

Written evidence – UCL Virus Watch (PTC0014)

Inquiry: The long-term impact of the pandemic on towns and cities

The following submission reflects the conclusions drawn from the Virus Watch study¹ led by a research group at University College London (UCL) in partnership with the NHS. Virus Watch is a Medical Research Council & National Institute for Health Research funded community household study across England and Wales with over 50,000 participants. The study examines diverse aspects related to COVID-19 using weekly and monthly surveys including questions on housing arrangements. A subgroup of participants also undergoes monthly testing for antibodies to the COVID-19 virus. As such, Virus Watch is well suited to respond to this inquiry into the relationship between the pandemic and housing.

A. Executive summary

A.1. Housing overcrowding has consistently been demonstrated to increase the risk of COVID-19 infection. The Virus Watch study estimates that overcrowded households are at 2.5 to 4 times increased risk of COVID-19 infection when compared with under-occupied households. The impact of the pandemic on households is therefore likely to be worse on those most severely affected by overcrowding.

A.2 Overcrowding is more common among renters, lower socioeconomic groups, people from Black and ethnic minority backgrounds and people with disabilities.

A.3 Overcrowding has increased during the pandemic. Some of this increase may persist into the post-pandemic period. This may widen health inequalities in the long term.

A.4. The pandemic has exacerbated housing inequalities by widening income inequality, some of which may be attributable to increased rates of COVID-19 infection among people who face overcrowding. Improving financial support during COVID-19 infection may prevent further entrenchment of existing housing inequalities.

A.5. Current standards of overcrowding are divorced from the health-impact of different levels of crowding. Virus Watch data reveals that people living in housing considered to have an appropriate number of people for the rooms available by statute and by agreed measures of overcrowding are at higher risk of COVID-19 infection than people in less densely occupied accommodation. Policies that set out acceptable or appropriate space levels for households should be re-evaluated.

B. Housing and Green Spaces

¹ UCL Virus Watch (2021), available at:
<https://www.medrxiv.org/content/10.1101/2021.05.10.21256912v2>

B.1. What is the long-term impact of the pandemic likely to be on housing and green spaces in towns and cities?

B1.1. Housing overcrowding has exposed people to a greater risk of COVID-19 infection during the pandemic, while rates of overcrowding have increased significantly during the pandemic.

B.1.2. The UCL Virus Watch study¹ finds that individuals living in overcrowded housing (defined as accommodation with more occupants than habitable rooms) are approximately 2.5 to 4 times more likely to be infected with the COVID-19 virus than those living in accommodation with fewer inhabitants than habitable rooms ('under-occupied'). The data also suggests that people living in 'balanced' accommodation (defined as one person per room) are more likely to be infected than those in under-occupied housing. That is to say, there is likely to be a graded increase in risk associated with increasing levels of crowding. This is consistent with international data².

B.1.3. In parallel, during the pandemic there has been a jump in rates of overcrowding among UK households from 4% to 6% with the largest changes observed in the private rental sector³. This compounds the growth in overcrowding that predates the pandemic. Some of this increase may reflect short term effects such as transient new housing arrangements in response to a temporary loss of income. However, other factors such as the decline in housing construction during the pandemic aggravating existing supply shortages, may result in this rise persisting further into the future⁴.

B.1.4. Overcrowding has likely therefore been a driver of, as well as being driven by, the pandemic.

B.2. How might this increase, or decrease, inequalities within towns and cities?

B.2.1. In the period from 1981-2011, the UK has seen a growth in average housing space per person but this has been unequally distributed. Housing space per person has not changed for the 10% with the least housing space in 1981 while it has almost doubled for the median person and quadrupled for the top 10%⁵. Associated with this, rates of overcrowding have been growing. They are highest amongst renters of social (9%) and private housing (7%) as well as among lower socio-economic groups, women, people from Black and ethnic minority backgrounds and people with disabilities⁶.

² Branden et al. (2020) available at: [https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568\(20\)30016-7/fulltext](https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568(20)30016-7/fulltext)

³ Household Resilience Study (2020), page 4, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/978991/Household_Resilience_Study_Wave_2_November-December_2020_Report.pdf

⁴ Cheshire et al. (2021), pages 1-2, available at <https://cep.lse.ac.uk/pubs/download/cepcovid-19-020.pdf>

⁵ Tunstall (2020) <https://www.cogitatiopress.com/socialinclusion/article/view/2789>

B.2.2. The ongoing trend towards a more unequal distribution of housing space and overcrowding among social groups and between housing sectors is likely to be increased by the pandemic. Widening income inequality due to the pandemic has left those who have been made even richer relative to the rest of society commanding even greater market power which they have used to purchase larger homes⁷.

B.2.3. At the other end of the income distribution, overcrowded households are likely to be worse off financially, in part due to higher COVID-19 infection rates. As a consequence of the increased risk of infection faced by people living in overcrowded households, they are likely to experience more frequent self-isolation periods, death or life-changing illness of a household member resulting in transient or permanent loss of income thereby reinforcing existing inequalities. These financial effects may in turn also have effects on housing by intensifying affordability pressures leaving disadvantaged households in overcrowded accommodation less market power to access more spacious accommodation. Indeed 4% of those in privately rented accommodation have moved to cope with housing costs⁸, potentially explaining the disproportionate rise in overcrowding in this sector⁹.

B.2.4. In tandem with widening housing inequalities, health inequalities will rise if increases in overcrowding are not addressed. Overcrowding is associated with a wide variety of adverse health effects ranging from poor mental health¹⁰ through to poor childhood development¹¹. It would also have important consequences for the distribution of vulnerability to any future infectious disease outbreak.

B.4. What action is needed from the UK Government, town and cities leaders, and others to mitigate the risk of any increasing inequalities?

B.4.1. In the short term, mitigation of the negative impacts of the bidirectional relationship between housing overcrowding and the pandemic could be achieved through preventing COVID-19 infections within overcrowded households or by reducing the negative impacts associated with COVID-19 infections. These include:

⁶ English Housing Survey 2016-17, pages 21-23, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/724642/Variations_in_housing_circumstances_report.pdf

⁷ Cheshire et al. (2021), page 9, <https://cep.lse.ac.uk/pubs/download/cepcovid-19-020.pdf>

⁸ Resolution Foundation (2021), page 13, available at: <https://www.resolutionfoundation.org/app/uploads/2021/02/Getting-ahead-on-falling-behind.pdf>

⁹ Household Resilience Study (2020), page 4, available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/978991/Household_Resilience_Study_Wave_2_November-December_2020_Report.pdf

¹⁰ World Health Organisation, available at <https://www.ncbi.nlm.nih.gov/books/NBK535289/>

¹¹ Shelter (2004), page 21, available at: https://assets.ctfassets.net/6sxvmndnpr0s/6dU8FFbZ6RnSk6DbnDOMHb/61e30884aff47a789891b2dce54fc7/Full_house_overcrowding_effects.pdf

B.4.2. increasing the scope and generosity of discretionary housing payments (DHPs) to alleviate affordability pressures in the rental sector experienced during the pandemic that may have adverse effects on access to appropriately spaced accommodation and therefore health inequalities in the long term¹². The DHP system is well established but many households in the private rental sector that face affordability pressures as evidenced by rent arrears are not in receipt of benefits, a requirement for access to DHPs¹³. Expanding eligibility could mitigate this impact;

B.4.3. more generous financial support for self-isolation to mitigate the economic hardship disproportionately impacting those in poor quality housing due to higher risks of infection in these households¹⁴. The Scientific Advisory Group for Emergencies (SAGE) argued '[p]rovision of financial support to safeguard incomes would likely have the single largest effect in achieving equitable self-isolation policies'¹⁵. The Nuffield Trust suggests one administratively simple way of achieving this could be to adapt the Job Retention Scheme to allow employers to apply for grants to cover 100% of the lost wages of any employee self-isolating, up to a cap¹⁶ ;

B.4.4. interim measures to reduce crowding in accommodation during high-risk periods such as through hotel isolation schemes for households with an infected family member. The Department for Health and Social Care have announced a pilot scheme to support self-isolation among overcrowded households¹⁷ however at present, the number of households benefiting from similar schemes is small;

B.4.5. home improvements to increase ventilation. Certain home improvement schemes have demonstrated to reduce hospitalisations¹⁸. Similar schemes could be envisaged to mitigate the risk of COVID-19 infection in overcrowded households and promote health long-term. Such a scheme could be modelled on existing home improvement schemes and

¹² Resolution Foundation (2021), available at:

<https://www.resolutionfoundation.org/publications/getting-ahead-on-falling-behind/>

¹³ Resolution Foundation (2021), page 4, available at:

<https://www.resolutionfoundation.org/app/uploads/2021/02/Getting-ahead-on-falling-behind.pdf> (p4)

¹⁴ Nuffield Trust (2021), available at: <https://www.nuffieldtrust.org.uk/research/tackling-covid-19-a-case-for-better-financial-support-to-self-isolate>

¹⁵ SAGE (2020), page 6, available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/925133/S0759_SPI-

[B_The_impact_of_financial_and_other_targeted_support_on_rates_of_self-isolation_or_quarantine_.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/925133/S0759_SPI-B_The_impact_of_financial_and_other_targeted_support_on_rates_of_self-isolation_or_quarantine_.pdf)

¹⁶ Nuffield Trust (2021), page 8, available at: <https://www.nuffieldtrust.org.uk/files/2021-05/tackling-covid-19-6.pdf>

¹⁷ UK Govt (2021), available at: <https://www.gov.uk/government/news/government-launches-new-pilots-to-further-support-people-to-self-isolate>

¹⁸ Rogers et al. (2018) <https://jech.bmj.com/content/72/10/896>

be administered by local authorities supported by adequate financing from central government;

B.4.6. enhanced testing and vaccination in densely populated areas, taking into account the specific needs of the populations in these areas;

B.5. How could the UK Government, town and cities leaders, and others use their response to the pandemic to reduce inequalities in housing and green spaces?

B.5.1. Several housing policies set out acceptable levels of housing space per person and could be used as levers to address overcrowding in the long term. These include:

B.5.2. Part X of the Housing Act, 1985¹⁹ which sets out the definition of statutory overcrowding. It is not a generous threshold and enforcement is weak. Though provided for by the Housing Act 2004, secondary legislation has never been used to amend this standard to be more generous;

B.5.3. Section 13D of Housing Benefit Regulations, 2006²⁰. The Local Housing Allowance regime sets out the number of bedrooms for which an eligible household is entitled to claim housing benefit. A more generous space entitlement would alleviate affordability pressures and make more space available for these households;

B.5.4. Section B13 of Housing Benefit Regulations, 2006²¹. Removal of the Spare Room Subsidy pushes those in 'under-occupied' social housing into smaller accommodation. Virus Watch data reveals that to do so increases their risk of COVID-19 infection. This policy could be reversed without major expense²²;

B.5.5. Statutory Instrument No.616 modifying The Licencing of Houses in Multiple Occupation Regulations, 2018²³. This sets out the space requirements for HMO licensing. This could be made more generous.

B.5.6. More fundamentally, improving the availability and affordability of appropriate housing including social housing is likely to alleviate overcrowding pressures²⁴.

Acknowledgments

This response has been prepared by Virus Watch with contributions from:

- Nicholas Patni, University of Oxford Medical School

¹⁹ <https://www.legislation.gov.uk/ukpga/1985/68/part/X>

²⁰ <https://www.legislation.gov.uk/uksi/2006/213/regulation/13D>

²¹ <https://www.legislation.gov.uk/uksi/2006/213/regulation/B13>

²² Joseph Rowntree Foundation (2014), available at:

<https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/housing-benefit-size-criteria-FULL.pdf>

²³ <https://www.legislation.gov.uk/uksi/2018/616/made>

²⁴ House of Commons Library (2021), page 12 available at:

<https://researchbriefings.files.parliament.uk/documents/CBP-7671/CBP-7671.pdf>

- Robert Aldridge, Centre for Public Health Data Science, Institute of Health Informatics, University College London, UK.
- Isobel Braithwaite, Centre for Public Health Data Science, Institute of Health Informatics, University College London, UK.
- Parth Patel, Centre for Public Health Data Science, Institute of Health Informatics, University College London, UK.

1 July 2021