.
3. **Capacity to self-isolate within a mutually dependent household:** Richer families can do this more easily than poor ones can.
4. **Capacity to avoid congregate settings:** Poorer people have less capacity to avoid congregate work or other congregate settings.
5. **Testing and vaccination rates:** Both are higher for people living in richer households.

The currently popular explanations for the COVID/poverty relationship may contain grains of truth, but they tend to be prejudicial and unhelpful. For example, issues

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<sup>1</sup> A syllogism is a kind of logical argument that applies deductive reasoning to arrive at a conclusion based on exactly two propositions that are asserted or assumed to be true. In a form, defined by Aristotle, from the combination of a general statement and a specific statement, a conclusion is deduced. (Wikipedia)

<sup>2</sup> Community housing is also known as subsidized housing, RGI housing, public housing, and social housing.

<sup>3</sup> [https://openpolicyontario.s3.amazonaws.com/uploads/2021/05/Mutually-Dependent-Adults\\_Toronto-CMA-30April-2021R.pdf](https://openpolicyontario.s3.amazonaws.com/uploads/2021/05/Mutually-Dependent-Adults_Toronto-CMA-30April-2021R.pdf)

<sup>4</sup> <https://www.wellesleyinstitute.com/wp-content/uploads/2021/04/An-uneven-recovery-Measuring-COVID-19-vaccine-equity-in-Ontario.pdf>

related to language barriers,<sup>5</sup> bad habits, and culture are distractions. The five factors listed above are supported by good evidence. Others aren't.

There are various sub-factors that relate to the five factors listed. The resources that poorer people do not have -- such as safe transportation, broadband, PPE, superior networks, and social capital – permeate the five principal factors.

### **The five factors and the hot spots**

We have established that there is no direct connection between Covid-19 and poverty. The virus has no capacity to make distinctions among the people it infects. We have identified the evidentiary factors that lead to more poor people being infected and transmitting the disease. Now, it is important to relate these factors to geographic hot and cold spots found on Covid-19 'heat maps'.

It is not surprising that the heat maps show hot spots in poorer areas and cold spots in richer areas. We must therefore deal better with inequity and poverty. But before we get there, it's important to note that hot and cold spots do not simply identify poverty.

Our research shows that hot spots like Brampton and Scarborough have larger homes, with high levels of overcrowding and high household sizes. They also have more adults living in mutual dependence within the households, with more limited ability to self-isolate. Both Brampton and Scarborough also have more households where family members cannot avoid working or gathering in congregate settings, such as meat packing or warehouse work.

All of this means that there are at least two explanations for Covid-19 hot and cold spots. One explanation is poverty. The other relates not to poverty, but to these specific features in **non-poor** households:

- Larger homes with many household members
- Difficulty self-isolating
- Inability to avoid congregate settings outside the home
- Overcrowding according to accepted definitions
- Vaccine avoidance or difficulty accessing vaccination.

Accordingly, for pandemic recovery to be effective, we cannot simply concentrate on the issue of poverty. We must also look at living conditions.

For example, as we have written elsewhere,<sup>6</sup> a possible new wave of the pandemic could incentivize highly destructive 'blanket' stay-at-home orders. These can result in the intensification of hot spots while making cold spots 'colder'.

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<sup>5</sup> <https://www.nytimes.com/2021/05/05/nyregion/vaccinations-asian-americans.html>

## **The counterfactual – community housing units**

The five factors we have noted lead us to ask whether there are poor people who are less affected by Covid-19 because of their living arrangements.

There are approximately 80,000 community housing units in the City of Toronto and a total of about 125,000 in the Toronto Census Metropolitan Area (CMA).

There have been no reports of hot zones where community housing is concentrated, even though the residents of community housing are overwhelmingly poor and among the lowest-income residents in the City of Toronto and the Toronto CMA.

You have to be poor to get in. Most residents are social assistance recipients and low-income seniors.

So why are hot spots that are characterized by poverty not more concentrated in community housing?

## **Small household size in community housing**

It turns out that people living in community housing have the *smallest* average household size, when compared to non-subsidized tenants and homeowners:<sup>7</sup>

- Subsidized tenants: 2.0 persons per household
- Non-subsidized: 2.2
- Homeowners: 2.7

Maps 1 & 2 show that community housing units in the City of Toronto are mostly located in areas that are not in hot zones:

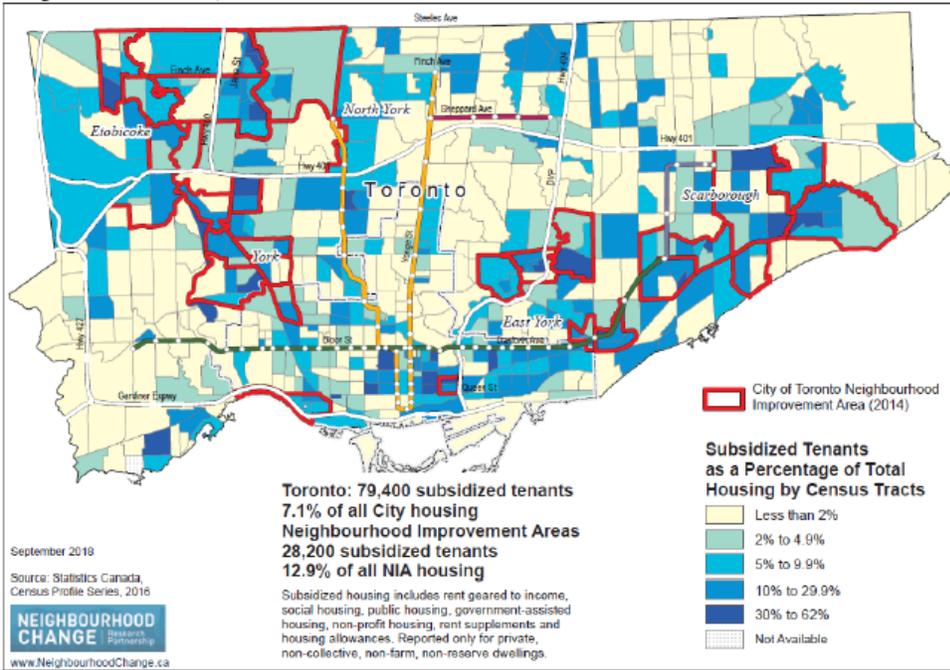
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<sup>6</sup> Forthcoming: Maaranen, Stapleton and Yuan, “Why do we have covid-19 hot spots? What are the real reasons?”

<sup>7</sup> Statistics Canada, Census Profile Series, 2016 and Working-Age Custom Tabulation

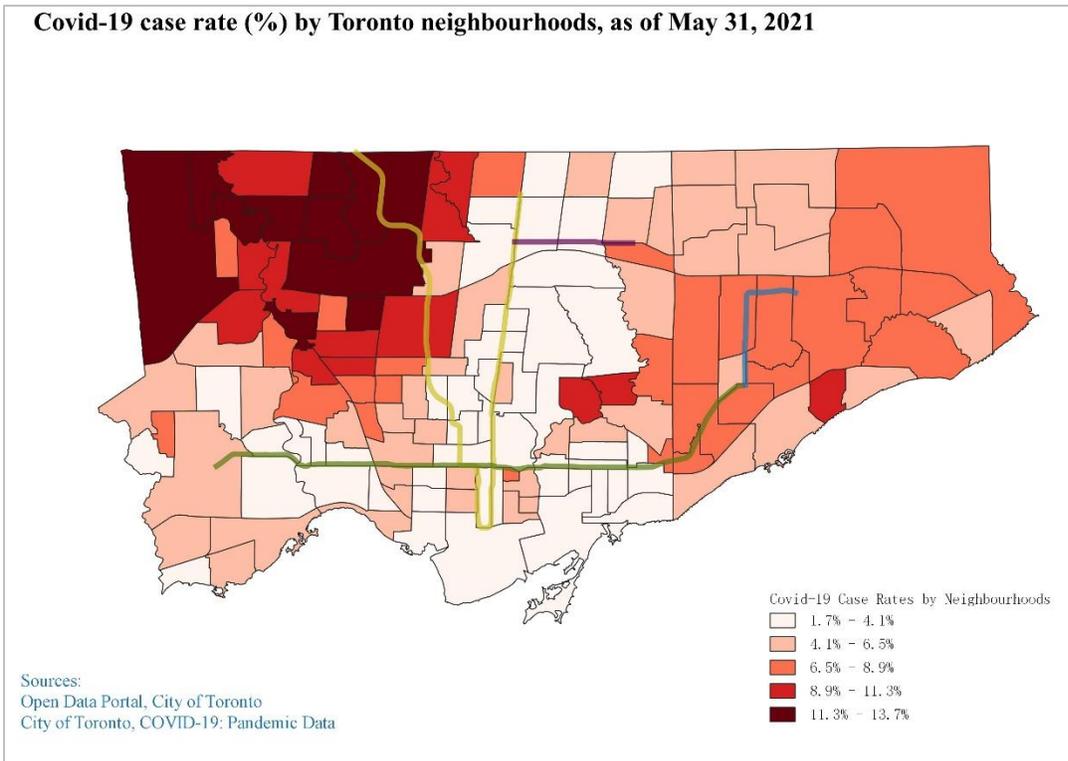
Map 1

**Subsidized Tenants, Percentage of All Housing  
City of Toronto, 2016**



Map 2:

**Covid-19 case rate (%) by Toronto neighbourhoods, as of May 31, 2021**



## **Lower levels of overcrowding**

Concentrations of mutually dependent adults in larger households contribute to high Covid-19 incidence. North Scarborough, where subsidized unit concentration is *one-third* of what it is in the rest of Toronto,<sup>8</sup> has most of Scarborough's hot zones. The same configuration is also true in Brampton, which has the highest concentration of multi-family dwellings in Canada.

Community housing tenants do not need to bring in additional working occupants to make their rent affordable. Rent remains at 30% of household income no matter how many people live in the unit.

Overcrowding is less prevalent in community housing than it is in private market housing, both rented and owned:<sup>9</sup>

- Subsidized tenants: 18% overcrowded households
- Non-subsidized tenants: 24%
- Homeowners: 7%

## **Capacity to self-isolate and avoid congregate settings**

Toronto's public housing provider, TCHC, has actively promoted self-isolation and avoidance of congregate settings.<sup>10</sup> This has come in the form of education, common area restrictions, elevator protocols, and hallway rules.

## **Vaccine availability in community housing**

TCHC is making special resources available to tenants to become vaccinated.<sup>11</sup> That makes it likely that more TCHC residents are being vaccinated than low-income and poor residents in private housing.

In addition, TCHC properties are most often located in areas of the city with superior transportation and access to hospitals and clinics. (See map 1 that clearly shows, for example, larger concentrations of community housing in southern vs. northern Scarborough).

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<sup>8</sup> [https://openpolicyontario.s3.amazonaws.com/uploads/2019/10/Double-or-Nothing\\_web-FINAL-R2.pdf](https://openpolicyontario.s3.amazonaws.com/uploads/2019/10/Double-or-Nothing_web-FINAL-R2.pdf)

<sup>9</sup> Statistics Canada, Census Profile Series, 2016 and Working-Age Custom Tabulation

<sup>10</sup> <https://www.torontohousing.ca/residents/community-services/Pages/COVID-19-Safety-Plan.aspx>

<sup>11</sup> <https://www.torontohousing.ca/residents/community-services/Pages/COVID-19-vaccine.aspx>

## Conclusion

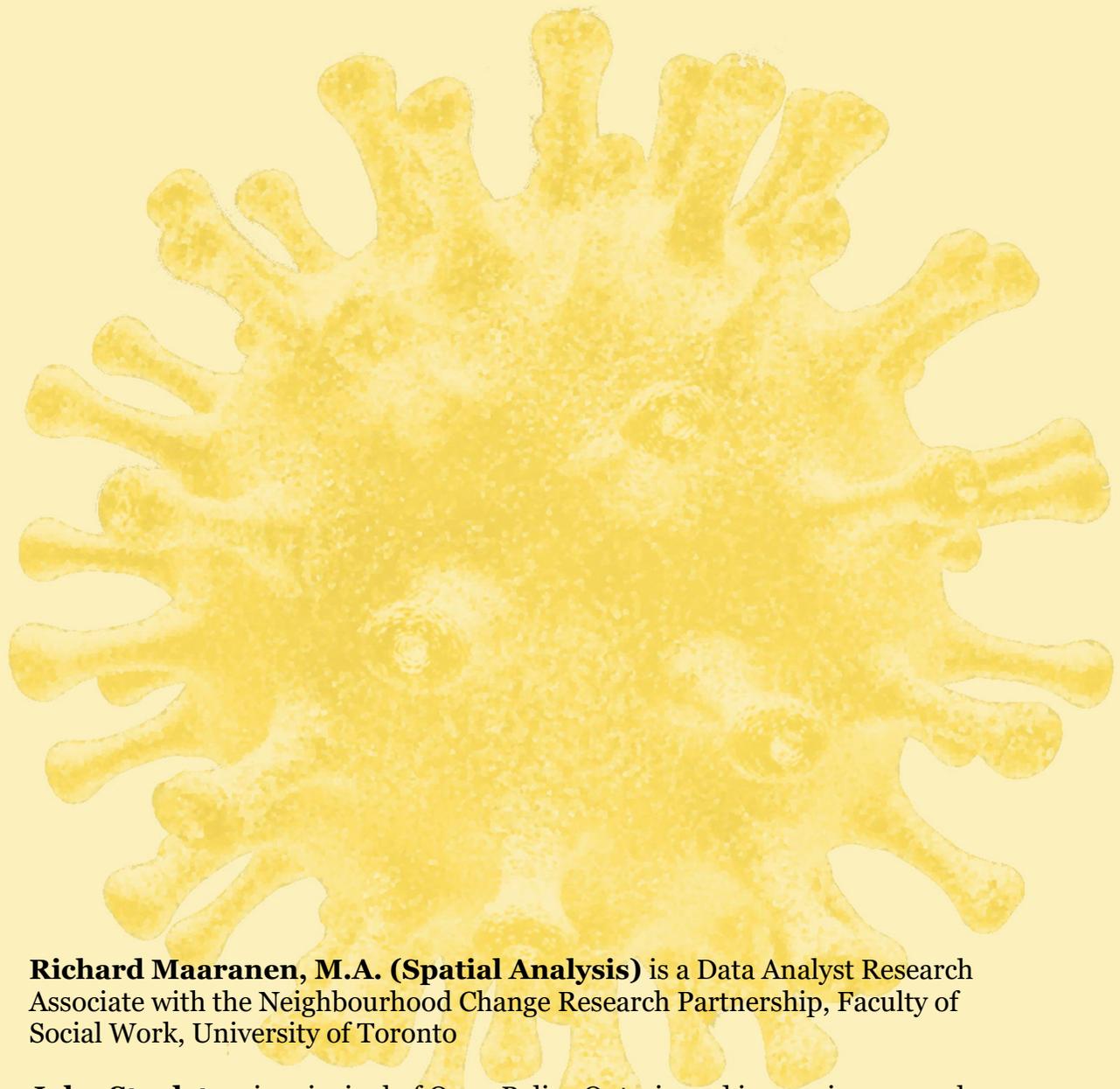
Even though community housing tenants are among our poorest residents, community housing has been successful in mitigating all five of the factors we have identified that create hot spots:

1. Their household size is smaller than that of unsubsidized tenants and homeowners.
2. Overcrowding is less prevalent.
3. They therefore have greater capacity to self-isolate.
4. Community housing policies, procedures, and public education enable them to avoid congregate settings.
5. Community housing resources were dedicated to enabling vaccination.

The result is that community housing forms Covid-19 cold spots, even though the correlation of poverty and Covid-19 would have designated them as hot spots.

Moreover, hot spots are prevalent where community housing is *least* available, in areas such as Brampton and Scarborough. In these areas, housing conditions often align negatively with the five factors.

Housing and public health policy makers need to keep this in mind as we transition from crisis management to planning. Community housing has proven itself to be a viable option for containing Covid-19 transmission among some of our poorest residents



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