

## The health impact of COVID-19 in regions

**In most OECD countries, remote regions have experienced lower excess mortality than other regions.**

The COVID-19 pandemic has hit certain parts of countries harder than others. Beyond the count of fatalities directly reported as due to the COVID-19 infection, the increase in the number of total deaths in a region relative to previous years provides a useful indication of the overall health impact of the current pandemic. More specifically, the excess mortality during the pandemic – the increase in deaths as a percentage of deaths in previous years – avoids problems of misreporting caused by low levels of testing. From February to June 2020, large regions in 31 OECD countries with available data registered on average 6% more deaths than in the same months of the previous 2 years (average of 2018-19). Interestingly, regional disparities in this indicator are strikingly high. Excess mortality in Greater London (United Kingdom), New Jersey (United States), Lombardy (Italy) and Madrid (Spain) ranged from 46% to 80% in the period from February to June 2020 – at least 22 percentage points higher than the average excess mortality in their respective country (Figure 1.1, panel A and Figure 1.3-Figure 1.4).

Differences in excess mortality during this period also reveal clear patterns between regions far from metropolitan areas and other types of regions, particularly metropolitan. In 17 out of 22 OECD countries, regions far from a metropolitan area have recorded lower excess mortality than metropolitan regions. More specifically, regions far from a metropolitan area experienced an average excess mortality of 5% compared to 9.5% in metropolitan regions. The gap is even larger between remote regions (3%) and large metropolitan regions (13%). However, there are exceptions to such a pattern, as is the case of Switzerland, where excess mortality is significantly higher in regions far from a metropolitan area than in metropolitan regions (Figure 1.1, panel B).

Another measure of the health impact of the current pandemic consists of the reported deaths due to COVID-19. In the 24 OECD countries with data available from January to 15 August 2020 (see Annex B for more details), regions registered 30 COVID-19 deaths per 100 000 people (mortality rate due to COVID-19) on average. Nevertheless, this figure masks stark

differences across regions. For example, New Jersey (United States), Lombardy (Italy), Castile-La Mancha (Spain), Amazonas (Colombia), Brussels Capital (Belgium) and Stockholm (Sweden) recorded more than 100 COVID-19 deaths per 100 000 people by mid-August (Figure 1.2). In addition, large regional disparities in COVID-19 deaths are present even within countries. In the United States, Italy and Spain, those regional gaps exceeded 140 deaths per 100 000 people as regions such as Hawaii (United States), Basilicata (Italy) and Canary Islands (Spain) experienced less than 8 COVID-19 deaths per 100 000 people.

### Definition

Excess mortality is defined as the percentage increase in the cumulative number of deaths (all causes) between the period of February to June 2020 with respect to the average number of deaths in the same period in 2018 and 2019.

COVID-19 deaths concern deaths where the primary cause of death can be attributed to the COVID-19 virus, independently of pre-existing conditions.

### Sources

OECD (2020), *OECD Regional Statistics (database)*, OECD, Paris <http://dx.doi.org/10.1787/region-data-en>.

See country metadata in Annex B.

### Reference years and territorial level

See territorial grids and regional typology in Annex A.

### Figure notes

Figure 1.1, panel B: Weighted averages of small regions (TL3).

Figure 1.3-Figure 1.4: Small regions (TL3) if available, otherwise large regions (TL2) for AUS, AUT, CAN, COL, DEU, EST, NZL and USA.

# 1. SOCIAL RESILIENCE FOR BETTER HEALTH AND SUSTAINED WELL-BEING

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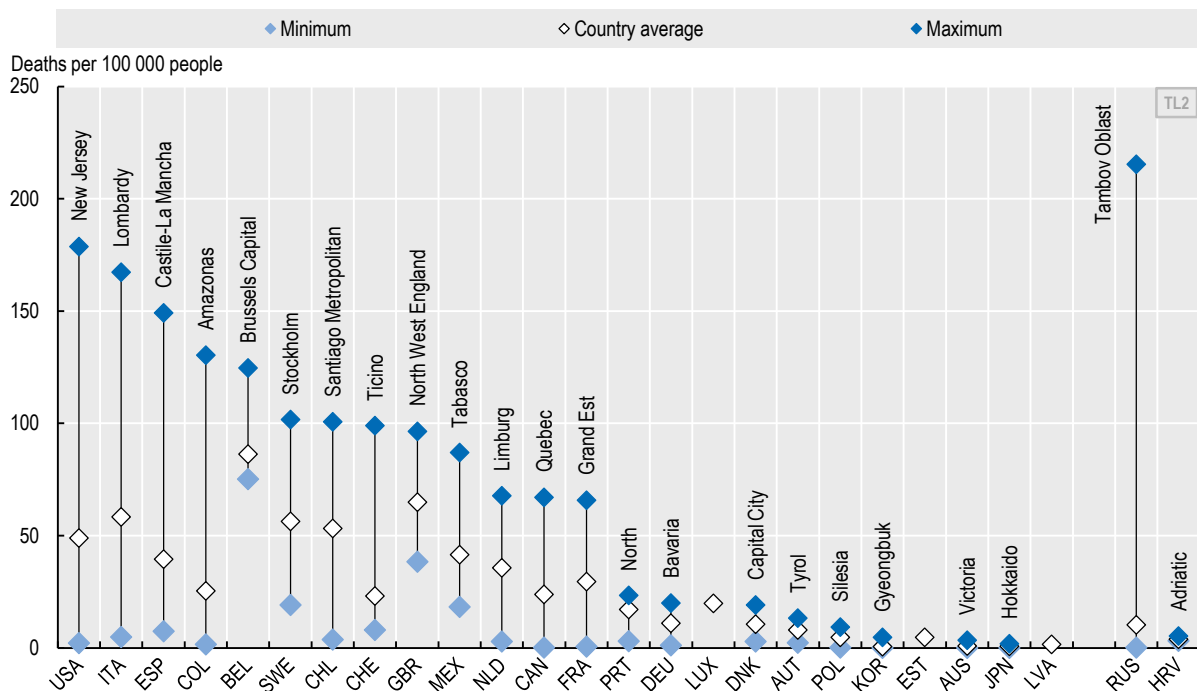
### 1.1. Regional disparities in excess mortality, February to June 2020 relative to 2018-19 average



StatLink <https://doi.org/10.1787/888934189070>

### 1.2. Regional disparities in COVID-19 deaths, from 24 January to 15 August, 2020

COVID-19 deaths per 100 000 people, large regions (TL2)



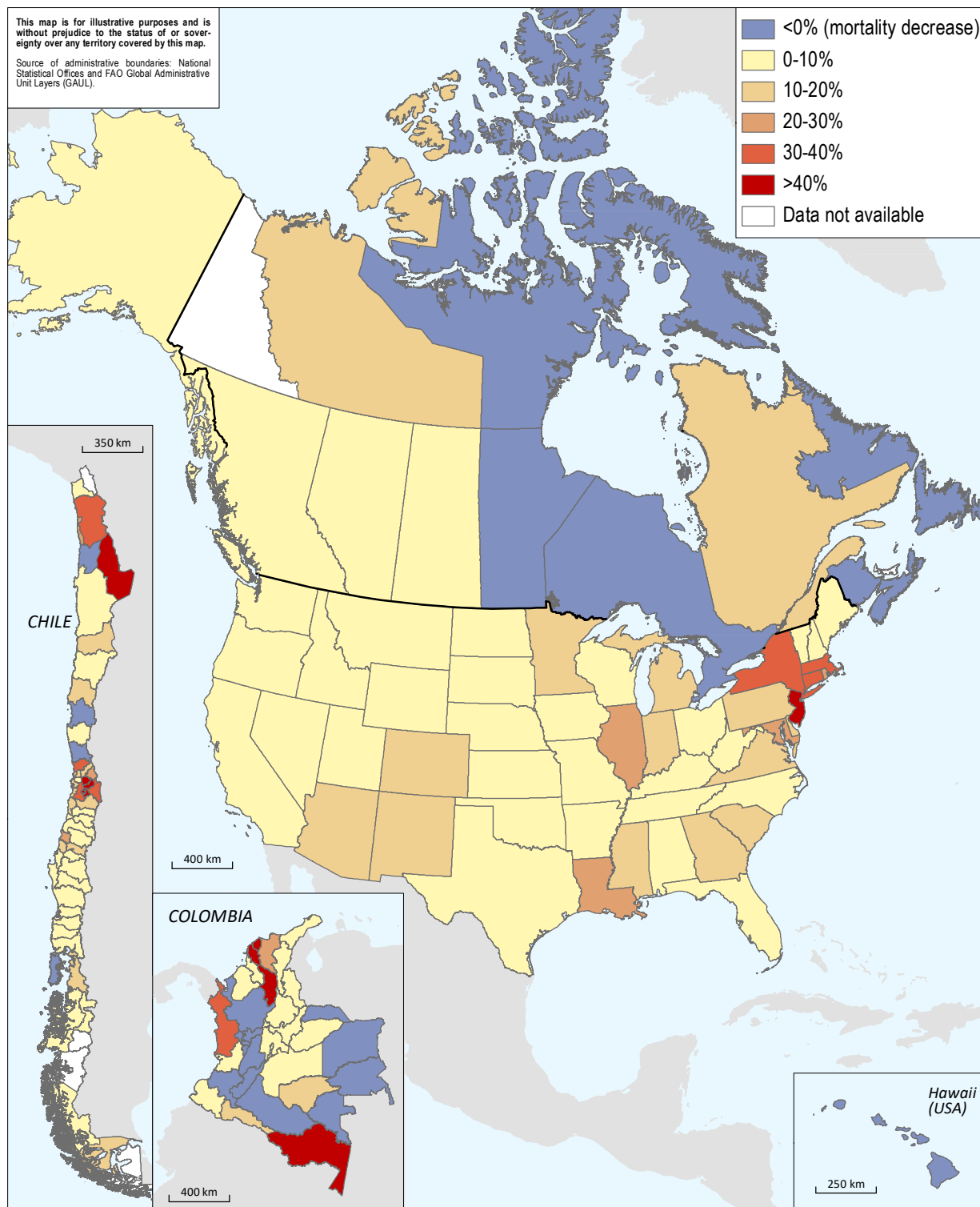
StatLink <https://doi.org/10.1787/888934189089>

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### 1.3. Excess mortality, February to June: 2020 compared to 2018-19 average - Americas

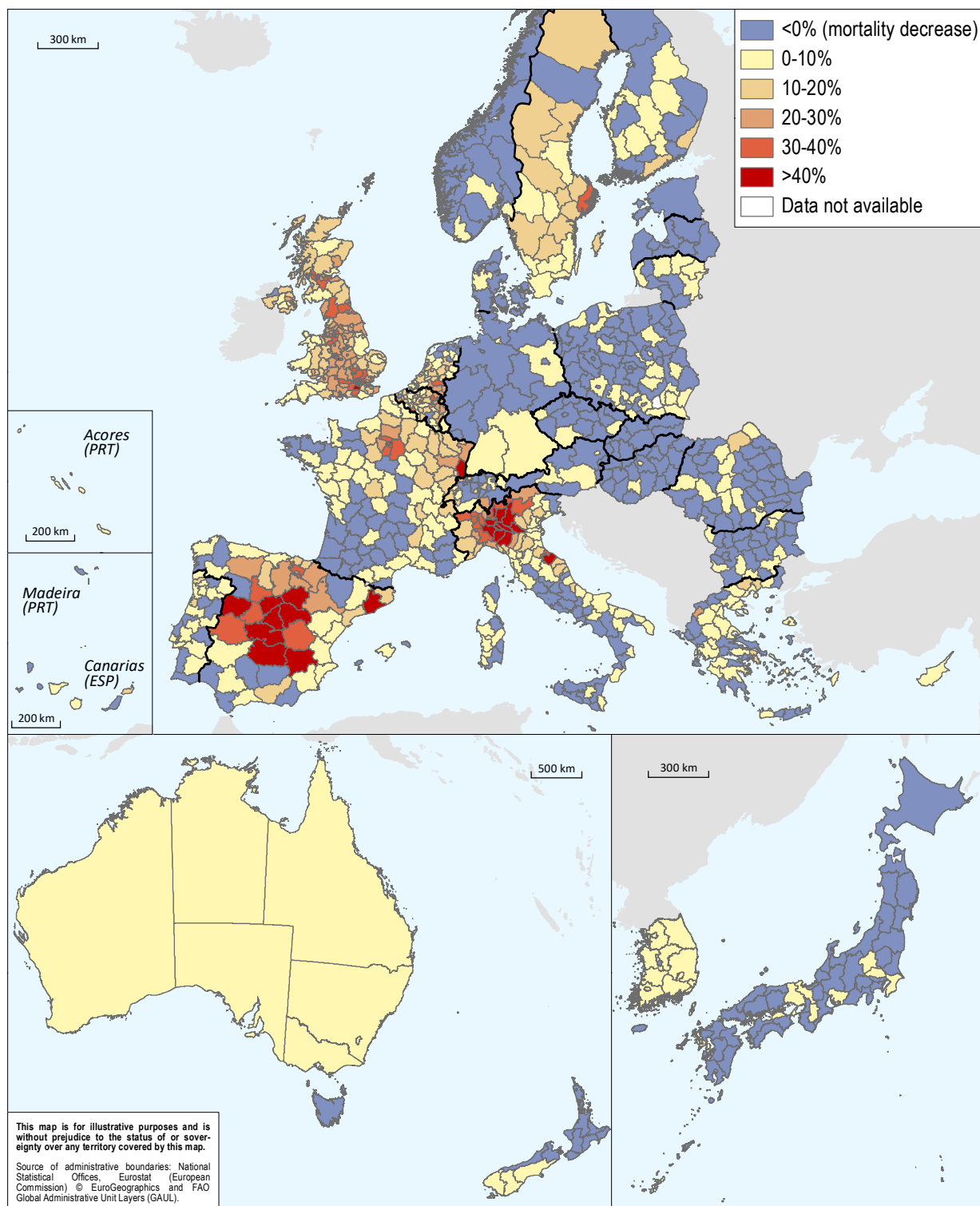
Percentage increase in 2020 deaths relative to the 2018-19 average, small regions (TL3)

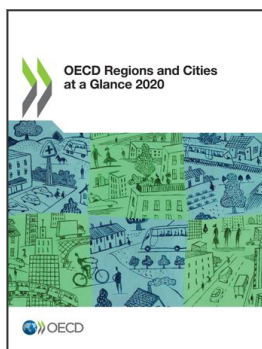


StatLink <https://doi.org/10.1787/888934189108>

## 1.4. Excess mortality, February to June: 2020 compared to 2018-19 average - Europe and Asia-Pacific

Percentage increase in 2020 deaths relative to the 2018-19 average, small regions (TL3)

StatLink <https://doi.org/10.1787/888934189127>



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