

Hospital beds and occupancy

The COVID-19 pandemic highlighted the need to have sufficient hospital beds and flexibility in their use, to address any unexpected surge in demand for intensive care. Still, adequate staffing was more of a pressing constraint than bed numbers (OECD, 2023^[1]). Further, a surplus of hospital beds may lead to overuse and therefore costs, as many patients can be treated effectively on a same-day basis in hospitals or primary healthcare facilities. Therefore, a balance needs to be found between ensuring sufficient bed capacity and value-for-money considerations.

Across OECD countries, there were on average 4.3 hospital beds per 1 000 population in 2021 (Figure 5.17). In Korea (12.8 beds per 1 000) and Japan (12.6 per 1 000) rates were much higher. Over half of OECD countries reported between 3 and 8 hospital beds per 1 000 population, with the lowest rates in Mexico, Costa Rica and Colombia.

Since 2011, the number of beds per capita has decreased in nearly all OECD countries, due in part to greater use of day care and reductions in the average length of stay. The largest decrease occurred in Finland, with a fall of around 50%, mainly affecting long-term care and psychiatric care beds. Latvia, Lithuania, Luxembourg, Norway and the Netherlands reduced capacity by 1 bed or more per 1 000 population. In contrast, the number of beds increased strongly in Korea, with a significant number of these dedicated to long-term care.

Hospital bed occupancy rates offer complementary information to assess hospital capacity. High occupancy rates of curative (acute) care beds can be symptomatic of a health system under pressure. Some spare bed capacity is necessary to absorb unexpected surges in patients requiring hospitalisation. Although there is no consensus about the “optimal” occupancy rate, a rate of about 85% is often considered a maximum to reduce the risk of bed shortages (NICE, 2018^[2]). In 2021, the average bed occupancy rate was 69.8%, but the rate was higher than 85% in 3 of the 28 OECD countries with comparable data: Ireland, Israel and Canada (Figure 5.18). Occupancy rates were comparatively low in Türkiye, Mexico and many Central and Eastern European countries. Compared to 2019, occupancy rates were lower in almost all OECD countries in 2021. This reflects in part the suspension or rationing of non-urgent hospital care during the pandemic (OECD/European Union, 2022^[3]).

While general hospital bed capacity matters, intensive care unit (ICU) capacity was an essential resource during the COVID-19 pandemic, delivering care for critically ill patients. Notwithstanding definitional differences, on average across 29 OECD countries there were 16.9 ICU beds per 100 000 population in 2021 (Figure 5.19). Numbers varied markedly from around 40 beds or more per 100 000 population in the Czech Republic, Estonia and Türkiye to below 5 beds per 100 000 in Iceland and Sweden. Compared to the situation pre-pandemic, all countries increased ICU capacity other than Luxembourg (where the absolute number of ICU beds was unchanged). This reflected country efforts to boost surge capacity, such as the temporary transformation of other clinical wards into ICUs and creation of field hospitals with ICUs.

Definition and comparability

Hospital beds include all inpatient beds that are regularly maintained and staffed and that are immediately available for use. They include beds in general hospitals, mental health and substance abuse hospitals, and other specialty hospitals. Beds in residential long-term care facilities are excluded. Data for some countries do not cover all hospitals. In the United Kingdom, data are restricted to public hospitals. Data for Sweden exclude private beds that are privately financed. Beds for same-day care may be included in some countries (such as Austria). Cots for healthy infants are included for a few countries (such as Canada and Poland).

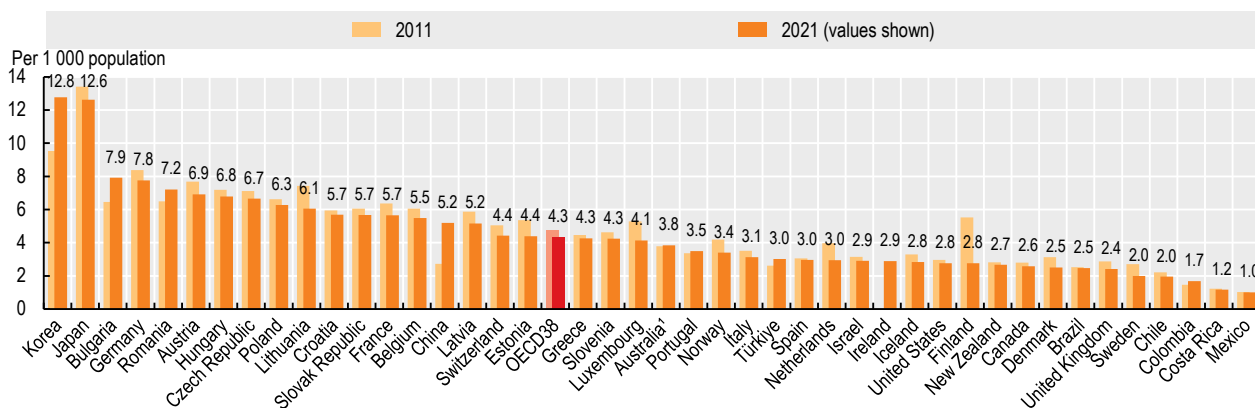
The occupancy rate for curative (acute) care beds is calculated as the number of hospital bed-days related to curative care divided by the number of available curative care beds (multiplied by 365).

ICU beds are for critically ill patients who need intensive and specialised medical and nursing care, strong monitoring and physiological organ support to sustain life during a period of acute organ system insufficiency. ICU beds are classified by the level of care provided to the patient. Commonly, this falls into three levels, with Level 3 providing the most intense monitoring and Level 1 the lowest. The data on ICU beds cover the three levels, except in Finland, Ireland, Italy, Latvia, the Netherlands and Spain, which include only critical care beds (Levels 2 and 3). The exact definition of intensive care beds varies across OECD countries, shaped by differences in regulations, specifying requirements such as the patient/nurse ratio, physical properties of the bed (including ventilators, monitoring equipment, infusion equipment and so on) and patient characteristics. The data in Figure 5.19 relate to adult ICU beds for most countries, but a few countries (such as Estonia, Iceland, Mexico and New Zealand) also include neonatal and paediatric ICU beds.

References

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https://www.nice.org.uk/guidance/ng94/evidence/39_bed-occupancy-pdf-172397464704.
- OECD (2023), *Ready for the Next Crisis? Investing in Health System Resilience*, OECD Health Policy Studies, OECD Publishing, Paris, [1]
<https://doi.org/10.1787/1e53cf80-en>.
- OECD/European Union (2022), *Health at a Glance: Europe 2022*, State of Health in the EU Cycle, OECD Publishing, Paris, [3]
<https://doi.org/10.1787/507433b0-en>.

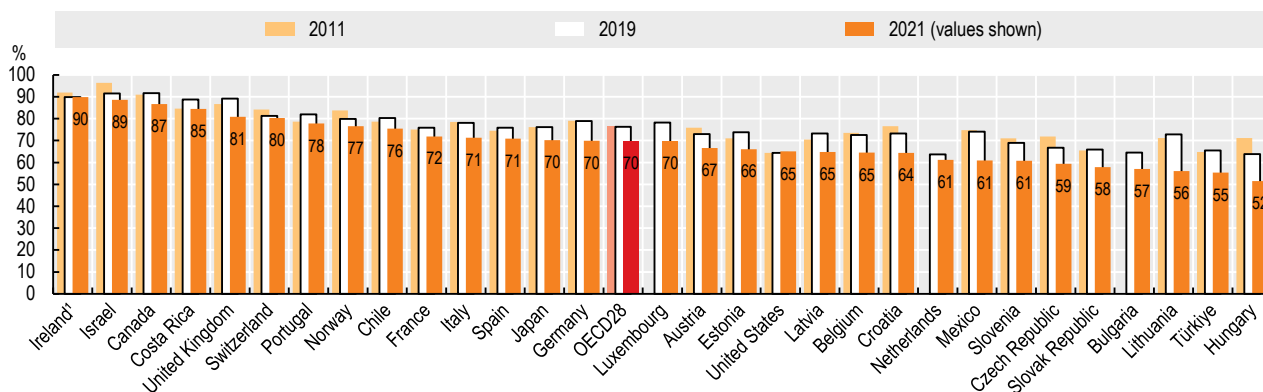
Figure 5.17. Hospital beds, 2011 and 2021 (or nearest year)



1. 2017 data.
Source: OECD Health Statistics 2023.

StatLink <https://stat.link/ua2tpn>

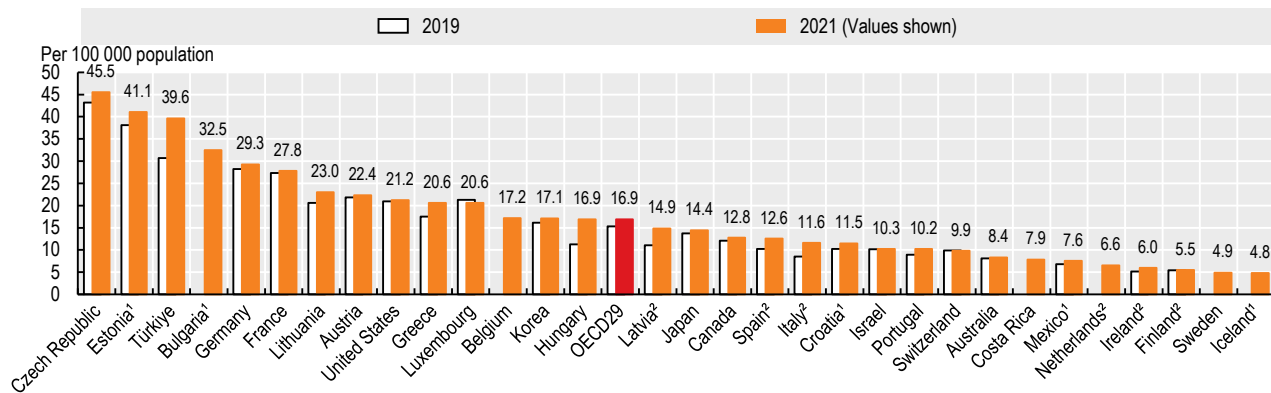
Figure 5.18. Occupancy rate of curative acute care beds, 2011, 2019 and 2021 (or nearest year)



1. Data for Ireland exclude private hospitals (the occupancy rate of curative care beds in both public and private hospitals was 82.8% in 2021).
Source: OECD Health Statistics 2023.

StatLink <https://stat.link/6kgodj>

Figure 5.19. Adult intensive care beds, 2019 and 2021



1. Data include neonatal and paediatric ICU beds. 2. Data cover critical care beds only.
Source: OECD Health Statistics 2023.

StatLink <https://stat.link/2j5xh6>



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