

CG Report 6: Effects of COVID-19 in Care Homes - A Mixed Methods Review

Data Summary

Failure to address pre-existing, systemic problems with infrastructure, funding, and care quality issues could leave global care home populations similarly vulnerable to future crises and pandemics.

Our report asked three important questions:

1. *What were the mortality rates in care homes by country?*

While less than one per cent of the global population resides in care homes, care home residents account for nearly one-third of deaths attributed to COVID-19 across 25 countries (range 9-64%). Residual excess deaths were also observed, with excess mortality reported for both COVID-19 positive and negative patients.

2. *How does the mortality in care homes compare with previous periods?*

There was excess mortality in care home residents during COVID-19 waves 1 and 2. However, it is difficult to determine the cause(s) for this excess mortality, as studies were short-term, observational, and often failed to note how the cause of death was determined.

3. *What explains any excess mortality in care homes?*

Care home quality, inadequate staffing levels, overcrowding, highly mobile staff, sub-standard clinical care, and barrier to access to emergency treatment all contributed to high excess mortality in care homes.

Recommendations:

1. **Improve care home quality**
2. **Increase staffing levels**
3. **Reduce the number of beds per facility**
4. **Employ staff confinement strategies**
5. **Improve clinical care**
6. **Ensure resident access to emergency treatment**
7. **Standardize data collection methods for more effective evaluation**

Key Findings

(1) What were the mortality rates in care homes by country?

- Care home residents comprised, on average, 30% of total COVID-19 deaths across 25 countries (range: 9-64%).
- Up-to-date data on care homes deaths was scarce with only Australia, Belgium, Canada (British Columbia), Denmark, Hungary, the UK, and the US providing data through to September 2021.
- Seven countries report more than 10,000 COVID care homes deaths: Canada, Belgium, France, Germany, Spain, the UK and the US.
- In June 2020, Canada's national health data agency reported the highest worst record among wealthy nations for proportion of COVID-19-related deaths occurring in long-term care facilities among wealthy nations: approximately 80%
- In England and Wales, a higher proportion of deaths in care homes as were seen in wave two (25.7%) compared to wave one (23.1%), even though excess deaths were higher in wave one (27,079 excess deaths) compared with wave two (1,335 excess deaths).

(2) How does the mortality in care homes compare with previous periods?

- All 17 included cohort studies report all-cause excess mortality in care homes during waves 1 and 2.
- A coroner's database of death inquiries in Ireland from March to June 2020 reported a 38% increase in unexplained residual excess in death from March to June 2020 compared with years 2015-19. [[Cusack 2020](#)]
- An increase in deaths was seen in both COVID-19 positive (43%) and negative (24%) patients in a Milan Nursing home over two months. [[Cangiano 2020](#)]
- In Northern Italy the 2020 nursing care home population all-cause excess mortality risk compared to the non-care home population was more than double the 2018 risk, while in the non-nursing care home population, it rose by roughly 60%. [[Ballatori 2021](#)]
- A study in Scotland reported roughly half of the COVID-19 deaths occurred in the were accounted for by the 5% of those over-70-year-olds who were care-home residents. [[Burton 2021](#)]
- A Welsh study reported that deaths in care homes increased by 72% in 2020 upto June 14, 2020 compared with 2016 to 2019. [[Hollinghurst 2020](#)]

(3) What explains any excess mortality in care homes?

- COVID mortality was 2.7% in high crowding vs 1.3% in low crowding homes. [Canada, [Brown 2020](#)]
- Nursing homes with a 5-star inspection rating had a COVID-19 death rate 24% lower than those with a 1-star rating. [USA, [Cronin 2020](#)]
- Mortality in COVID-19 patients decreased substantially if they had a daily clinical examination or vital signs measurement. [France, [Tarteret 2020](#)]
- Compared to nursing homes with >120 beds, those with < 60 beds were less likely to report resident COVID-19 deaths in residents. [USA, [Wang 2020](#)]
- Both COVID-19 infection and mortality rates for all outcomes were significantly lower in 'Green House'/small nursing homes than in traditional homes that had <50 beds and ≥50 beds. Notably, residents in Green House homes received significantly more hours per day of care from certified nursing assistants than residents in traditional nursing homes. [USA, [Zimmerman 2021](#)]
- Pre-existing, chronic understaffing issues in care homes were exacerbated by workers leaving or becoming sick. [Canada, [Gee 2020](#)]
- Among residents of long-term care in the Southern Ile-de-France region, deaths in long-term care residents were mainly due to hypovolemic shock as residents were confined to their rooms for several days without assistance with eating and drinking. [France, [Diamantis 2020](#)]
- In the first wave of the pandemic, Spanish armed forces were called up to help nursing homes. Seniors were found 'in a state of complete abandonment,' [Margarita Robles, Defence Minister]