

# Learning from the COVID pandemic to prepare for climate change in long-term care (LTC)

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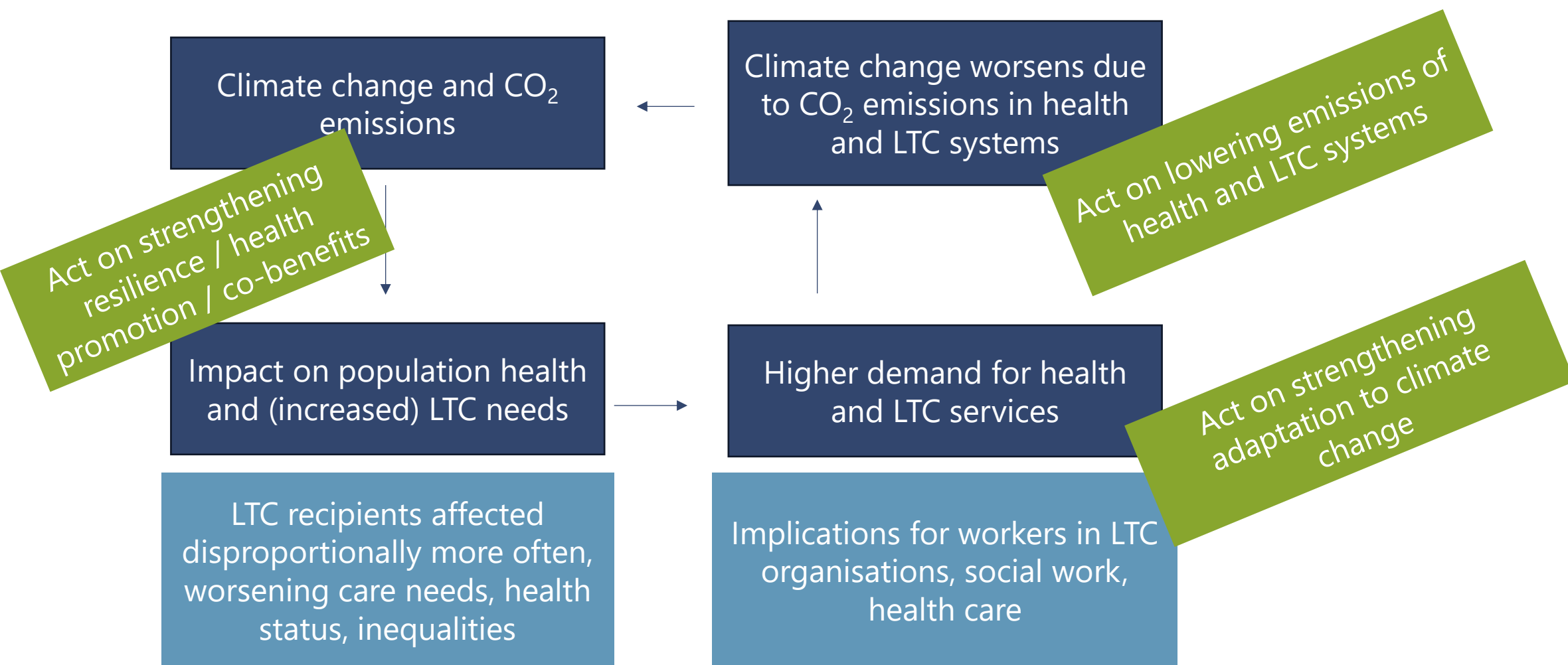
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*Responding to Climate Events in Long-Term Care: International Perspectives*

*An Ageing Commons webinar co-hosted with the GOLTC Climate Change and Long-Term Care Interest Group*

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# Why climate change matters



# — Connecting climate change and COVID-19 impacts

- Older adults & LTC users disproportionately affected
- Climate events increase care needs, costs, workforce strain
- LTC systems already structurally vulnerable

> > COVID-19 exposed these weaknesses

## **We ask:**

- What are the parallels between the the Covid-19 pandemic and challenges related to climate change?
- Can lessons from the pandemic inform climate adaptation strategies to ensure future responses are preventative and just?

# Part I - Looking back: Long-Term Care and the Covid-19 pandemic

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What did COVID-19 teach us for climate change?

- How to better protect high-risk populations
- How to strengthen system resilience
- How to respond earlier and more fairly

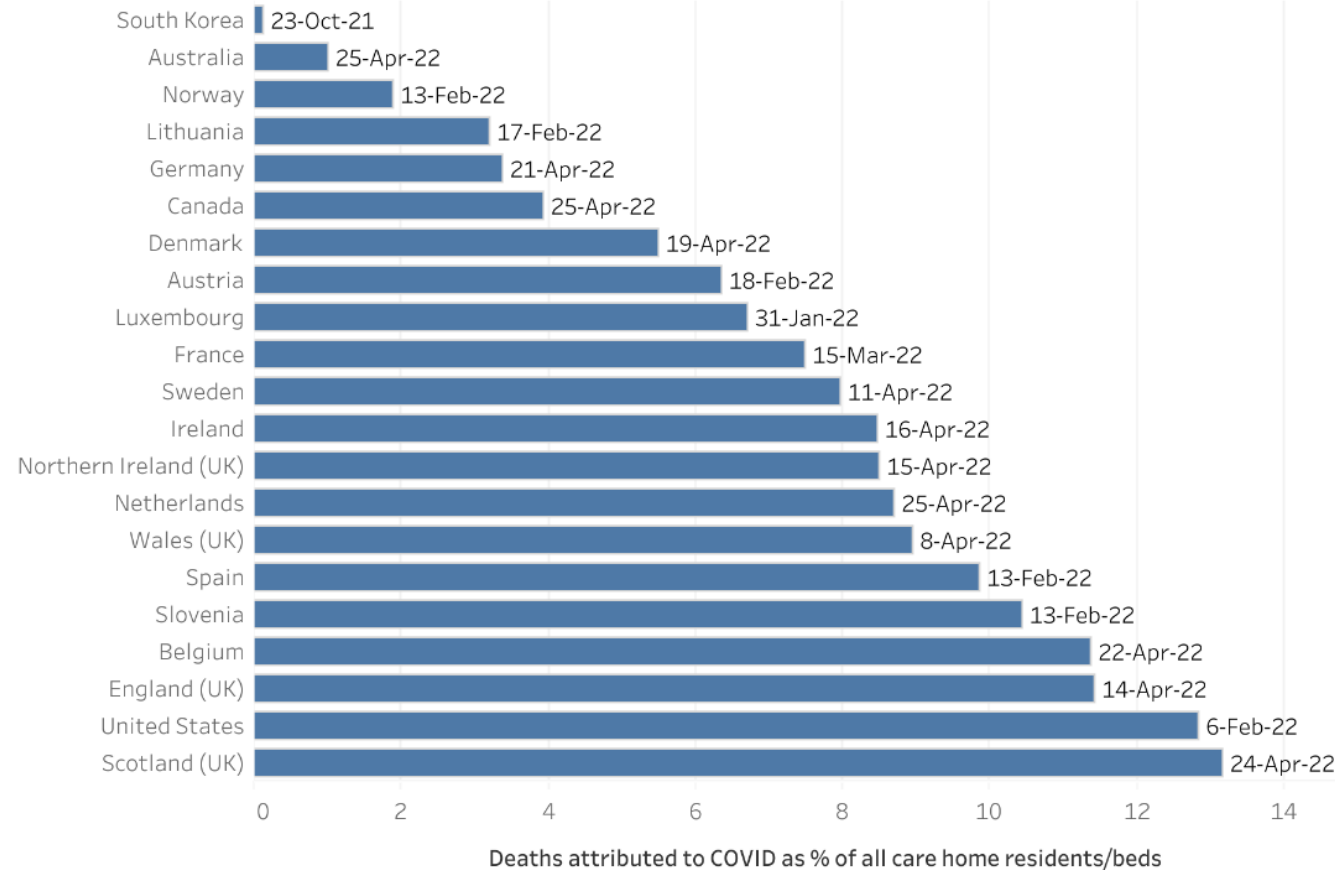
# — Disproportionate impact on people with care needs

- ca. 50% of all COVID-19 deaths among care home residents (in early phases) even if population in care homes represents less than 1% in countries analysed
- Age and underlying health conditions alone do not explain this magnitude
- **System factors mattered, e.g.**
  - Difficulty (or even impossibility?) of implementing physical distancing in care homes
  - Late / insufficient access to testing and PPE
  - Late adaptation of guidance to recognize “geriatric COVID symptoms” and asymptomatic transmission
  - Reduced access to healthcare
  - In some countries, late access to vaccination for people in care homes

# Large differences in deaths among share of care home residents demonstrate policy relevance of measures

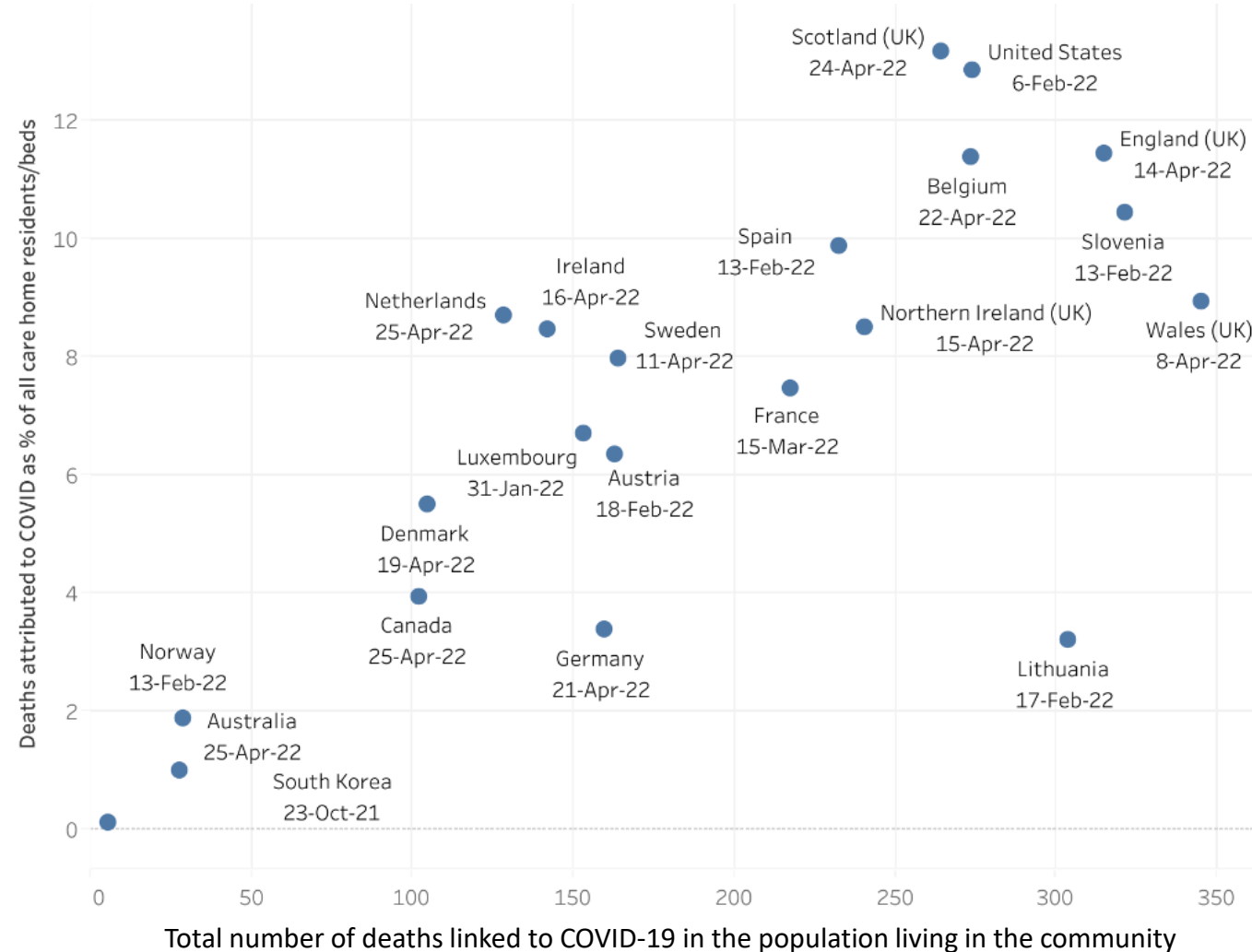
Share of care home residents whose deaths were linked to COVID-19, compared to the care home population

Country (Table 2 Live)



Source:  
<https://ltccovid.org/2022/02/22/international-data-on-deaths-attributed-to-covid-19-among-people-living-in-care-homes/>

# Where deaths of people living in the community were low, deaths of care home residents were also low.



Graph shows total number of deaths linked to Covid-19 in the population living in the community (x axis), compared to deaths of care home residents (y axis) (April 2022).

Source:  
<https://ltccovid.org/2022/02/22/international-data-on-deaths-attributed-to-covid-19-among-people-living-in-care-homes/>

# — What have we learnt from the pandemic about data gaps?

- *Mortality data does not convey the enormity of other impacts, for which there is increasing evidence*
  - Impact on wellbeing, mental health, cognitive and behavioural symptoms
  - Increased prescription of anti-psychotics
  - Decreased access to diagnostic services and other care
  - Enormous impacts on unpaid and unpaid carers as well
- *Care at home: almost no data available on those who receive and those who provide care!*

# There were common structural challenges behind international responses to COVID-19 in LTC

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**Low political priority** for LTC (compared to acute health care & other policy areas)

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Fragmented systems, responsibilities split between different government departments and levels of government (local/regional/national): **no one was in charge**

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**Failures in health/LTC coordination resulting in limited access to health care**

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**Weak regulatory oversight** and **inexistent or underdeveloped information systems**

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Lack of recognition of **human rights** of people living in care homes

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**Under-recognition of care staff:** low pay/staff shortages/poor working conditions

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**Under-investment** in community-based care/ outdated buildings used as LTC facilities

## — Any silver linings? What worked:

- Increased public and political awareness about Long-Term Care (at least initially)
- Improvements in data and information systems
- Good examples of how well-established care coordination mechanisms worked
- Some innovative care approaches (Care ecosystems, smaller care homes) worked better
- Increased uses of technology
- Increased research focus on LTC: learning beyond COVID
- International lesson sharing

# Part II - Long-term care and climate change

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Schmidt, A.E. & Aigner, E. (forthcoming) *Long-Term Care and Climate Change* (Chapter 11), in: Pillemer, K. and Ayalon, L. (eds.) *Aging and climate change*. Policy Press.

# Climate-related hazards and exposure pathways relevant to people who use LTC services

- Extreme temperatures
- Wildfires
- Droughts
- Flooding
- Storms and sea level rise
- Air quality
- Climate-sensitive infectious diseases
- Food and water insecurities
- Migration and relocation

# Examples from recent events

*Valencia (Spain) 2024 floods:*

**Nearly half** (104 out of 216) of all the people who died were **aged 70** and over (while representing only **15% of the population**), partly attributed to older people who have mobility problems living on the ground floor

*Japan 2018 floods:*

6 months after flooding, people receiving LTC at home 3 times more likely to have moved to a nursing home, compared to people with similar characteristics not affected by the flooding (Miyamori et al., 2023).

# — Climate change vulnerability (and risk)

...as a function of exposure, sensitivity and adaptive capacity

- **Exposure** is a measurement of the extent, duration, or frequency of stress on a system
- **Sensitivity** is defined as the degree to which a system or species is affected, either adversely or beneficially, by climate variability or change
- **Adaptive capacity** is the ability of a system (or population) to cope with actual or expected stress

*NB: In the current International Panel on Climate Change (IPCC) framework, exposure is separated out, and vulnerability refers primarily to sensitivity and the capacity to cope, both of which together determine overall climate risk when combined with hazards.*

# In very brief terms – climate risks for people with LTC needs

## **Exposure:**

Risks depend on location & quality (heat, flooding, emergency access)

Design matters: ventilation, shading, materials reduce overheating

Disasters show high mortality in LTC & older adults

Aging at home = high risk, especially with poor health, isolation, no AC (heat)

## **Sensitivity:**

Higher in LTC due to multimorbidity, frailty & dementia

Increased risks from chronic conditions, impaired immunity, functional & cognitive limitations

Example: Nursing Home in British Columbia - 97% of residents had chronic conditions, including some that exacerbate with increased heat (hypertension, dementia) (cf. Wollschlaeger et al., 2022)

# What makes it difficult to deal with impacts of climate change for people with LTC needs? (barriers to adaptive capacity)

- Clients: mobility & cognitive limits hinder evacuation
- Limited (barrier-free) shelter options
- digital divide – early warnings do not reach those most at risk
- Staff: shortages (being themselves affected or unable to reach workplace), high workload, crisis strain (incl. for informal caregivers!)
- Care quality: disruptions (falls, medication, supplies, mental health)
- Care constraints: physical contact makes distancing difficult
- Inequalities: ageism/ableism may deprioritise those most at risk

# What can we learn from the pandemic to prepare for climate change?

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# Care services need to be resilient in crisis

Climate change (and the pandemic) highlight fractures within LTC systems, therefore:

- ✓ Importance of **home/community-based care** to ensure safety and wellbeing of people who are socially isolated or who need care and support – data gaps need to be addressed
- ✓ Ensure there is **enough workforce** and **is well-trained** to respond
- ✓ Ensuring **buildings are adequate** in terms of quality and location (**both private homes and residential care homes**) and built/retrofitted to be climate resilient and designed to facilitate quality of life
- ✓ **Information systems** to support **real-time risk assessment and prioritisation** in emergencies, need to cover formal and “informal” care systems
- ✓ Monitoring of **longer-term impacts** of crises on people with care needs, going beyond “just” mortality numbers

COVID-19 pandemic showed: (systemic) adaptive capacity is a decisive factor!

# Systemic ways forward – food for thought

(cf. Schmidt & Aigner, forthcoming)

- 1. Transformational leadership** - organizational frameworks that emphasize disaster preparedness and ecological sustainability (Ali et al., 2023) but: these need to be reconciled with poor working conditions in LTC sector.
- 2. Innovative models for aging-in-place**, supported by cohousing arrangements, embody core gerontological values by promoting autonomy, social integration, and environmental sustainability – see e.g. dementia villages in the Netherlands. Shared housing in walkable neighborhoods not only reduces emissions related to travel and energy use but also may address social isolation and increase resilience.
- 3. Urban development models** may be extended to reflect a gerontological commitment to age-friendly environments e.g. creating green spaces and pedestrian zones in heat-vulnerable areas contribute simultaneously to older adults' physical and social well-being and to broader sustainability goals (Nieuwenhuijsen et al., 2024).

# Thank you for your attention!

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