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Delivering Safe Emergency Social Services as a Host Community during a Pandemic

Structured Abstract

This research synthesizes the current literature and applied practices on the subject of delivering safe Emergency Social Services (ESS) during a pandemic for a host community.

The literature review identified that there are potential alterations to the current ESS delivery model that could reduce the potential for virus spread while providing ESS helps to provide an increased margin of safety for evacuees, CoPG residents, emergency workers and volunteers. Through the analysis, common strategies that could be implemented were: transportation, advanced registration, dispersed evacuation, pre-screening, contact tracing, ventilation, maximizing the use of cleaning supplies and personal protective equipment (PPE), cleaning, education, and information campaigns.

Introduction: Emergency planners face considerable challenges when planning for the natural disasters, while a pandemic is occurring. This two-fold emergency adds complexity because it requires considerable forethought and planning to achieve both simultaneous and conflicting objectives of limiting the spread of COVID-19 while also delivering emergency services. The City of Prince George (CoPG) provides Emergency Social Services (ESS) for not only their own residents, but also the multitude of communities located in the northern half of the province of British Columbia (BC). Mass evacuations, which requires the rapid removal of a large number of residents from disaster-impacted areas, can also inadvertently accelerate the transmission and spread of COVID-19 (Takaoka Kawati, & Kai, 2021). Investigating and implementing strategies that reduce the potential for virus spread while providing ESS helps provide



an increased margin of safety for evacuees, CoPG residents, emergency workers and volunteers. The following study is a review of practices used globally in evacuation centres and other similar purposed facilities, to reduce the spread of COVID-19 while providing essential services to a large population. These strategies were evaluated for applicability into CoPG's ESS plan. Elements of the research gained from the literature review that could increase safety for the CoPG's ESS plan are; transportation, advanced registration, dispersed evacuation, pre-screening, contact tracing, ventilation, maximizing the use of cleaning supplies and personal protective equipment (PPE), cleaning, education, and information campaigns. This study will make recommendations regarding how the CoPG can increase the safety of the ESS plan during the pandemic in order to reduce the transmission of the virus while providing host community services for neighboring communities.

Research Problem and Scope: This paper will endeavour to identify and analyze works related to the research questions: How can the City of Prince George emergency managers provide an increased margin of safety for evacuees, CoPG residents, emergency workers and volunteers when delivering ESS as a Host Community. This papers' scope is confined to: the COVID-19 pandemic and the City of Prince George ESS host delivery model.

Methods: This paper was conducted following Webster and Watson's (2002) approach to a review of literature in order to evacuate using the best practices in this field. The review was inclusive of primary and secondary research conducted to date. All research used during the research is peer reviewed.

Results/Findings: Elements of the research gained from the literature review that could increase safety for the CoPG's ESS plan are; transportation, advanced registration, dispersed evacuation, pre-screening, contact tracing, ventilation, maximizing the use of cleaning supplies and personal protective equipment (PPE), cleaning, education, and information campaigns.

Conclusions / Recommendations: This study highlights the opportunity for communities who provide ESS to improve the margin of safety for all involved looking at similar facilities and services and utilizing the strategies that have reduced virus spread. For the CoPG these were transportation, advanced registration, dispersed evacuation, prescreening, contact tracing, ventilation, maximizing the use of cleaning supplies and personal protective equipment (PPE), cleaning, education, and information campaigns. It is recommended that the CoPG look at the process in two stages. The first is early in the evacuation before or during travel, so that key information can be shared such as best practices for transportation; location of evacuation centres, and what to expect upon arrival can be



shared. The second stage is during the operation of the evacuation centre. Modifying current practices to include more evacuation centres, optimizing personal protective equipment and cleaning supplies, increasing ventilation, conducting pre-screening and contact tracing, as well as educating and targeted information campaigns can greatly decrease the spread of an infectious disease like COVFID-19 in the community. It will be key to work with other stakeholders like the Health Authority and Non-Government Organizations to meet the extra demands of conducting ESS during a pandemic.



References

- Takaoka, S., Kawata, Y., & Kai, T. (2021). A study of issues related to the operation of evacuation shelters in a corona-endemic society: Through the guidelines and training of Shiga Prefecture in Japan. *Journal of Disaster Research*, *16*(1), 40–47. https://doi.org/10.20965/jdr.2021.p0040
- Webster, J. & Watson, R.T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly*, 26(2), xiii-xxiii. http://www.jstor.org/stable/4132319