

What settings have been linked to SARS-CoV-2 transmission clusters? [version 2; peer review: 1 approved]. Leclerc QJ, Fuller NM, Knight LE ET AL. *Wellcome Open Res* 2020, 5:83 (<https://doi.org/10.12688/wellcomeopenres.15889.2>)

This study aimed to determine the types of settings in which SARS-CoV-2 transmission occurred. Accurate information on settings and outbreak events is essential for informing responses to SARS-CoV-2.

QUESTION The PICO of the study was not clear but appeared to be;

P – Settings/sites

O – COVID-19 case clusters

METHODS This study identified articles describing settings where transmission of SARS-CoV-2 had occurred and resulted in a cluster of cases, by searching for peer-reviewed articles in PubMed and media articles in Google. The settings were tabulated and estimates of the proportion of people in that setting who became infected provided.

RESULTS This study found that clusters of cases were reported in many, predominantly indoor settings.

DISCUSSION The following points were discussed;

There was concern about the adequacy of the search conducted and consequently that many events would not have been identified by the search strategy used. This was for the following reasons. The PubMed search was limited in its ability to identify settings because it did not contain search words and synonyms for possible sites (e.g. meat works OR abattoirs OR butchery; school* OR student OR education; funerals etc.) and was limited to English language only articles. Further, a search for pre-print articles and publicly available outbreak reports (such as those from the CDC Morbidity and Mortality Weekly report) did not appear to have been conducted.

It was felt that even if it were possible to locate all the publicly available information about outbreaks, there would still be a large amount of 'unpublished' information (such as that held by public health groups/contact tracers) that would need to be accessed to reliably inform this issue and to provide adequate detail about the settings. As only the interesting and unusual is published, the relativities of the number of 'actual' SARS-CoV-2 transmission events is not currently available, only the relative number of 'reported' events. CDC or equivalent agencies in each country may be responsible for making this essential information available.

The study states it is a systematic review, but does not report information consistent with this methodology. For instance, a clear research question and inclusion and exclusion criteria were not found. A PRISMA flow chart displaying the flow of articles resulting from the searches to those included and extracted was not provided. Further there was no attempt to critique the sources of information included or to summarise the types of sources utilized. The review is likely not replicable and is not reproducible as currently reported.

OVERALL SUMMARY The issue the review addresses is an important one –reliable information on settings that may be linked to clusters of cases is essential to inform lockdown restrictions and exit from them. However, given the significant concerns regarding the review methodology and likely absence of necessary outbreak information, the data presented is not representative of outbreak settings and the contribution of this review is limited.