

Towards better health and resilient health systems in regions (SDG 3)

Metropolitan regions have 65% more hospital beds per capita than remote regions, a gap that can affect the capacity to cope with health crises.

A number of factors related to healthcare, living standards and people's behaviour can make regions unevenly prepared to face a health crisis. Stark regional inequalities in morbidity rates make some places within OECD countries more vulnerable than others. As reported by the World Health Organization (WHO), people with pre-existing medical conditions, including high blood pressure, heart and lung diseases, cancer, diabetes or obesity, are more susceptible to suffer serious consequences if infected by COVID-19 (WHO, 2020). Across OECD regions, the spatial concentration of disease-specific mortality rates reflects differing health challenges. While Western European regions face higher mortality rates due to respiratory diseases, regions in the Baltic countries and Central Europe tend to suffer more from cardiovascular diseases, whereas regions in the Americas record particularly high rates of obesity.

In some regions in Canada (New Brunswick), Chile (Aysen), Mexico (Quintana Roo) and the United States (Mississippi), close to 40% or more of the population is obese. For these regions, obesity rates are at least 8.5 percentage points higher than their national averages and are twice the OECD average (Figure 1.5). Obesity and other types of morbidity can translate into higher disease-specific mortality, such as those driven by respiratory or cardiovascular diseases. With more than 150 deaths per 100 000 inhabitants per year, some regions in Greece, Japan, Portugal and the United Kingdom are the hardest hit from respiratory diseases (Figure 1.6). In the Baltic countries and Central Europe, Estonia, North Hungary, Latvia, Central and Western Lithuania and South West Romania report an annual average of more than 600 deaths per 100 000 people due to cardiovascular diseases, the highest cardiovascular-related mortality rates among OECD countries (Figure 1.7).

Medical resources such as hospital beds and doctors per inhabitant are crucial for managing health crises but differ substantially across types of regions. Overall, metropolitan regions and regions close to metropolitan areas are better equipped with hospital beds per inhabitant than regions far from metropolitan areas, a gap that has increased significantly since 2000. In 2018, regions close to metropolitan areas had higher availability with an average of 10 beds per 1 000 inhabitants, almost twice as many as in remote regions. Since 2000, the number of beds per inhabitant has decreased in most regions (by 6% on average across all types of regions) but at a much stronger pace in remote regions (by 22%). The widespread decrease in the number of hospital beds has some exceptions. In Korea, for example, the provision of hospital beds has increased in all types of regions but at the highest pace in non-metropolitan regions (Figure 1.8).

Regional differences in healthcare infrastructure and resources are significant in most OECD countries. While some regions in Southern European and North American countries have less

than 2 hospital beds per 1 000 people, other regions in the same countries have 3 times as many. On average, the best-equipped regions in OECD countries have three and a half times more beds per person than the least equipped ones. Largest regional disparities in the number of hospital beds per inhabitant are driven by particularly low availability in certain regions such as Central Greece, Chiapas (Mexico), Mayotte (France), Oregon (United States) and Vaupés (Colombia). In addition to low levels of medical equipment, some regions also face challenges of providing enough doctors. In particular, some regions in the north of Chile and the east of Turkey, together with most regions in Colombia and Mexico, have comparatively low levels of both hospital beds and doctors per inhabitant (Figure 1.9-Figure 1.10).

Definition

Obesity refers to the population aged 15 years old or more with a Body Mass Index above 30 kg/m².

Respiratory and cardiovascular mortality correspond to the number of deaths from diseases of categories J00 to J99 (respiratory) and I00 to I99 (cardiovascular) in the International Classification of Diseases (ICD).

Sources

WHO (2020), "COVID-19 and NCDs", *Information note*, <https://www.who.int/docs/default-source/inaugural-who-partners-forum/covid-19-and-ncds---final---corr7.pdf>.

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

See country metadata in Annex B.

Further information

Feng Gao et al., "Obesity Is a Risk Factor for Greater COVID-19 Severity", *Diabetes Care* Jul 2020, 43 (7) e72-e74, <https://doi.org/10.2337/dc20-0682>.

Figure notes

Figure 1.5: CAN, DNK, ISR, ITA, ESP, SWE and CHE, 2017; CHL and EST, 2016; COL and NOR, 2015; AUT, CZE, HUN, LVA, LTU, PRT, SVK and SVN, 2014.

Figure 1.6-Figure 1.7: BGR, CHL, HRV, DNK, EST, FIN, DEU, GRC, IRL, ISR, ITA, LVA, LTU, LUX, NOR, POL, ROU, SWE, CHE and GBR, 2017; FRA, 2017.

Figure 1.8: Weighted averages of small regions (TL3) of AUT, CHE, CZE, ESP, EST, FRA, HUN, JPN, KOR, LTU, LVA, SVK, SVN and SWE.

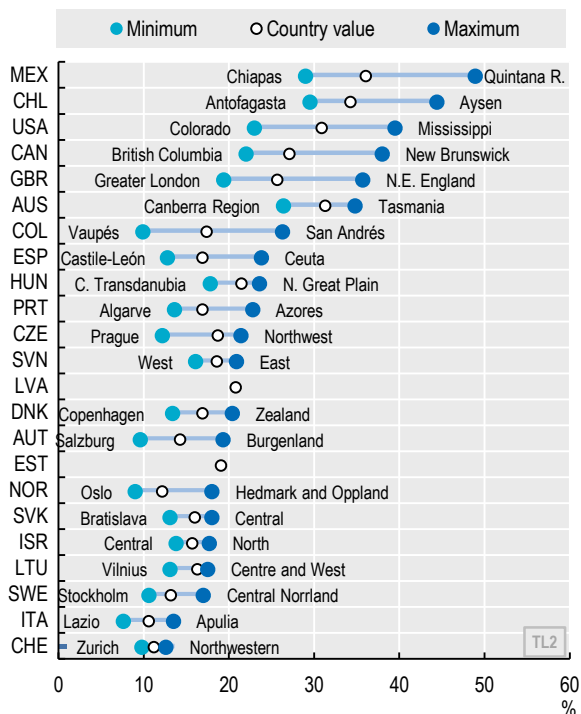
Figure 1.9-Figure 1.10: See reference years for hospital beds and doctor rates in Annex B.

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

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1.5. Obesity rates, 2018

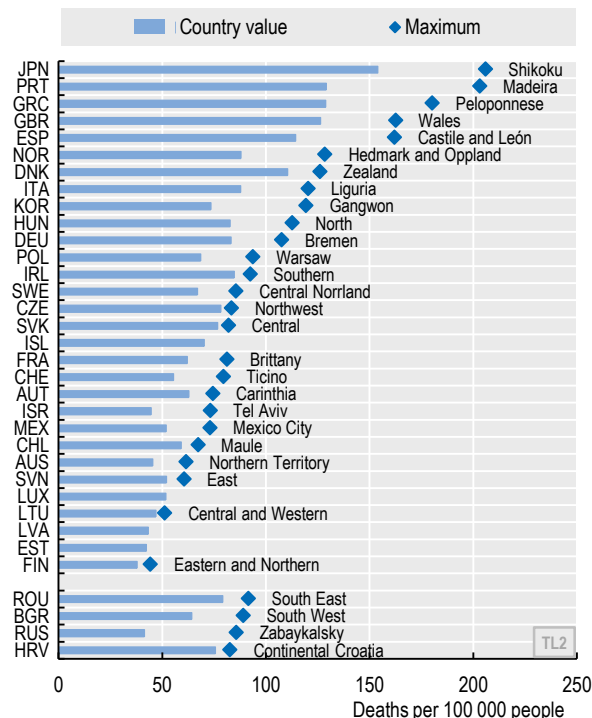
Percentage of adult population, large regions (TL2)



StatLink <https://doi.org/10.1787/888934189146>

1.6. Respiratory diseases mortality, 2018

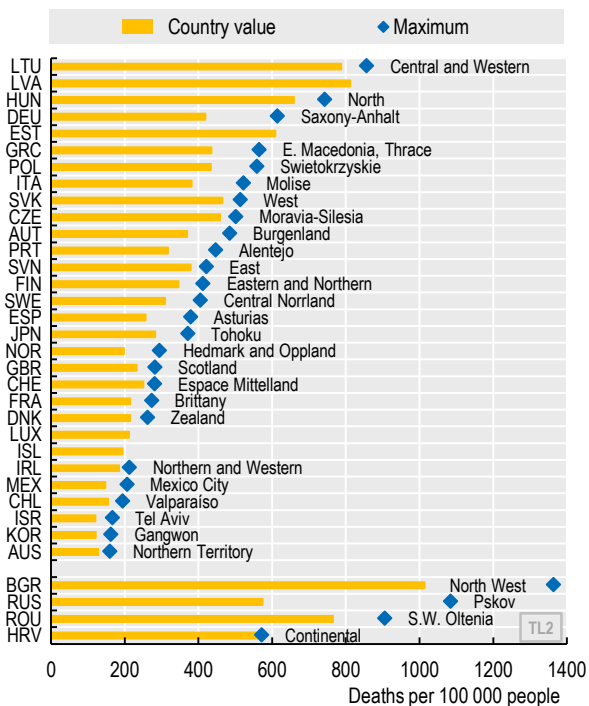
Deaths per 100 000 people, large regions (TL2)



StatLink <https://doi.org/10.1787/888934189165>

1.7. Circulatory diseases mortality, 2018

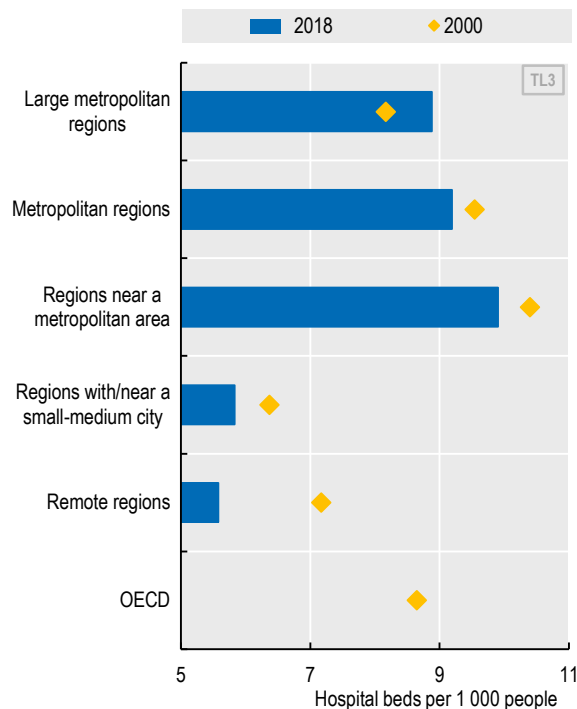
Deaths per 100 000 people, large regions (TL2)



StatLink <https://doi.org/10.1787/888934189184>

1.8. Hospital beds rate, 2000-18

Beds per 1 000 people, by type of region, small regions (TL3)



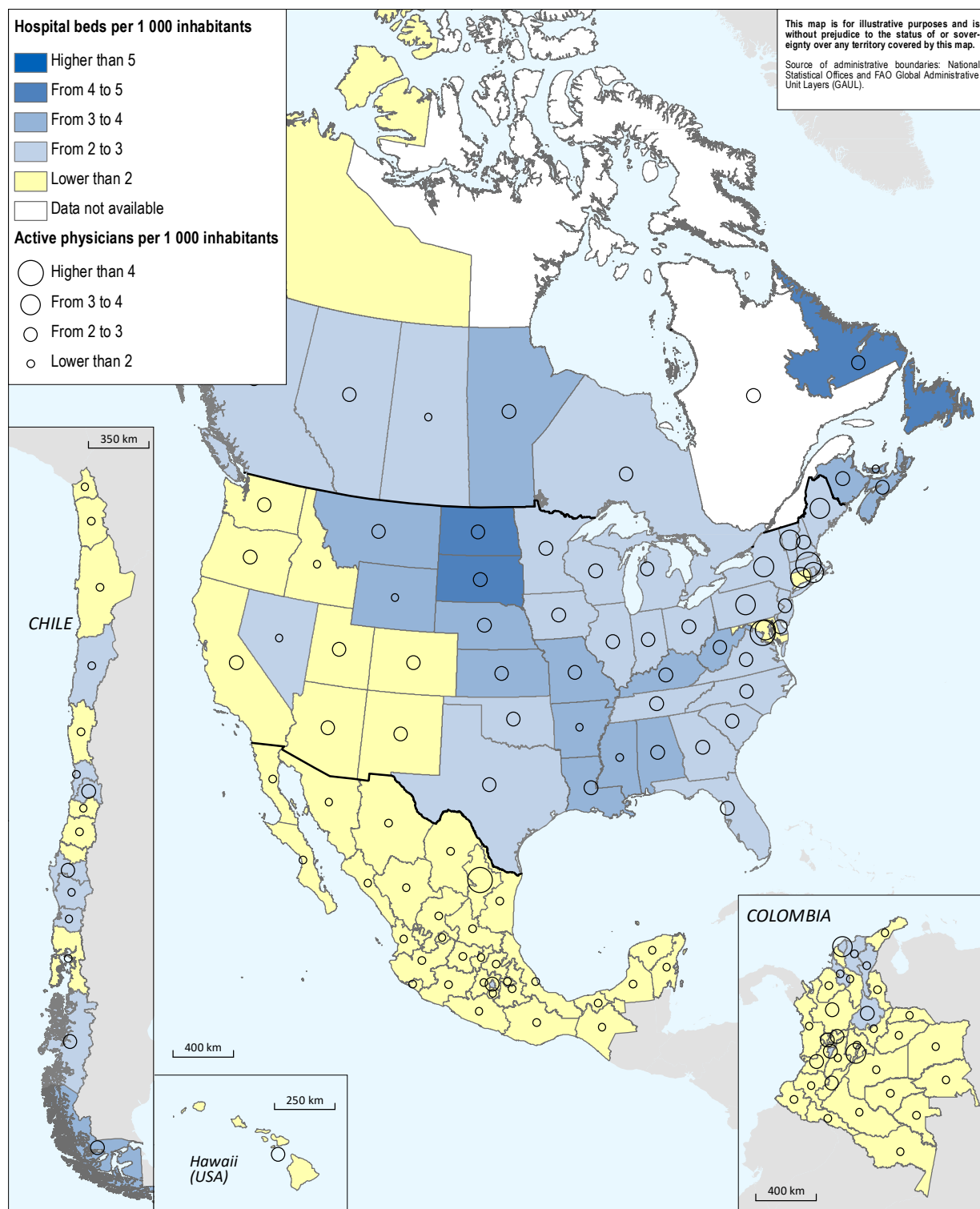
StatLink <https://doi.org/10.1787/888934189203>

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

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1.9. Hospital beds and doctors per 1 000 inhabitants: Americas

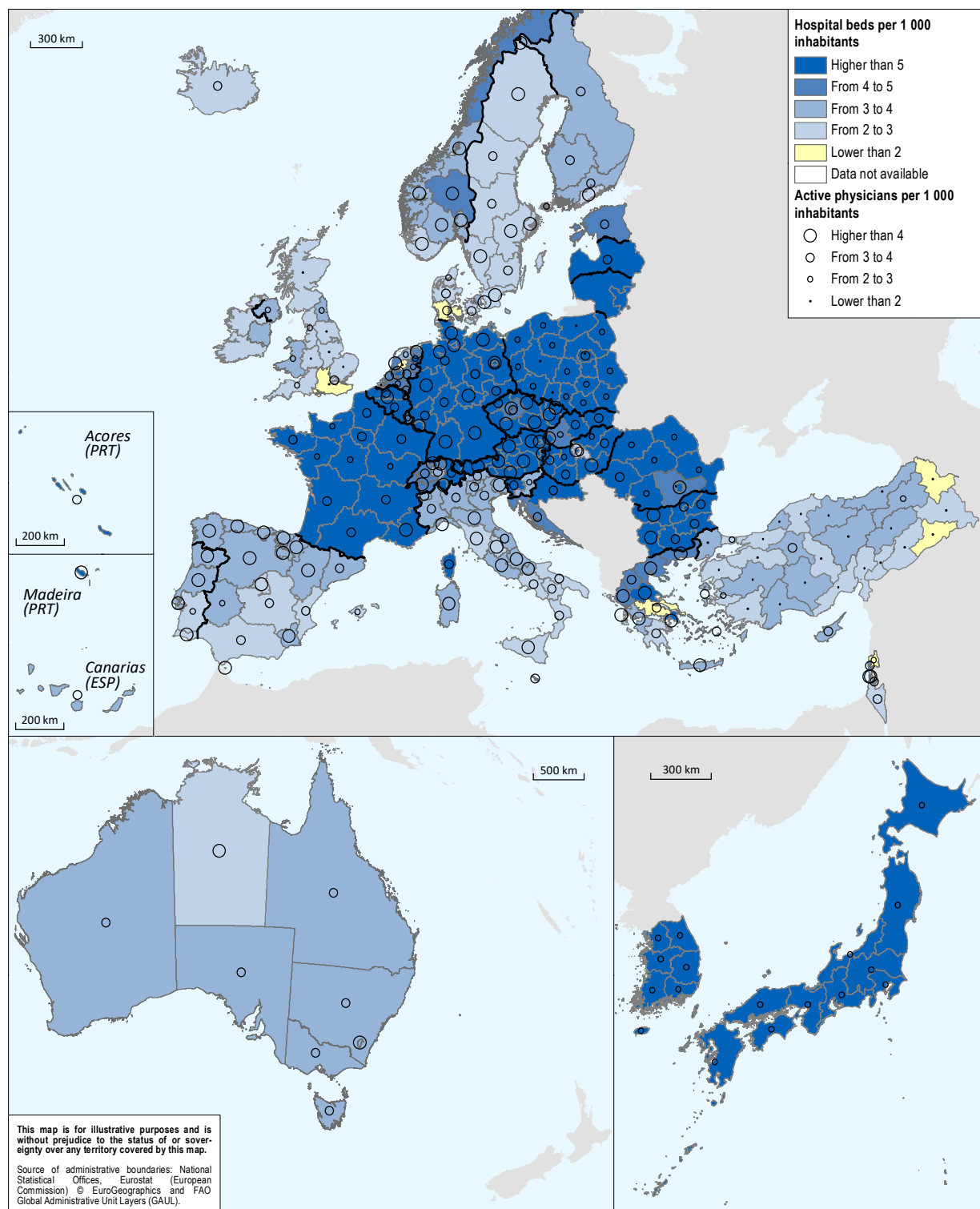
Large regions (TL2), 2018



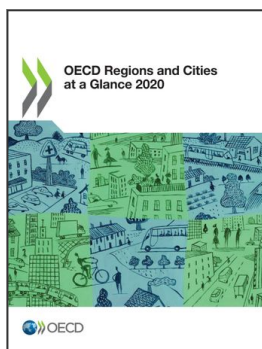
StatLink <https://doi.org/10.1787/888934189222>

1.10. Hospital beds and doctors per 1 000 inhabitants: Europe and Asia-Pacific

Large regions (TL2), 2018



StatLink <https://doi.org/10.1787/888934189241>



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