

Overview of international estimates of numbers of deaths of care home residents during the COVID-19 pandemic

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LTCcovid.org webinar

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Why do we need to know about deaths of care home residents linked to COVID-19?

- In many countries, care homes not included in initial responses to COVID-19.
- Focus was on stopping transmission in the community and boosting hospital capacity, but situation was different in countries in Asia with SARS and MERS experience: strong Infection Prevention and Control systems in care homes.
- No data on number of people infected (and deceased) in care homes: **risk that vital resources needed to tackle infections in care homes are not made available**

How has the evidence on COVID deaths in care homes evolved. In March:

- Newspaper reports from Italy, Spain, Belgium and France on large numbers of deaths in care homes and of care homes becoming “overwhelmed”. LTCcovid starts to document international reports on 20 March.
- Official data on deaths in most countries only included those confirmed through testing and in hospitals.

First official estimates in Europe: end March/early April

On 31st March France published first data on deaths in care homes, including “suspected” COVID deaths, Belgium and Ireland followed soon after and some unofficial estimates from Italy and Spain emerged

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Business

France Virus Deaths Jump to 5,387 With Nursing Homes Added

By [Rudy Ruitenberg](#)

April 2, 2020, 6:47 PM GMT+1 Updated on April 2, 2020, 7:20 PM GMT+1

1st LTCcovid report on deaths of care home residents (5 countries, less than ideal data for 2 of them): 42 to 57% deaths linked to COVID, 12th April



Mortality associated with COVID-19 outbreaks in care homes: early international evidence

Adelina Comas-Herrera ([CPEC, LSE](#)) and Joseba Zalakain ([SIIS](#))

12th April, 2020

Key findings:

- Official data on the numbers of people affected by COVID-19 is not available in many countries
- Due to differences in testing availabilities and policies, and to different approaches to recording deaths, international comparisons are difficult
- Data from 3 epidemiological studies in the United States shows that as many as half of people with COVID-19 infections in care homes were asymptomatic (or pre-symptomatic) at the time of testing
- Data from 5 European countries suggests that care home residents accounted for between 42% and 57% of all deaths related to COVID-19.

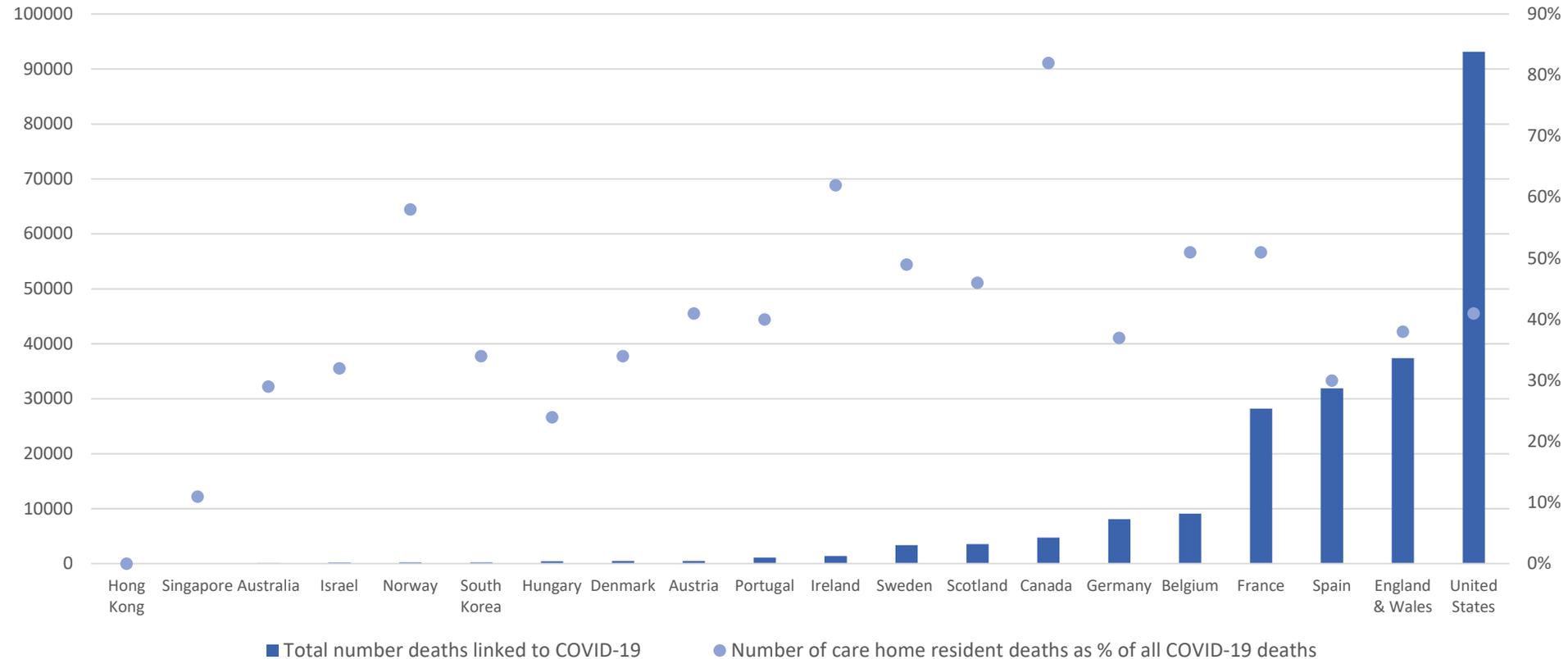


The screenshot shows the top of a Guardian article page. At the top, there is a dark blue navigation bar with the text "Support The Guardian" and "Available for everyone, funded by readers". Below this are "Contribute" and "Subscribe" buttons. The Guardian logo is on the right. Below the navigation bar are menu items for "News", "Opinion", "Sport", "Culture", "Lifestyle", and "More". A secondary navigation bar lists "World", "Europe", "US", "Americas", "Asia", "Australia", "Middle East", "Africa", "Inequality", and "Global development". The main article title is "Coronavirus outbreak" with a sub-headline "Half of coronavirus deaths happen in care homes, data from EU suggests". A yellow banner indicates "This article is more than 1 month old". Below the title is a sub-headline: "Figures from Italy, Spain, France, Ireland and Belgium suggest UK may be underestimating care sector deaths". There are two links: "Coronavirus - latest updates" and "See all our coronavirus coverage". On the right, there is an advertisement for "The Guardian Jobs" with the text "Advertise your school roles for free".

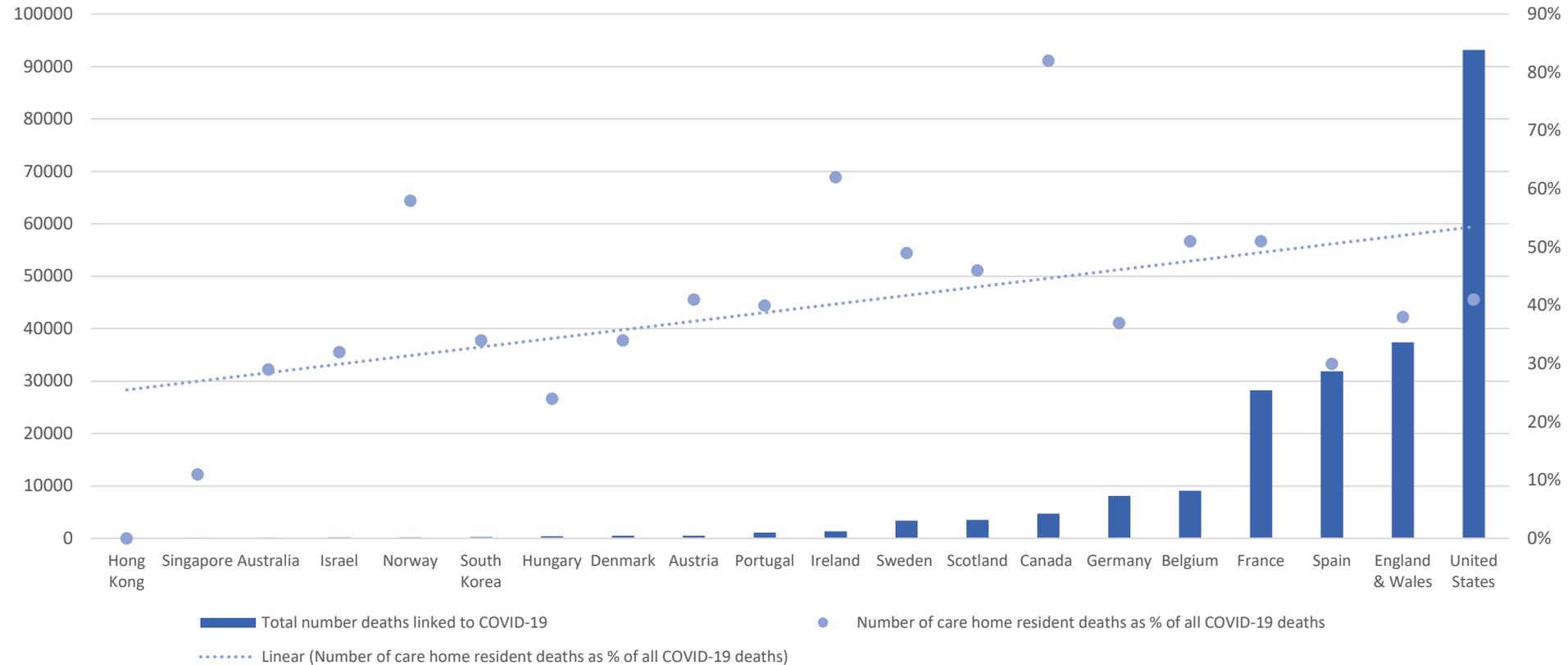
What did the early estimates tell us?

- Urgent need to ensure care homes are equipped with resources to deal with the pandemic (testing, staff, PPE, additional buildings, up-to-date guidance and training)
- National estimates of COVID-19 deaths up that point, in most countries, were an underestimate as did not include large number of deaths in care homes.

Data has been improving, LTCcovid reports now include of data from more countries (example of report from 21 May)



Number of total COVID-deaths compared to share of deaths of care home residents (up to 21st May)

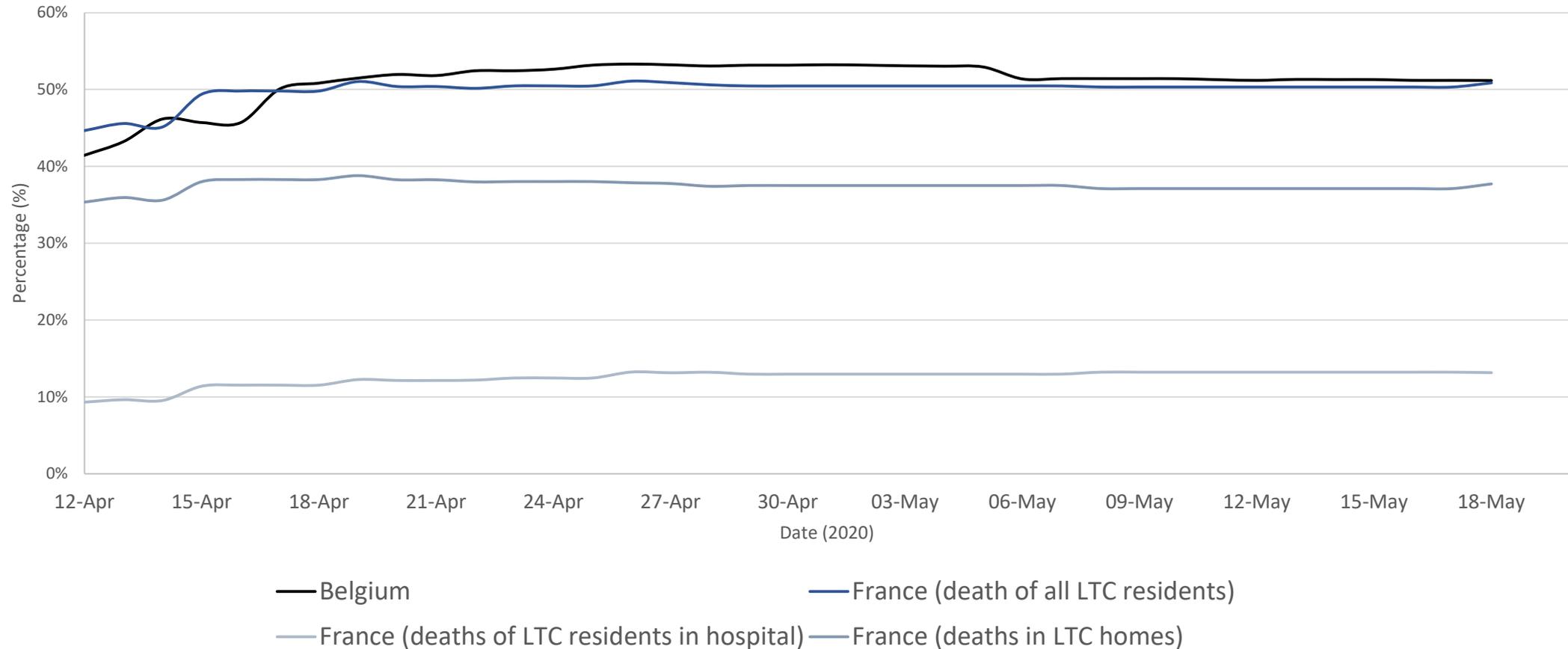


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As we added more countries during late April and May: a new policy message

- High number of deaths in care homes **may not be inevitable, as some countries have had very few deaths**, so we need to focus on prevention policies and measures and learn about what works
- The share of care home residents whose deaths are linked to COVID-19 tends to be **lower in countries where there have been fewer deaths** in total, although as the number of deaths grows the share seems to reach a plateau

Trend in share of number of deaths of care home residents out of total deaths, Belgium and France



How well can we compare international data on deaths of care home residents? Many differences in:

- How care homes are defined
- What types of deaths are covered:
 - Confirmed through test
 - COVID suspected / noted in death register
 - Excess deaths (how many more people died than in previous years)
- Whose deaths are covered:
 - People who die in care homes
 - All care home residents

We aim to present data in a way that shows the methodological differences

Table 1. Number of COVID-related or confirmed deaths in the population and in care homes (or among care home residents).

Country	Date	Approach to measuring deaths	Total number deaths linked to COVID-19	Number of deaths of care home residents linked to COVID-19	Number of deaths in care homes	Number of care home resident deaths as % of all COVID-19 deaths	Number of deaths in care homes as % of all COVID-19 deaths
Austria	22/04/2020	Confirmed	510	220		41%	
Australia	18/05/2020	Confirmed	99	29		29%	
Belgium	18/05/2020	Confirmed + Probable	9,080		4,646		51%
Canada	08/05/2020	Confirmed + Probable	4,740	3,890		82%	
Denmark	07/05/2020	Confirmed	506	170		34%	
France	18/05/2020	Confirmed + Probable	28,239	14,363	10,650	51%	38%
Germany ⁶⁷	20/05/2020	Confirmed	8,090	3,029		37%	
Hong Kong	20/05/2020	Confirmed	4	0	0	0%	0%

Current findings (1):

- Not all countries have experienced infections or deaths in care homes, for example Hong Kong (only 4 deaths in total and 1,056 cases of infections in the total population).
- In the other countries where there have been at least 100 deaths in total and we have official data, the **% of COVID-related deaths among care home residents ranges from 24% in Hungary to 82% in Canada)**
- BUT: the definitions used make a huge difference

Current findings (2): why definitions matter

- Data from England:
 - Share of all **probable** COVID-19 deaths **in care homes**: 27%
 - Share of all **probable** deaths **of care home residents** is 38%
 - Share of excess deaths in care homes during pandemic: 44%
 - Share of deaths of care home residents is 52% of all excess deaths
- France:
 - deaths in care homes are 34% of all COVID-19 deaths
 - deaths of care home residents are 51%.
- South Korea:
 - **0** deaths IN care homes, but **84** deaths of care home residents

A better way to show impact of COVID in care homes in different countries?

COVID-19 deaths of care home residents, as % of all care home residents

	Number of care home residents (or beds)	Deaths attributed to COVID (as per table 1) as percentage of care home residents	Excess deaths compared to previous years, as percentage of care home residents
Austria	69,730	0.3%	
Germany	818,000 (beds)	0.4%	
Canada	425,755	0.9%	
Sweden	82,217	2.0%	
France	605,061	2.4%	
United Kingdom	411,000	3.4%	6.7%
Belgium	125,000	3.7%	

To conclude:

- While it is very important to measure and report the number of deaths of care home residents during the COVID-19 pandemic, international comparisons are tricky
- Share of total deaths in homes are important to:
 - Show potential underestimation of total deaths (specially if only confirmed cases or deaths in hospitals are counted)
 - Improve allocation of (potentially scarce) resources: testing, PPE, nurses, quarantine facilities, technical support, etc.
- Shares of total care home residents offer a different perspective on the impact of COVID-19 on care home residents
- We also need to understand other impacts:
 - Staff, people who rely on care in the community
 - Physical and mental health impacts

Next steps:

- Systematic reviews of impact of COVID-19 in care homes and of effectiveness of measures
- Continuing to learn from evidence and experience of other countries to try to inform policy
- Use improved data availability to seek understand impact of differences in the population in care homes in different countries (e.g. age, gender, dependency/health status), differences in types of care homes (e.g. size/shared beds), staff pay and conditions, etc.
- Continuing to improve methods towards comparing “like with like”.