



## **A Brief Scan of COVID-19 Impacts on People Experiencing Homelessness: System Impacts and Responses**

Jakob Koziel, Maria Savidov, and Andrea Frick

This is part 2 of a 3-part series entitled,  
*A Brief Scan of COVID-19 Impacts on People Experiencing Homelessness.*

Correspondence concerning this article should be disclosed to Bissell Centre, 10527 96 Street,  
Edmonton AB, T5H 2H6. Email: [research@bissellcentre.org](mailto:research@bissellcentre.org)

# Table of Contents

<b>Introduction</b>	3
<b>Methods</b>	3
<b>Acknowledgments</b>	3
<b>Disclaimer</b>	4
<b>The system impacts of COVID-19 on populations experiencing homelessness</b>	4
Hospital care system	4
Unemployment	4
Evictions	4
<b>Responses and strategies focused on mitigating system impacts</b>	5
Permanent Housing	5
Temporary Housing in Hotels or Motels	5
Innovative Collaborations	7
<b>Conclusion</b>	9

## **Introduction**

The World Health Organization declared a global outbreak of the coronavirus disease 2019 (COVID-19) on March 11<sup>th</sup>, 2020<sup>1</sup>. The virus is two times more deadly than the influenza virus and can cause a plethora of deleterious health outcomes<sup>2</sup>. Additionally, COVID-19 poses a particular risk for those who already suffer from or who have a higher risk of suffering from pre-existing medical conditions, such as populations experiencing homelessness<sup>3-7</sup>.

This report summarizes the emerging literature, media reports and homelessness-serving systems' responses to the pandemic and the system impacts that it has had pertaining to those who experience homelessness.

Any strategies and recommendations presented in this report are intended to be suggestive and exploratory as opposed to prescriptive. That is, this paper is to serve as a starting point for readers interested in doing more research on topics related to COVID-19 and homelessness. Additionally, the purpose of this report is to learn from the global response to the reality of homelessness in the pandemic and understand the evidence of various responses to the pandemic to assist with informing regional practice, program, and policy decision making.

## **Methods**

Initially, we conducted an online media and academic search on COVID-19 among populations experiencing homelessness and shelters between March 30<sup>th</sup> and April 26<sup>th</sup>, 2020. We also conducted one-on-one telephone interviews with 5 shelters across Canada and the United States to gain an "on the ground" perspective during the early stages of the pandemic.

Since April 26<sup>th</sup>, we have been reviewing daily online news reports, as well as documents published in the academic (i.e. peer-reviewed journal articles) and grey (i.e. evaluations, government documents, working papers, etc.) literature to understand the impact of COVID-19 on equity-deserving populations or those experiencing homelessness as well as developing strategies focused on helping to mitigate that impact.

Our end date for our literature and media search was September 3<sup>rd</sup>, 2020. Literature and media searches revealed that most of the research originates from the United States and only a handful have been conducted elsewhere including Canada and England.

## **Acknowledgments**

We would like to acknowledge and thank the following individuals for their work in reviewing and providing feedback for the paper:

Denise Adams (Canadian Research Initiative in Substance Misuse)  
Don Voaklander (Injury Prevention Centre)  
Karen Edwards (Community-University Partnership)  
Kathy Belton (Injury Prevention Centre)  
Sandra Ngo (Edmonton Social Planning Council)

## **Disclaimer**

Given the heightened risk that COVID-19 poses to individuals experiencing homelessness, the academic and grey literature, while small, has been growing at a rapid pace and suggesting responses for agencies to implement to mitigate this crisis within populations experiencing homelessness. However, due to the novelty of the COVID-19 pandemic, most of the research on this topic is new. As such, most of the research contained in this report has not yet been peer-reviewed and may change or be refuted in the future.

Please note, this report is not meant to be an academic paper or systematic review but rather a summary and snapshot of the emerging media reporting and academic investigations of the pandemic's impact on the previously mentioned populations during a specific timeframe (March 30<sup>th</sup> – September 3<sup>rd</sup> 2020).

The hope is that this report will stimulate further research and inter-agency collaboration on the topics presented here to support those experiencing homelessness. As this work is exploratory, we are continuously conducting additional work on these topics.

## **The system impacts of COVID-19 on populations experiencing homelessness**

### **Hospital care system**

The high prevalence of COVID 19 among populations experiencing homelessness will also place a greater burden on hospitals in the near future<sup>8</sup>. In one analysis, researchers utilized pre-COVID-19 health data from New York City and Los Angeles, to estimate not only the potential impact of COVID-19 on American populations experiencing homelessness but also the impact on the healthcare system caring for such populations<sup>9</sup>. The analysis estimates that these populations will be twice as likely to be hospitalized and two to four times more likely to require critical care than the general population due to COVID-19 in addition to a higher infection and fatality rate<sup>9</sup>. Specifically, 4.3% of the American homeless population (~21,295) will be hospitalized, with 7,145 (1.4%) requiring intensive care unit beds, and 3,454 fatalities (0.7%). The cost of mitigating and managing this crisis will be approximately \$11.5 billion<sup>9</sup>.

### **Unemployment**

Nations across the world have witnessed a rise in unemployment due to COVID-19 and it is expected that homelessness will increase<sup>10, 11</sup>. In New York City alone, the unemployment rate was just over 18% in June 2020, higher than for the whole state of New York<sup>12</sup>. In another example, service personnel in Calgary stated that the pandemic has made it more difficult for populations experiencing homelessness to find work, due, in part, to a lack of access to transportation<sup>13</sup>. In order to reduce unemployment amongst populations experiencing homelessness during the COVID-19 pandemic, experts suggest the use of effective and efficient prevention programs<sup>6, 14, 15</sup>.

### **Evictions**

The COVID-19 pandemic has left the rental and housing markets in a state of uncertainty. The pandemic continues to contribute to historic unemployment levels across the United States and Canada, with service providers predicting a significant increase for housing support needs<sup>7, 15-16</sup>.

Those involved in efforts to eradicate homelessness and poverty are expecting an increase in service demands with the expiration of eviction bans while service providers continue to advocate for increased long-term housing that offers social services<sup>7, 15-18</sup>.

### **Responses and strategies focused on mitigating system impacts**

#### **Permanent Housing**

Most researchers and policymakers have indicated that housing individuals permanently is the best strategy when combating the spread of COVID-19 among persons experiencing homelessness<sup>6, 19-24</sup>. The more that people can physically isolate in their homes, the lower the risk of COVID-19 spreading<sup>6, 23-24</sup>. Yet, simply moving those who experience homelessness into permanent housing is not enough. Often, individuals being placed in permanent or permanent supportive housing (PSH) will have pre-existing medical and mental health conditions and other needs that need to be addressed<sup>25</sup>. Thus, ensuring housed participants have access to food and other resources as well as other supports is also important<sup>21, 23-26</sup>.

Currently, the number of recently housed individuals who tested positive for COVID-19 is unknown. It is known that even with physical distancing and precautions that outbreaks are more common in shelters and spaces converted to shelters than in housed individuals<sup>27-29</sup>. In addition to preventing COVID-19 among individuals experiencing homelessness, there are also several societal benefits regarding permanent housing during the pandemic. Housing those experiencing homelessness will free up critically needed hospital beds during the pandemic as it has been estimated that they are twice as likely to be hospitalized than the general population<sup>9, 23-24</sup>. As such, reducing the strain on the healthcare system can result in better long-term system outcomes for communities<sup>21, 23</sup>.

There is emerging research that has begun to investigate the perceived risks and knowledge of COVID-19 as well as practices that reduce the risk of COVID-19 among those permanently housed. A study from Los Angeles surveyed 532 permanent supportive housing tenants and found that a large proportion are aware of the pandemic (99%) and perceive it to be a very serious threat (65%) to their health<sup>25</sup>. However, the researchers also found that tenants who lived in units containing shared bathroom facilities had a lower probability of social distancing than tenants living in studio apartments<sup>25</sup>. Additionally, those who identified as male perceived COVID-19 to be a less serious health risk than females while those who were diagnosed with a mental health diagnosis reported lower probability of handwashing compared to those with no mental health diagnoses<sup>25</sup>.

Based on their findings, the investigators suggested targeted outreach for those with mental health diagnoses<sup>25</sup>. Targeted outreach can include interventions focused on enhancing behaviours (daily functioning) that reduce the risk of transmitting COVID-19<sup>25</sup>.

#### **Temporary Housing in Hotels or Motels**

The second-best strategy in preventing COVID-19 among those experiencing homelessness is temporarily sheltering individuals in hotels, motels, or other spaces that are currently

unoccupied. Since the travel ban, hotels are vacant, freeing those spaces up for people in need of quarantine, or just needing to socially distance<sup>16</sup>. Advocates in some cities like Victoria and Ottawa are putting pressure on the government to purchase hotels in the hopes that they can be converted into affordable housing post-COVID-19<sup>30-33</sup>.

Since the start of the pandemic, jurisdictions in North America were successful in quickly housing many people in hotels and motels, thus reducing their chances of contracting or spreading COVID-19<sup>34</sup>. For example, in early April, California announced Project Roomkey, a plan to house 15,000 of the state's most high-risk populations experiencing homelessness in hotels, with funding from the U.S. Federal Emergency Management Agency<sup>35</sup>. Unfortunately, there has been a backlash and legal action among some communities who are opposed to accepting a high density of individuals experiencing homelessness in their neighborhood<sup>36-39</sup>. The communities fear that drug use and crime will rise as a result<sup>37, 40</sup>.

Among some hotels and motels that are acting as temporary shelters for homeless individuals, as well as shelters, there have been reports of property damage, theft, drug use, and abuse of staff<sup>37, 41-43</sup>. Hospitality staff are not trained or equipped to work with persons experiencing trauma, homelessness, and drug use<sup>6, 36</sup>. As such, more resources are needed to ensure needs for everyone are met.

As demonstrated, utilization of hotel vacancies presents logistical and fiscal difficulties. New York City estimates that moving the entire population experiencing homelessness into hotel rooms could cost the city \$82 million a month<sup>44</sup>. San Francisco is moving individuals experiencing homelessness into hotel rooms at an unprecedented speed, but this still is not fast enough to meet demand<sup>44</sup>. People who use drugs (PWUDs) have unique struggles staying in place at hotels and need special consideration and supports such as "safe supply" of unadulterated substances<sup>20, 45</sup>. While hospitality settings are a viable stop-gap for the great need for social isolation, long term post-pandemic solutions need to be in place for persons experiencing homelessness<sup>46-48</sup>.

Despite the challenges in housing those who are homeless, there is mounting evidence to suggest that sheltering those experiencing homelessness is the preferential strategy in mitigating the spread of COVID-19 compared to doing nothing.

Researchers from Boston developed a Clinical and Economic Analysis of COVID-19 intervention model to test the effectiveness of eight COVID-19 management strategies for those living in Massachusetts and experiencing sheltered homelessness<sup>49</sup>. The researchers simulated various epidemic scenarios with varying reproduction numbers, expected number of positive COVID-19 cases, along with different strategies that would be implemented including, but not limited to, sheltering homeless populations in temporary housing<sup>49</sup>. The researchers also assessed whether testing everyone that has the virus by analyzing the virus' DNA, otherwise known as universal polymerase chain reaction (PCR) testing, is effective compared to not testing anyone or only testing those who are symptomatic<sup>49</sup>. Results from the analysis suggests that temporary

housing, along with universal PCR testing every two weeks, is the costliest but most efficient strategy in reducing COVID-19<sup>49</sup>.

### **Innovative Collaborations**

The pandemic has resulted in many diverse collaborations: non-profit organizations and governments have collaborated together to provide essential needs and physically distanced shelters<sup>50-54</sup>.

Restaurants and food banks have been working together with shelters to provide much-needed meals for individuals experiencing homelessness<sup>7, 55, 56</sup>. Established in May, 2020, the Juneau Cares Act, established by the United Way of Southeast Alaska, pays up to \$1 million in support of restaurants serving food to those in need<sup>57-58</sup>. Companies, such as TELUS, have collaborated with health care providers to provide communications or mobile medical units to shelters, encampments, and other homeless communities<sup>59</sup>. The Metropolitan Transit Authority in Houston provides cabs to transport those seeking healthcare to testing sites<sup>60</sup>.

Providing meals and medical services to camps enables individuals to stay in place, which helps prevent the spread of COVID-19 and sends a message of goodwill and caring. Providing safe transportation enables more individuals to be tested and avoid public transit. Providing phone services helps isolated individuals keep connected to friends and family in isolation<sup>61</sup>.

A Boston study described an inclusive COVID-19 response model for populations experiencing homelessness and people who are marginally housed<sup>62</sup>. The model consisted of various moving parts including Front-Door Symptom Screening, Isolation and Management Venues, Shelter-Based Infection Control, Real-Time Surveillance, Command Structure and Organizational Dynamics, as well as exposure, screening, contact tracing, and quarantine<sup>62</sup>. The authors of the study found that in the initial phases, a vast majority of individuals who tested positive were asymptomatic<sup>62</sup>. As such, the model made the following adjustments:

- De-emphasizing symptomatic screening and instead focusing on universal testing with an emphasis on conducting testing in shelters with greater confirmed COVID-19 activity.
- Operating under the assumption of “universal exposure” given the high prevalence of COVID-19 infection which allowed (1) quarantine tents to be used as another isolation venue for symptomatic people awaiting results and (2) scaling back contact tracing efforts which allowed personnel to focus on other response activities.
- Expanding management and isolation sites and increasing the number of beds for those with no or minimal symptoms who were not allowed to stay in shelters but did not need hospitalization.

Local and provincial governments have collaborated with local non-profit agencies<sup>22, 38, 53, 63</sup>. One example includes the Edmonton EXPO Centre initiative which leveraged significant space, food, and services with collaboration and funding from the government<sup>65</sup>. Two case studies

from New Brunswick and Texas showcased how local, provincial and state governments have responded to the COVID-19 crisis in collaboration with local communities<sup>55, 64</sup>.

In New Brunswick, agencies and government institutions were successfully able to mobilize a community response to provide transportation and food to equity-deserving populations across the province<sup>55</sup>. First, formal relationships were established between non-profit agencies, grassroot associations, and the provincial government to help communities roll out resources<sup>55</sup>. Given that the province already had pre-existing relationships with the community, this was easy and did not require any system changes<sup>55</sup>.

Next, coordinators were brought in and began to assess what resources and transportation needs each New Brunswick community needed and what strengths each community had<sup>55</sup>. Coordinators also met twice a week with each other as well as with community leaders<sup>55</sup>. To provide more streamlined communication between the province and communities, coordinators would receive the most up-to-date information from one another as well as the province and distill the information with communities in their region<sup>55</sup>.

Community development activities, such as asset mapping, were instrumental in the initial phases of the response as they helped communities organize quickly, given the already pre-existing relationships, and allowed coordinators and the province to know what communities were doing, what assets each community has to contribute, and a current contact list<sup>55</sup>. The authors mentioned that the province would have benefitted from a central phone service, along with an operator, to guide individuals to all services that they may qualify for<sup>55</sup>.

Benavides and Nukpezah (2020) examined how Dallas, Texas addressed the needs of populations experiencing homelessness during the pandemic<sup>64</sup>. First, the city of Dallas was able to apply several existing resources and capacities established prior to the pandemic in responding to COVID-19<sup>64</sup>. This included the creation of the Office of Homeless Solutions (OHS), an agency focused on nontraditional strategies of addressing homelessness as well as eliminating pre-COVID-19 barriers and collaborating with federal and state government agencies<sup>64</sup>.

Additionally, the city has also had years of experience in sheltering equity-deserving populations during natural disasters such as hurricanes<sup>64</sup>. This experience was applied directly in their response to the COVID-19 pandemic<sup>64</sup>. Secondly, in consultation with the city manager's office and the city council, OHS established an emergency shelter at a Convention Center<sup>64</sup>. Third, the OHS arranged for the city to contract with a hotel to serve as an isolation and quarantine centre for equity-deserving populations from shelter spaces<sup>64</sup>.

The City also worked in collaboration with other counties to assist with transitioning equity-deserving populations back into shelters while also aiding in the development of a plan should a resurgence of COVID-19 occur<sup>64</sup>. Next, to facilitate coordination and communication the city organized weekly conference calls and spoke with service providers, shelter operators, government officials, and others on what was being done, current needs in the community,



what should be brought up to the city council, various updates, how to best coordinate their efforts, and determine areas where the city could fill-in with operational and programmatic assistance<sup>64</sup>. Lastly, OHS partnered with Dallas County Health and Human Services and Parkland Hospital on all its efforts, including the establishment of a testing site for individuals experiencing homelessness and a medical plan for isolation of COVID-19 positive individuals discharged from hospitals<sup>64</sup>.

### **Conclusion**

There is a strong body of evidence that COVID-19 is especially dangerous for populations experiencing homelessness and can spread quickly if appropriate social distancing, protective and sanitization measures are not undertaken<sup>6, 27-29, 66</sup>. There have been many creative and collaborative responses around the world, which have had both positive and negative impacts in their respective communities. The pandemic has created urgency around the need to eradicate homelessness and has also thrust the living conditions and struggles of those who are homeless into the public consciousness<sup>6</sup>. It is critical that we learn from other communities and consider the impacts and evidence when we make decisions around interventions.

## References

1. World Health Organization. (2020, June 29). Timeline of WHO's response to COVID-19. Retrieved from: <https://www.who.int/news-room/detail/29-06-2020-covid-timeline>.
2. Alberta Health Services. (Updated 2020, August 24). Information for Albertans. Novel coronavirus (COVID-19). Retrieved from: <https://albertahealthservices.ca/topics/Page16997.aspx#about>
3. Government of Canada (2020, July 20). Vulnerable populations and COVID-19. Retrieved from: <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/vulnerable-populations-covid-19.html>
4. Blitz, M. (2020, May 14). Homeless residents in D.C. face high rates of COVID-19 infections and deaths. *WAMU*. Retrieved from: <https://wamu.org/story/20/05/14/homeless-residents-in-d-c-face-high-rates-of-covid-19-infections-and-deaths-during-quarantine/>
5. Ho, V. (2020, May 29). San Francisco's homeless deaths have tripled. Advocates blame city neglect during pandemic. *The Guardian*. Retrieved from: <https://www.theguardian.com/society/2020/may/29/san-francisco-homeless-deaths-coronavirus>
6. Perri, M., Dosani, N., & Hwang, S.W. (2020, June 29). COVID-19 and people experiencing homelessness: challenges and mitigation strategies. *Canadian Medical Association*, Vol 192, Issue 26. Retrieved from: <https://www.cmaj.ca/content/cmaj/192/26/E716.full.pdf>.
7. Crowe, C. (2020, April 15). 1.5m households to become 'extremely low-income' due to COVID-19. *Smart Cities Dive*. Retrieved from:

<https://www.smartcitiesdive.com/news/coronavirus-affordable-housing-crisis-homeless-national-league-of-cities-webinar/576040/>.

8. Worldcrunch News. (2020, July 2). Bad to worse: the homeless and COVID-19. Retrieved from: <https://worldcrunch.com/coronavirus/bad-to-worse-the-homeless-and-covid-19>.
9. Culhane, D., Treglia, D., Steif, K., Kuhn, R., & Byrne, T. (2020). Estimated emergency and observational/quarantine capacity need for the US homeless population related to COVID-19 exposure by country; projected hospitalizations, intensive care units and mortality. University of Pennsylvania, Philadelphia, PA. University of California, Los Angeles, CA. Boston University, Boston, MA. Retrieved from: [https://endhomelessness.org/wp-content/uploads/2020/03/COVID-paper\\_clean-636pm.pdf](https://endhomelessness.org/wp-content/uploads/2020/03/COVID-paper_clean-636pm.pdf).
10. International Labour Organization. (2020, March 18). Almost 25 million jobs could be lost worldwide as a result of COVID-19, says ILO. Retrieved from: [https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS\\_738742/lang--en/index.htm](https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_738742/lang--en/index.htm).
11. Thompson, A. (2020, June 21). Pandemic creates new layer of problems for homeless. The Daily Record. Retrieved from <https://www.the-daily-record.com/story/news/local/2020/06/21/pandemic-creates-new-layer-of-problems-for-homeless/112773574/>.
12. Cline-Thomas, A. (2020, June 22). Growing concern pandemic could cause spike in homeless population. CBS New York. Retrieved from:

<https://newyork.cbslocal.com/2020/06/22/growing-concern-pandemic-could-cause-spike-in-homeless-population/>

13. Gilson, D. (2020, June 29). Pandemic poses new challenge in fight against rural homelessness in Alberta. CBC News. Retrieved from:  
<https://www.cbc.ca/news/canada/calgary/homeless-strathmore-pandemic-covid-rural-alberta-1.5631102>.
14. HUD Exchange. (2020). Homeless system response: supporting individuals exiting isolation or quarantine. Retrieved from:  
<https://files.hudexchange.info/resources/documents/COVID-19-Homeless-System-Response-Supporting-Individuals-Exiting-Isolation-or-Quarantine.pdf>.
15. Conway, D. (2020, July 30). Challenges, opportunities arise for homeless service providers. Your Observer News. Retrieved from: <https://www.youobserver.com/article/sarasota-homeless-service-providers-evictions-covid-19>.
16. Feinberg, R. (2020, July 22). The pandemic has advocates rethinking Maine's homeless shelters and resource system. Maine Public. Retrieved from:  
<https://www.mainepublic.org/post/pandemic-has-advocates-rethinking-maines-homeless-shelters-and-resource-system>.
17. Koseff, A. (2020, July 29). Bay Area counties can spend millions buying hotels for homeless people, but timeline is tight. San Francisco Chronicle. Retrieved from:  
<https://www.sfchronicle.com/politics/article/Bay-Area-counties-can-spend-millions-buying-15440889.php>.

18. Miranda, L. (2020, July 15). A 'tsunami of evictions' is coming, warn housing advocates. NBC News. Retrieved from: <https://www.nbcnews.com/business/business-news/tsunami-evictions-coming-warn-housing-advocates-n1233965>.
19. Koshiba, J. (2020). *Flattening the next curve: addressing housing & homelessness in the era of COVID-19*. Retrieved from: <https://www.capitol.hawaii.gov/committeefiles/special/COV/Document/Non-Profit%20&%20Community/05-04-20%20James%20Koshiba%20Housing%20&%20Homelessness%20Proposal.pdf>.
20. Canadian Research Initiative on Substance Misuse (2020, May 17th). Supporting people who use substances in shelter settings during the COVID-19 pandemic. Retrieved from: <https://crism.ca/wp-content/uploads/2020/06/CRISM-Guidance-Supporting-People-Who-Use-Substances-in-Emergency-Shelter-Settings-V1.pdf>.
21. Viglienzoni, C. (2020, May 20). Stimulus plan holds money to help house homeless. WCAX News. Retrieved from: <https://www.wcax.com/content/news/Stimulus-plan-includes-money-to-help-house-homeless-570638241.html>.
22. Babych, S. (2020, July 16). Calgary's homeless shelters readjusting pandemic response strategies but hygiene practices here to stay. Calgary Herald. Retrieved from: <https://calgaryherald.com/news/local-news/calgarys-homeless-shelters-readjusting-pandemic-response-strategies-but-hygiene-practices-here-to-stay>.
23. Canadian Alliance to End Homelessness (2020, May 4). Getting back to housing: how Canadian Communities are adapting Coordinated Access to accelerate connections to

permanent Housing and build momentum to end homelessness once and for all.

Retrieved from <https://caeh.ca/wp-content/uploads/CAEH-Getting-Back-to-Housing.pdf>

24. Canadian Alliance to End Homelessness (2020, May 14). Bright spot: Chatham-Kent positions its COVID-19 shelter as a path to housing. Retrieved from:  
<https://caeh.ca/brightspot-chatham-kent-covid-19/>.
25. Henwood, B, F., Redline, B., & Lahey, J. (2020). Surveying Tenants of Permanent Supportive Housing in Skid Row about COVID-19. MedRxiv. [Pre-print].  
<https://doi.org/10.1101/2020.04.17.20070052>.
26. Baxter, M. (2020, May 11). COVID-19 shines a light on hidden homelessness. TV Ontario.  
Retrieved from: <https://www.tvo.org/article/covid-19-shines-a-light-on-hidden-homelessness>.
27. Centers for Disease Control and Prevention. (2020, May 16). Checklist for homeless service Providers during community re-opening. Retrieved from:  
<https://www.cdc.gov/coronavirus/2019-ncov/php/homeless-service-providers.html>
28. Centers for Disease Control and Prevention. (2020, August 3). Interim considerations for health departments for SARS-CoV-2 testing in homeless shelters and encampments.  
Retrieved from: <https://www.cdc.gov/coronavirus/2019-ncov/community/homeless-shelters/testing.html>
29. Centers for Disease Control and Prevention. (2020, Aug 6). Interim guidance on unsheltered homelessness and coronavirus disease 2019 (COVID-19) for homeless service providers and local officials. Retrieved from: <https://www.cdc.gov/coronavirus/2019-ncov/community/homeless-shelters/unsheltered-homelessness.html>

30. Good News Network. (2020, May 20). Canadian government buys hotels to house homeless people—and also rehire workers. Retrieved from:  
<https://www.goodnewsnetwork.org/canadian-government-buys-hotels-to-house-homeless-people-during-covid/>
31. Pringle, J. (2020, April 29). Hotel 2 homes campaign calls on federal government to buy hotels To house Ottawa’s homeless during pandemic. *CTV News*. Retrieved from  
<https://ottawa.ctvnews.ca/hotels-2-homes-campaign-calls-on-federal-government-to-buy-hotels-to-house-ottawa-s-homeless-during-pandemic-1.4916967>
32. CTV News Vancouver Island. (2020, May 15). B.C. buys Victoria hotel for homeless, affordable housing. Retrieved from: <https://vancouverisland.ctvnews.ca/b-c-buys-victoria-hotel-for-homeless-affordable-housing-1.4941181>.
33. Rey-Lefebvre, I. (2020, June 22). Sans-abri: la volonté de l’Etat d’éviter toute remise à la rue se heurte, en Ile-de-France, au manque de logements. *Le Monde*. Retrieved from:  
[https://www.lemonde.fr/societe/article/2020/06/22/sans-abri-la-volonte-de-l-etat-d-eviter-toute-remise-a-la-rue-se-heurte-en-ile-de-france-au-manque-de-logements\\_6043741\\_3224.html](https://www.lemonde.fr/societe/article/2020/06/22/sans-abri-la-volonte-de-l-etat-d-eviter-toute-remise-a-la-rue-se-heurte-en-ile-de-france-au-manque-de-logements_6043741_3224.html).
34. Lupton, A. (2020, May 6). Housing homeless in hotels has proven effective against COVID-19. *CBC News*. Retrieved from <https://www.cbc.ca/news/canada/london/housing-homeless-in-hotels-has-proven-effective-against-covid-19-1.5555879>.
35. CBS Los Angeles. (2020, May 11). Coronavirus: city opens downtown hotel to temporarily House homeless as part of Project Roomkey. *CBS News*. Retrieved from:

<https://losangeles.cbslocal.com/2020/05/11/coronavirus-city-opens-downtown-hotel-to-temporarily-house-homeless-as-part-of-project-roomkey/>.

36. Kelly, A. (2020, May 2). Neighbors express concern over homeless people staying at hotels.

CTV News. Retrieved from: <https://vancouverisland.ctvnews.ca/neighbours-express-concern-over-homeless-people-staying-at-hotels-1.4922569>.

37. DeRosa, K. (2020, July 15). Crime spikes around hotels for homeless in Victoria. Times

Colonist. Retrieved from: <https://biv.com/article/2020/07/crime-spikes-around-hotels-homeless-victoria>.

38. Buffam, R. (2020, July 10). CRD mulls converting old Oak Bay care-home into temporary

homeless shelter. CTV News. Retrieved from: <https://vancouverisland.ctvnews.ca/crd-mulls-converting-old-oak-bay-care-home-into-temporary-homeless-shelter-1.5019009>.

39. Smee, M. (2020, June 24). Fast-tracked plan to build apartments for people experiencing

homelessness gets push-back from neighbours. CBC News. Retrieved from:

<https://www.cbc.ca/news/canada/toronto/fast-tracked-plan-to-build-apartments-for-people-experiencing-homelessness-gets-push-back-from-neighbours-1.5624260>.

40. Wakefield, J (2020, May 29). Edmonton resumes homeless camp removal, focused on

camps that pose health, safety risk. Edmonton Journal. Retrieved from:

<https://edmontonjournal.com/news/local-news/edmonton-resumes-homeless-camp-removal-focused-on-camps-that-pose-health-safety-risk>.

41. CBS New York. (2020, July 29). Homeless individuals moved out of Hell's Kitchen Hotel that

took them in during peak of COVID-19 pandemic. CBS News. Retrieved from:

<https://newyork.cbslocal.com/2020/07/29/washington-jefferson-hotel-shelter/>.



42. McMordie, L. (2020, June 26). Why some homeless people prefer sleeping rough to hostels or hotels. The Conversation. Retrieved from: <https://theconversation.com/why-some-homeless-people-prefer-sleeping-rough-to-hostels-or-hotels-139414>.
43. Sweet, J. (2020, July 3). Homeless people and shelters face new realities of COVID-19. CBC News. Retrieved from: <https://www.cbc.ca/news/canada/new-brunswick/pandemic-affects-homeless-life-1.5634290>.
44. Blumgart, J. (2020, April 28). Why US cities haven't just given every homeless person a hotel room during the pandemic. City Metric. Retrieved from <https://www.citymetric.com/fabric/why-us-cities-havent-just-given-every-homeless-person-hotel-room-during-pandemic-5003>.
45. D'Entremont, Y. (2020, May 21). Harm reduction: how homeless people are getting their drugs During a COVID quarantine. Halifax Examiner. Retrieved from: <https://www.halifaxexaminer.ca/featured/harm-reduction-how-homeless-people-are-getting-their-drugs-during-a-covid-quarantine/>.
46. Paterson, S. (2020, May 7). Housing First in plan to take homeless from hotels into homes after lockdown. The Glasgow Times. Retrieved from: <https://www.glasgowtimes.co.uk/news/18433134.housing-first-plan-take-homeless-hotels-homes-lockdown/>.
47. Patterson, M. (2020, May 29). Homeless camps offer lesson for phase two of housing plan. My Cowichan Valley Now. Retrieved from: <https://www.mycowichanvalleynow.com/58639/homeless-camps-offer-lessons-for-phase-two-of-housing-plan/>.

48. Freeman, J (2020, June 1). Toronto developing next phase of COVID-19 response for the homeless. CP24 Toronto News. Retrieved from: <https://www.cp24.com/news/toronto-developing-next-phase-of-covid-19-response-for-the-homeless-1.4964319>.
49. Baggett, T. P., Scott, J. A., Le, M, H., et al. (2020). Clinical Outcomes, Costs, and Cost-effectiveness of Strategies for People Experiencing Sheltered Homelessness During the COVID-19 Pandemic. medRxiv [pre-print].  
<https://doi.org/10.1101/2020.08.07.20170498>.
50. O'Donnell, C. (2020, June 18). Hillsborough plans big push to reduce chronic homelessness with emergency COVID-19 funds. Tampa Bay Times. Retrieved from:  
<https://www.tampabay.com/news/health/2020/06/18/hillsborough-plans-big-push-to-reduce-chronic-homelessness-with-emergency-covid-19-funds/>.
51. Van Buskirk, C. (2020, July 21). Pandemic forced innovation to safeguard people who are homeless. WGBH News. Retrieved from: <https://www.wgbh.org/news/local-news/2020/07/21/pandemic-forced-innovation-to-safeguard-people-who-are-homeless>
52. Feinberg, R. (2020, July 22). The pandemic has advocates rethinking Maine's homeless shelters and resource system. Maine Public. Retrieved from:  
<https://www.mainepublic.org/post/pandemic-has-advocates-rethinking-maines-homeless-shelters-and-resource-system>.
53. CBC News. (2020, June 26). Homeless shelters get \$760K from Manitoba government. Retrieved from: <https://www.cbc.ca/news/canada/manitoba/manitoba-homeless-shelters-covid19-pandemic-1.5628310>.

54. Christensen, J. (2020, June 16). In Yellowknife and Iqaluit, the pandemic response for the North has included bold housing programs and harm reduction measures. Let's build on them. Policy Options. Retrieved from: <https://policyoptions.irpp.org/magazines/june-2020/covid-19-has-changed-how-we-respond-to-northern-homelessness/>
55. Pei, N., Leclair, S., Leclerc, D., Heelis, A., Wright, C. (2020). Case study | New Brunswick's COVID-19 response to vulnerable populations. Tamarack Institute. Retrieved from <https://www.tamarackcommunity.ca/hubfs/Resources/Case%20Studies/Case%20Study%20-%20New%20Brunswichs%20COVID%20Response%20to%20Vulnerable%20Populations.pdf?hsCtaTracking=beeacfd-9f53-4fc9-ab64-7ce596d54532%7C9ffdb347-534b-4dfd-8fba-26c435afc8f0>.
56. Richmond, R. (2020, April 30). Food bank partners with local chefs to supply bag lunches to Homeless. The London Free Press. Retrieved from <https://lfpres.com/news/local-news/food-bank-partners-with-local-chefs-to-supply-bag-lunches-to-homeless/>.
57. City News. (2020, June 30). Program would give restaurants virus funds to feed homeless. Retrieved from: <https://www.citynews1130.com/2020/06/30/program-would-give-restaurants-virus-funds-to-feed-homeless/>.
58. City and Borough of Juneau. (2020, May 1). Uninsured or underinsured? CARES Act- Coronavirus aid, relief, and economic security act. Retrieved from: <https://beta.juneau.org/newsroom-item/cares-act-aims-to-cover-uninsured-and-underinsured-for-covid-19-care>.

59. Mazzucco, L. (2020, April 23). Here's how Mississauga's homeless population is receiving assistance amid the COVID-19 outbreak. Insauga. Retrieved from <https://www.insauga.com/heres-how-mississaugas-homeless-population-is-receiving-assistance-amid-the-covid-19-outbreak>.
60. Whalen, E. (2020, April 28). New coronavirus testing hotline serves Houston's homeless population. Community Impact Newspaper. Retrieved from <https://communityimpact.com/houston/heights-river-oaks-montrose/coronavirus/2020/04/28/new-coronavirus-testing-hotline-serves-houstons-homeless-population/>.
61. Chan, A. (2020, May 12). B.C gives thousands of smartphones to homeless amid pandemic. CTV News. Retrieved from: <https://vancouverisland.ctvnews.ca/b-c-gives-thousands-of-smartphones-to-homeless-amid-pandemic-1.4935905>.
62. Baggett T.P., Racine M.W., Lewis, E., et al. (2020) Addressing COVID-19 Among People Experiencing Homelessness: Description, Adaptation, and Early Findings of a Multiagency Response in Boston. Public Health Reports, 135(4): 435-441. <https://doi.org/10.1177/0033354920936227>.
63. Clay, B. (2020, May 10). Alberta supporting homeless and women's shelters. High River Online. Retrieved from: <https://highriveronline.com/local/alberta-supporting-homeless-and-women-s-shelters>.
64. Benavides AD, Nukpezah JA. How Local Governments Are Caring for the Homeless During the COVID-19 Pandemic. The American Review of Public Administration. 2020;50(6-7):650-657. <https://doi.org/10.1177/0275074020942062>.

65. Homeward Trust Edmonton (2020). EXPO Centre Pandemic Response Summary (March-July 2020). Homeward Trust Edmonton. Internal document.
66. Baggett, T.P., Keyes, H., Sporn, N., Gaeta, J.M. (2020). COVID-19 outbreak at a large homeless Shelter in Boston: Implications for universal testing. MedRxiv. [Pre-print].  
<https://doi.org/10.1101/2020.04.12.20059618>.