RESEARCH REPORT

Eurofound

Living conditions and quality of life

Working for children matters: An overview of service delivery and workforce in Europe

Working for children matters: An overview of service delivery and workforce in Europe

Eurofound

European Foundation for the Improvement of Living and Working Conditions

When citing this report, please use the following wording:
Eurofound (2025), *Working for children matters: An overview of service delivery and workforce in Europe*, Publications Office of the European Union, Luxembourg.

Authors: Daniel Molinuevo, Michele Consolini, Matteo Magnano, Marta Anzillotti (Eurofound); Iñigo Isusi, Jessica Durán (IKEI)

Research manager: Daniel Molinuevo

Research project: Child Guarantee: Two years on (240401)

Acknowledgements: The authors wish to thank Eurofound's Unit C Advisory Committee and Stan van Alphen, Veronica De Nisi and Miguel Angel Alvarez Espinosa from the Directorate-General for Education, Youth, Sport and Culture for their useful comments on a draft version of this report.

Luxembourg: Publications Office of the European Union, 2025

Print:	ISBN 978-92-897-2489-0	doi:10.2806/7303617	TJ-01-25-012-EN-C
PDF:	ISBN 978-92-897-2488-3	doi:10.2806/3377620	TJ-01-25-012-EN-N

This report and any associated materials are available online at https://eurofound.link/ef25002

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency established in 1975. Its role is to provide knowledge in the area of social, employment and work-related policies according to Regulation (EU) 2019/127.

European Foundation for the Improvement of Living and Working Conditions

Telephone: (+353 1) 204 31 00
Email: information@eurofound.europa.eu
Web: https://www.eurofound.europa.eu

Contents

Executive summary

Introduction

This report provides an overview of the state of play of services that are key to tackling child poverty and promoting the well-being of children. The services analysed are healthcare, education, and early childhood education and care (ECEC). In addition to these services, the situation regarding nutrition and housing, which are part of the European Child Guarantee, is also analysed.

The people working with children are integral to ensuring the accessibility of high-quality services, which is the objective of the European Child Guarantee and other EU policy initiatives such as the European Education Area. Workers in ECEC, education and healthcare are the key guarantors of the European Child Guarantee. The report therefore looks at their working conditions and how they can be improved; it also examines how recruitment and retention can be enhanced.

Policy context

The importance of services for children was reiterated in the La Hulpe Declaration on the Future of the European Pillar of Social Rights. The declaration emphasised the necessity of reaching the renewed Barcelona targets on ECEC, and recalled the importance of investing in universally accessible, affordable, high-quality childcare, including by guaranteeing workforce professionalisation and fair working conditions. It also stated that further implementation and strengthening of the European Child Guarantee is essential, along with improving its monitoring. As stated in the Competitiveness Compass for the EU, access to affordable and high-quality childcare is key when it comes to increasing labour market participation and productivity.

The political guidelines for 2024–2029 state that the European Commission will strengthen the European Child Guarantee. These guidelines envisage a new action plan for the implementation of the European Pillar of Social Rights and the first EU Anti-Poverty Strategy. In addition, this report will also support the achievement of the benchmarks set out in the European Education Area.

Key findings

- Child poverty trends over time are progressing towards achieving the goals set at EU level. In 2024, the percentage of children in the EU-27 at risk of poverty or social exclusion (AROPE) stood at 24.1 %. This constitutes a decrease from 2015, although the situation deteriorated each year from 2020 until 2024. This is in contrast to the AROPE rate for the total population, which has decreased since 2021 and stood at 20.9 % in 2024.
- Participation in ECEC has increased over time. More than one third (39.2 %) of children under the age of three participated in formal childcare in 2024.
- The data show progress in the area of housing, and disparities between EU Member States are decreasing. Nevertheless, the gap between children who are AROPE and those who are not is still notable, with the latter being nearly 10 times less likely to live in a household facing housing cost overburden.
- The mental health of children worsened slightly in the period before the COVID-19 pandemic and then plummeted between 2018 and 2022, especially among young teenagers. Unmet healthcare needs have also increased over time.
- Performance in education is one of the areas most affected by the pandemic, with plummeting scores and increased disparities. Additionally, the rates of early school leaving are increasing, even when controlling for the degree of urbanisation and the household's economic condition. Women with childcare duties have the highest dropout rates.
- The healthcare sector is negatively affected by precarious working conditions such as poor work–life balance due to long and unsocial hours. Poor job quality is widespread, with above-average levels of work intensity combined with elevated levels of emotional demands that lead to burnout.
- The high level of labour mobility of healthcare professionals allows labour shortages to be addressed in some countries at the expense of brain drain and increased labour shortages in others (especially those in eastern and southern Europe).
- The mismatch between the level of skills required and that provided by healthcare workers is particularly apparent regarding the lack of knowledge and skills needed to address mental health issues.

- Childcare staff and ECEC workers in most countries are paid at around minimum wage levels. Temporary, part-time and term-time-only contracts are also fairly common. Overall, the sector's working conditions, pay and career opportunities are worse than those of primary school teachers, so many workers choose to change careers.
- The education sector has a U-shaped attrition rate: newly qualified teachers leave after a few years, and teachers over 50 years of age take early retirement. There is also a higher turnover rate for teachers in schools with a high proportion of disadvantaged students and there is a lack of training and resources in relation to working with children with special needs.
- Career advancement and progression in the education sector is often sought by leaving teaching and taking up roles in school leadership or education administration. This creates further shortages in the area of teaching.

Policy pointers

- Public expenditure on education is fundamental. A renewed effort in relation to education funding and policies should follow up on the ambitious agenda that puts high-quality education and well-being at its centre.
- Despite the progress registered among Member States, large disparities still exist between socioeconomic groups, particularly in the area of housing. Reducing disparities is of paramount importance to ensure that all children can afford a good education and good living conditions.
- The COVID-19 crisis showed that certain households may be more financially unstable, which may have a cascade effect on house utilities and arrears. Energy poverty and food poverty are still salient topics that need to be addressed to guarantee children's health.
- There is an opportunity to capitalise on the funding and support available within the framework of the European Child Guarantee, the European Education Area and the EU action plan on labour and skills shortages to improve the working conditions and training opportunities of those delivering services for children.
- Similarly, the forthcoming review of these and other EU policy initiatives (e.g. the new European Pillar of Social Rights action plan) should increase funding, support and monitoring in relation to the working conditions and training opportunities in services for children in order to reach these policy targets by 2030. Monitoring can be enhanced by using data from the European Working Conditions Survey and the European Jobs Monitor.
- The points above are also relevant to initiatives at national, regional and local levels. Many public policies tend to focus on 'services' in general. This can entail one-off investments to set up infrastructure, whereas the workforce requires continuous funding and support. It is therefore important to acknowledge this explicitly in policy initiatives and allocate enough funding.

Introduction

Aims and outline of the report

The main aim of this report is to provide an overview of the state of play of services that are key to tackling child poverty and promoting the well-being of children. This includes looking at the situation of the workforce delivering these services.

The services that are analysed are healthcare, education, and early childhood education and care (ECEC). These services are dealt with through several policy initiatives, which are described in more detail in Chapter 1 of this report. In addition to these services, the situations regarding nutrition and housing are analysed. Although, strictly speaking, these are not services, they have been included because they are two areas covered by the European Child Guarantee.

The method used to analyse trends over time is a convergence analysis of the indicators used in the European Child Guarantee monitoring framework established by the European Commission and the Social Protection Committee. This methodology allows trends to be identified at national and EU levels, and provides insights into whether disparities in the performance of EU Member States increase or decrease over time. Analysing these disparities is key to reducing them. This in turn is one of the core principles of an EU that strives to become, as stated in the Treaty of Rome, 'an ever-closer union'. The importance of this foundational principle is reflected in the fact that the Social Convergence Framework is part of the preventive arm of the EU's new economic governance framework.

One area that is given particular importance in this research is the workforce that delivers services for children. The people working with children are integral to ensuring the accessibility of high-quality services, which is the objective of the European Child Guarantee. Workers in childcare, education and healthcare are the key guarantors of the European Child Guarantee. Despite its importance, only a few national action plans include measures specifically targeting the workforce. Several national action plans mention the development of services in general. It should be noted that developing services can entail one-off investments to build infrastructure. By contrast, supporting the workforce requires continuous financial support, which is possible through the European Social Fund Plus (ESF+), to create new jobs or improve existing ones.

This introductory chapter is followed by a chapter describing some of the EU-level policy initiatives that deal with the accessibility of services for children and/or the workforce delivering these services.

In Chapter 2, the report focuses on the analysis of trends and disparities in the indicators that are part of the common monitoring framework for assessing progress on the implementation of the European Child Guarantee. As described in other publications (Eurofound, 2023), many of the indicators in this framework are relevant to other EU policy initiatives and monitoring frameworks (e.g. the Barcelona targets, the European Education Area, the Social Scoreboard). Analysing these indicators therefore gives an overview of developments in the performance of Member States and the disparities in several policy areas dealt with by the EU, thus identifying areas in which more progress is needed.

Chapter 3 focuses on the workforce needed to deliver the European Child Guarantee in regard to ECEC, education, healthcare and other relevant sectors. This includes looking at labour shortages in these areas and providing examples of how these shortages are mitigated through measures in the areas of training, recruitment, role creation and retention.

The report finishes by summarising the main conclusions of the research and providing a series of policy pointers in relation to initiatives at EU and national levels.

Methodology

The indicators chosen for the trend analysis are part of the monitoring framework for assessing the implementation of the European Child Guarantee. The methodology chosen is convergence analysis. The concept of upward convergence was consolidated in 2017 and centred around the European Pillar of Social Rights (Eurofound, 2021). Upward convergence combines two concepts: improving performance and reducing disparities. Improving performance refers to Member States progressing in the desired policy direction (e.g. increasing school participation or decreasing the number of early school-leavers). Performance is generally measured by means of averages. An improvement in performance that moves towards a policy target is referred to as an upward trend; this means, for instance, that a decreasing rate of children at risk of poverty or social exclusion (AROPE) would be an upward trend, as this is considered an improvement in performance. The opposite is a downward trend, which signals worsening performance (e.g. an increase in the percentage of children who are AROPE).

Reducing disparities refers to convergence between Member States. The opposite is divergence – that is, an increase in disparities. For example, if the rates of early school leaving in two Member States become more similar, they are said to have converged. By the same logic, if the difference between Member States' rates increases, they are said to have diverged. Based on these two concepts, three more scenarios can be observed in addition to upward convergence. Downward convergence occurs when performance worsens and disparities decrease. Upward divergence happens when performance improves and disparities increase. Finally, downward divergence is characterised by worsening performance and increasing disparities.

Convergence in mainly measured by sigma-convergence in this report. Sigma-convergence is characterised by an overall reduction in disparities among countries or regions over time. In this report, it is measured using the standard deviation and the coefficient of variation. The standard deviation is a measure of the dispersion of a set of values. A low standard deviation for an indicator indicates that the values recorded by Member States are close to the EU-27 mean, while a high standard deviation indicates that they are spread out over a wider range. For there to be sigma-convergence, the standard deviation needs to have decreased. The coefficient of variation is a standardised measure of dispersion. It is defined as the ratio of the standard deviation to the mean and is often expressed as a percentage:

$$CV_t = \frac{\sigma_t}{\mu_t}$$

where $\sigma_t = \sqrt{\frac{\sum_{i=1}^{n}(x_{i,t} - \mu_t)^2}{N}}$ and $\mu_t = \frac{1}{N}\sum_{i=1}^{n} x_{i,t}$

Due to the COVID-19 pandemic, 2020 and 2021 data may be unreliable in some Member States, and therefore results for those years have to be considered carefully.

Nonetheless, most of the analysis covers the period between 2015 and 2023, and the differences in disparities have been calculated for those two years, thus ensuring that trends and disparities are based on reliable data.

Information about the situation of the workforce at national level was provided through a literature review of recent research (primarily published over the last decade, from 2014 onwards) that established a link between working conditions and the accessibility of the services covered here.

For this purpose, several academic databases were used, particularly JSTOR Open Access Content, PubMed, Sage Journals, ScienceDirect, Scopus, Routledge Handbooks Online, Web of Science and Google Scholar, alongside Google in general.

The keywords for the search were broken down into three main groups. The first covered each of the four selected sectors; the second group comprised descriptors relating to accessibility; and the third group covered the main concepts relating to working conditions. The Boolean operators 'OR' and 'AND' were used with truncation symbols to identify suitable studies.

These keywords were translated into the different research languages (French, German, Italian and Spanish), and search strings were combined in the literature search.

Studies from scientific and academic literature and 'grey literature' (including policy documents from reliable sources and official documents or think tank reports) were screened and selected if they included a link between working conditions and accessibility. The identified research is primarily from the EU, although literature from outside the EU has also been used in some cases. The data search took place between mid-April and the end of June 2024.

1 EU policy context

La Hulpe Declaration on the Future of the European Pillar of Social Rights

The La Hulpe Declaration sets out the EU social agenda for the period between 2024 and 2029. It represents a broad consensus, as it was signed in April 2024 by the European Parliament, the European Commission, Belgium (on behalf of 25 Member States; Austria and Sweden did not sign), the European Economic and Social Committee, and several civil society organisations (CSOs) and social partners. The declaration reaffirms the commitment to the European Pillar of Social Rights. It emphasises lifelong learning, fair working conditions and social protection, and acknowledges the plans to review the action plan in 2025 to help achieve the 2030 targets set out in the Pillar.

The declaration emphasises the importance of fostering work–life balance, among other social policies. ECEC is mentioned as a key element in achieving this, with the declaration referring to the need to reach the renewed Barcelona targets and recalling the importance of investing in ECEC, 'including by guaranteeing workforce professionalisation and fair working conditions' (Council of the European Union, 2024). The declaration also refers to the further implementation and strengthening of the European Child Guarantee, including through improved monitoring.

Ursula von der Leyen's political guidelines for the next European Commission (2024–2029)

On the day of her re-election as President of the European Commission (18 July 2024), Ursula von der Leyen presented to the European Parliament the political guidelines for her second mandate (2024–2029). The document sets out the priorities for the next five years. Strengthening the European Child Guarantee is mentioned in these guidelines for the 2024–2029 European Commission. Also included is setting up a new action plan on the implementation of the European Pillar of Social Rights and the establishment of the first EU anti-poverty strategy.

The political guidelines also pay particular attention to housing, as they call for the creation of a Commission Directorate-General with responsibility for housing and the first-ever European affordable housing plan.

The Competitiveness Compass

The Competitiveness Compass is a strategic framework introduced by the European Commission in January 2025 to enhance the EU's global competitiveness over the next five years. It focuses on three core areas: (i) closing the innovation gap by fostering start-ups and scaling up technologies; (ii) aligning decarbonisation efforts with economic growth through initiatives like the Clean Industrial Deal; and (iii) reducing dependencies to bolster security and resilience through new trade partnerships. To support these objectives, the compass emphasises regulatory simplification, single market integration, financing competitiveness, the promotion of skills and high-quality jobs and improved policy coordination between the EU and the Member States.

The Competitiveness Compass also makes a link between the objectives of the European Child Guarantee and wider societal issues, stating that: 'Increasing labour participation and productivity largely depend on fair working conditions, decent wages, work–life balance, and on having access to affordable and quality childcare and long-term care' (European Commission, 2025, p. 23).

The Barcelona targets for 2030

The 2022 Council recommendation on ECEC and establishing the Barcelona targets for 2030 asks the Member States to ensure that, by 2030, at least 45 % of children under the age of 3 participate in ECEC services. In 2024, according to EU Statistics on Income and Living Conditions (EU-SILC) data, the EU-27 average was 39.2 %, with 17 Member States not reaching the target set for 2030.

For children between the age of three and the starting age for compulsory primary education, the target is for at least 96 % of children to participate in ECEC for at least one hour per week. The latest data available are from 2023, when the EU-27 average (94.6 %) fell short of the 2030 targets, which were achieved by only 8 Member States.

The Council recommendation establishing the Barcelona targets for 2030 also recommends that Member States support high-quality employment and fair working conditions for ECEC staff, in particular by supporting the development of attractive wages, adequate working arrangements, high standards in occupational health and safety, and equality and non-discrimination in the sector.

The European Child Guarantee

The Council recommendation establishing the European Child Guarantee, approved in 2021, states that the Council welcomes the Commission's aims to 'work jointly with the Social Protection Committee' and 'review the progress made in the implementation of this Recommendation and report to the Council by five years after its adoption' (Council of the European Union, 2021).

The recommendation also mentions the need to invest in a qualified workforce and infrastructure. Moreover, it links several desired outcomes to increased investment in the workforce, including providing high-quality services for children, improving policy effectiveness, implementing preventive and remedial measures and ensuring that Member States are benefiting from EU instruments to their full extent.

The European Education Area

The European Education Area is an EU initiative that aims to create a cohesive, inclusive and high-quality education framework across Europe by 2030. This vision promotes mobility, mutual recognition of diplomas and cross-border cooperation among Member States. Key goals include enhancing the quality and inclusiveness of education, supporting teachers, fostering lifelong learning and leveraging digital and innovative pedagogical methods.

The Council's review of the strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021–2030) took place in 2025. An interim evaluation assessed the effectiveness, efficiency, relevance, coherence and added value for the EU of setting up the European Education Area. To enhance impact, the evaluation suggests ways to update priorities, ensure better links across sectors and policies, and improve monitoring to support evidence-informed decisions. Its content will be used by the Council to reflect on EU-level targets, governance structures and working methods and to make any necessary adjustments for the 2026–2030 cycle.

2 Services for children: Analysis of trends and disparities

This chapter presents the convergence analysis. As stated in the Council recommendation establishing the European Child Guarantee:

> *The Council welcomes the Commission's aim to:*
>
> *[...]*
>
> *(d) work jointly with the Social Protection Committee to:*
>
> *(i) establish a common monitoring framework using existing data sources and indicators and, if necessary, develop further agreed common quantitative and qualitative outcome indicators to assess the implementation of this Recommendation.*
>
> (Council of the European Union, 2021)

The indicators that are part of the monitoring framework were developed and agreed by the Social Protection Committee and its indicators that are part of the monitoring framework subgroup. The Commission will work with the Social Protection Committee to review the progress made on the implementation of this recommendation and report to the Council in 2026.

In the resolution 'Children first – Strengthening the Child Guarantee, two years on from its adoption', the European Parliament states that it:

> *[r]eiterates its call on the Commission to create a transparent and publicly accessible EU-wide monitoring tool; urges the Commission to cooperate with Eurofound and relevant CSOs to build on their work in the creation of such a tool that would facilitate the clear identification of the desired outcomes to increase the transparency, visibility and accountability of the Guarantee, by making it possible to see the state of play in each country and the EU as a whole.*
>
> (European Parliament, 2023, p. 5)

As part of its wider work on convergence, Eurofound has added the indicators relevant to the European Child Guarantee to the convergence monitoring hub [1]. The hub displays the data available together with an analysis of those data, similar to what has been done with other EU monitoring tools and indexes that are part of the hub.

As stated in the recommendation establishing the European Child Guarantee, the Guarantee applies to children in need, who are defined in the recommendation as people under the age of 18 years who are AROPE. The analysis therefore begins by looking at the trends in AROPE rates and breaks this down into subcomponents. The analysis then turns to the other areas covered by the European Child Guarantee: ECEC, education, healthcare, housing and nutrition.

Child poverty

The recommendation establishing a European Child Guarantee aims to prevent and combat social exclusion by guaranteeing access to key services for children in need. For the purposes of the recommendation, children in need are defined as people under the age of 18 years who are AROPE. The analysis in this section thus covers the share of children who are AROPE and breaks this down into subcomponents: the at-risk-of-poverty (AROP) rate for children, the rate of severe material and social deprivation among children and the percentage of children living in a household with very low work intensity. It also covers the AROP gap.

Children at risk of poverty or social exclusion

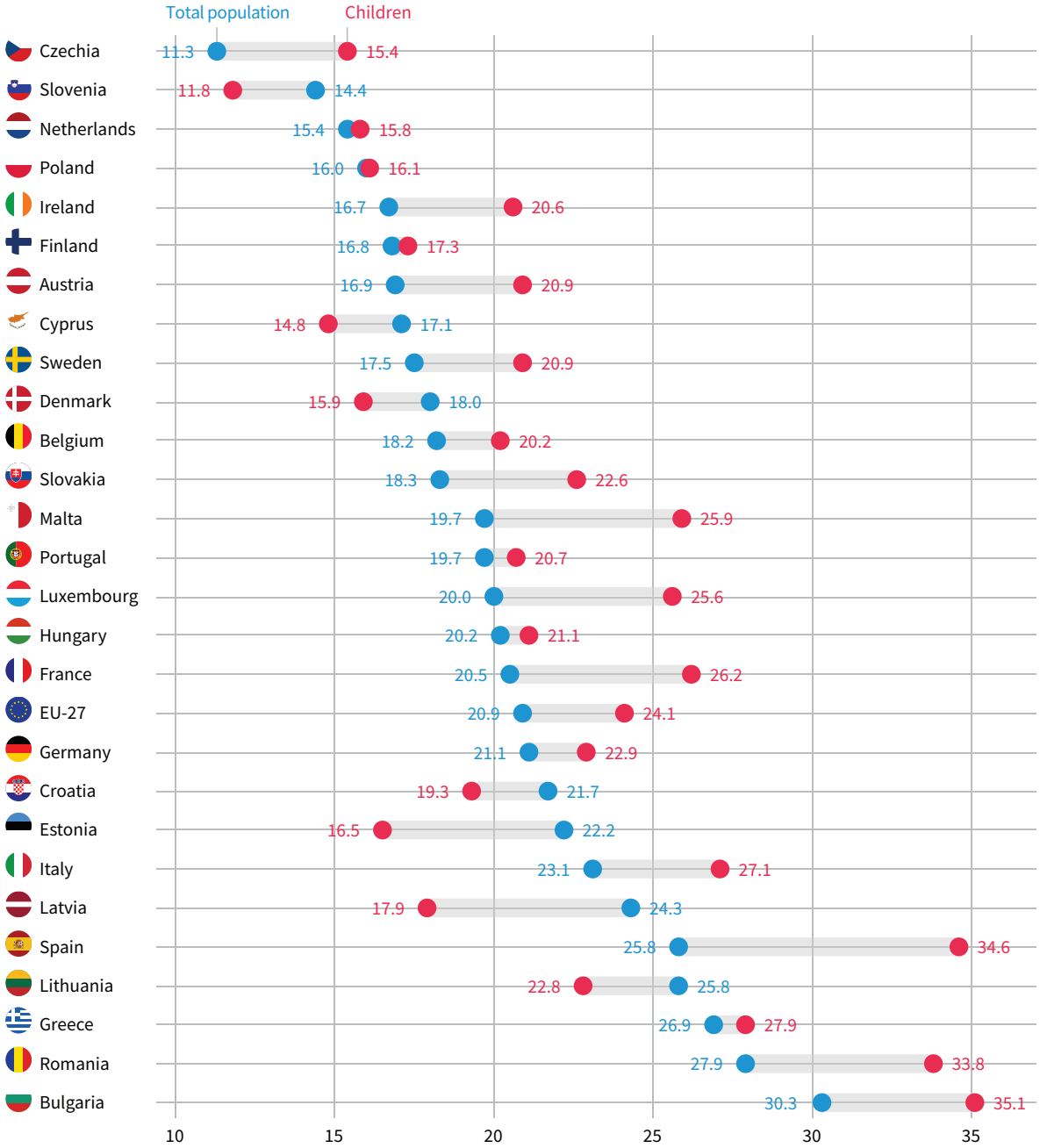
This indicator is calculated based on the AROP rate, the severe material and social deprivation rate, and the low work intensity indicator, all of which are described in more detail in the subsequent sections.

The EU-27 average AROPE rate for children was 24.1 % in 2024, with around 1 in 3 children in Bulgaria (35.1 %), Spain (34.6 %) and Romania (33.8 %) being AROPE. Shares in Slovenia (11.8 %), Cyprus (14.8 %) and Czechia (15.4 %) were about half the EU-27 average. The number of children who were AROPE in the EU-27 amounted to 19 343 000 in 2024.

As can be seen in Figure 1, in most Member States, the AROPE rates were higher for children than for the total population.

[1] More information on Eurofound's European Child Guarantee monitor is available on the dedicated Eurofound web page (https://www.eurofound.europa.eu/en/resources/convergence-monitoring-hub/european-child-guarantee-monitor).

Figure 1: AROPE rates for children and the total population, EU-27, 2024 (%)



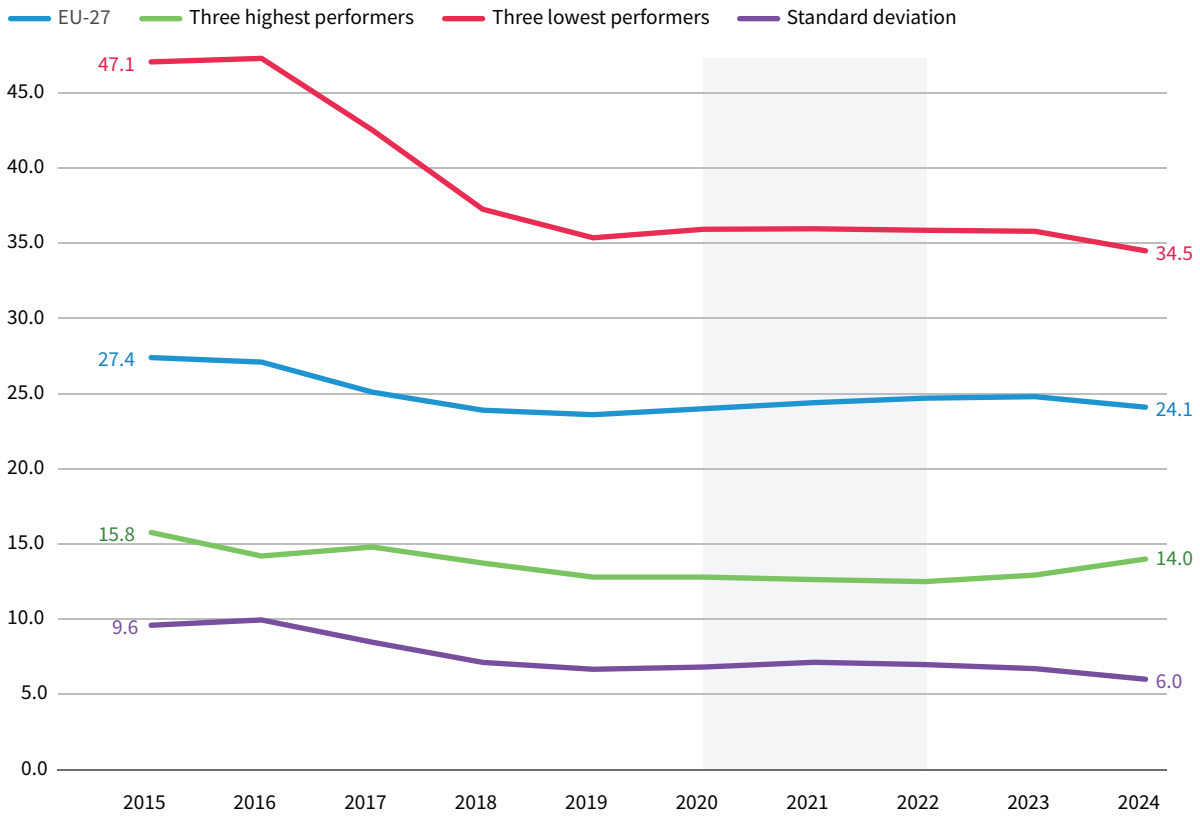
Source: *EU-SILC [ilc_pecs01].*

Analysis over time of the at-risk-of-poverty-or-social-exclusion rate for children, 2015–2024

Between 2015 and 2024, the overall period covered by this indicator, the EU-27 average AROPE rate for children decreased, recording a difference of - 3.3 percentage points (pp) (Figure 2). During the same period, there was a reduction in disparities between Member States, which is reflected in the decrease over time in the standard deviation. Therefore, **upward convergence** was observed. Latvia started with a high share and recorded a drop below the EU-27 average in 2022. Hungary experienced a similar decline in 2022, despite a temporary bump in 2023. Other Member States, including Italy and Romania, experienced a significant decrease but remained well above the EU-27 average. Luxembourg (25.6 %) and Malta (25.9 %) surpassed the EU-27 average in 2023, as both Member States recorded a 2 pp surge in 2022.

Romania (- 19.6 pp), Hungary (- 19.2 pp) and Latvia (- 12.8 pp) showed the greatest improvements. Conversely, Finland (+ 2.8 pp), Germany (+ 3.6 pp) and France (+ 3.8 pp) showed the largest deteriorations.

Figure 2: AROPE rate for children, EU-27 average, standard deviation and highest- and lowest-performing Member States, 2015–2024 (%)



Source: *EU-SILC [tepsr_lm412].*

At-risk-of-poverty rate for children

The AROP rate for children is the percentage of people aged under 18 who are in households with an income below the 60 % median equivalised disposable income after social transfers. In 2023, the EU-27 average AROP rate for children stood at 19.3 %. Spain (29.2 %), Bulgaria (28.2 %) and Romania (26.2 %) had the highest AROP rates for children, whereas Denmark (10.1 %), Slovenia (10.7 %) and Finland (11.6 %) had the lowest.

Analysis over time of the at-risk-of-poverty rate for children, 2010–2024

The EU-27 AROP rate for children stood at 21.1 % in 2010. The rate decreased to 20.7 % in 2013, spiked to 21.4 % between 2014 and 2016 and decreased again to 18.5 % in 2019. It fluctuated around 19.4 % between 2021 and 2024.

Overall, disparities between the Member States increased between 2010 and 2024 (Figure 3). Therefore, the trend over the period can be described as **upward divergence**.

Between 2010 and 2024, Latvia (- 10.8 pp), Poland (- 8.9 pp) and Hungary (- 6 pp) performed best, while France (+ 3.3 pp), Luxembourg (+ 2.7 pp) and Malta (+ 2 pp) had the largest increase over time. A catching-up process was observed, with Member States like Poland and Hungary improving their performance steadily, especially from 2016 onwards.

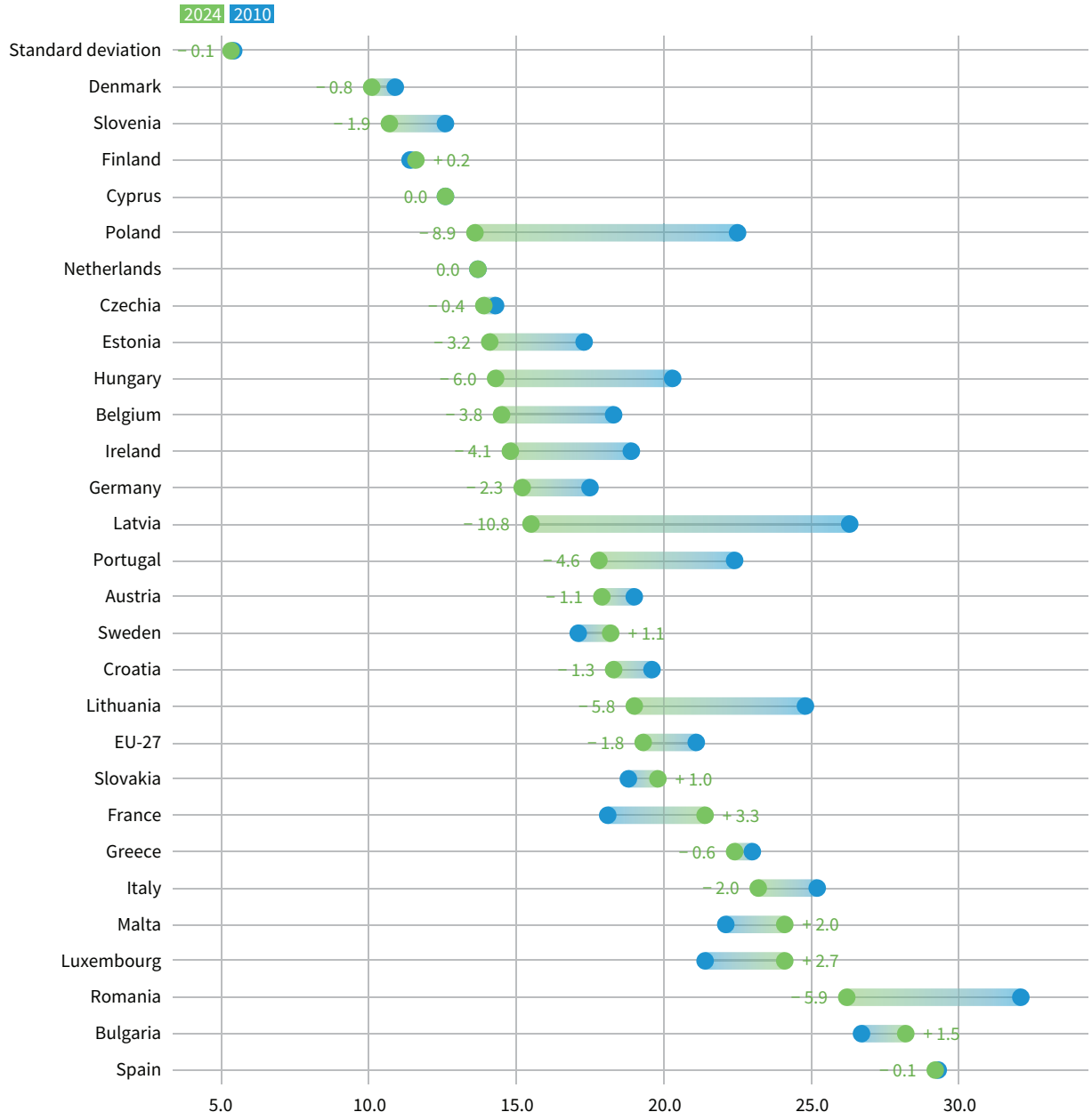
Severe material and social deprivation rate for children

The EU-SILC indicator for severe material and social deprivation among children measures the proportion experiencing an enforced lack of at least 7 out of 13 deprivation items. In 2024, the average share of children living with severe material and social deprivation was 7.9 % in the EU-27. Romania (21.2 %), Bulgaria (18.2 %) and Greece (13.9 %) recorded the highest percentages, while Croatia (1.2 %), Slovenia (1.9 %) and Poland (2.1 %) recorded the lowest.

Analysis over time of the severe material and social deprivation rate for children, 2015–2024

Between 2015 and 2024, the percentage of children living with severe material and social deprivation in the EU-27 decreased from 11.8 % in 2015 to 8.4 % in 2022, and decreased to 7.9 % in 2024. Disparities between Member States decreased substantially during this period. Therefore, the trend can be described as **upward convergence**.

Figure 3: Change in AROP rate for children, EU-27 and standard deviation, 2010 and 2024 (%)



Source: *EU-SILC [ilc_li02].*

Finland's performance plummeted the most, with an increase of + 2.6 pp between 2015 and 2024, followed by Sweden (+ 2.4 pp) and Denmark (+ 1.3 pp). On the other hand, Bulgaria recorded the largest change in absolute terms, seeing its social deprivation rate of 41.7 % in 2015 falling to 18.2 % in 2024: an improvement of - 23.5 pp. Romania and Hungary also experienced notable drops over this period, recording differences of - 19 pp and - 19.7 pp, respectively.

Children living in a household with very low work intensity

The EU-SILC analysis measures the percentage of children living in households where the adults worked 20 % or less of their total combined potential working time during the previous year. In 2024, 7.4 % of children in the EU lived in households with very low work intensity. Germany had the highest percentage (10 %), followed by Ireland (9.8 %) and France (9.6 %), whereas fewer than 3 % of children were living in this situation in Slovenia (2.1 %), Cyprus (2.4 %) and Luxembourg (2.6 %).

Analysis over time of children living in a household with very low work intensity, 2015–2024

Analysis of the percentage of children living in a household with low work intensity shows that Member States' values converged between 2015 and 2024, meaning that disparities decreased over time. The EU-27 average shrunk from 8.4 % in 2015 to 7.4 % in 2024. Thus, the trend is defined as **upward convergence**. The reduction in disparities between Member States was steady between 2015 and 2020. Disparities rose between 2020 and 2021, but shrunk again in 2022 and 2024.

Ireland experienced the largest improvement, from 19.2 % to 8.5 %, albeit experiencing strong fluctuations over time. Only Germany (+ 3 pp) and France (+ 1.5 pp) experienced increases over time.

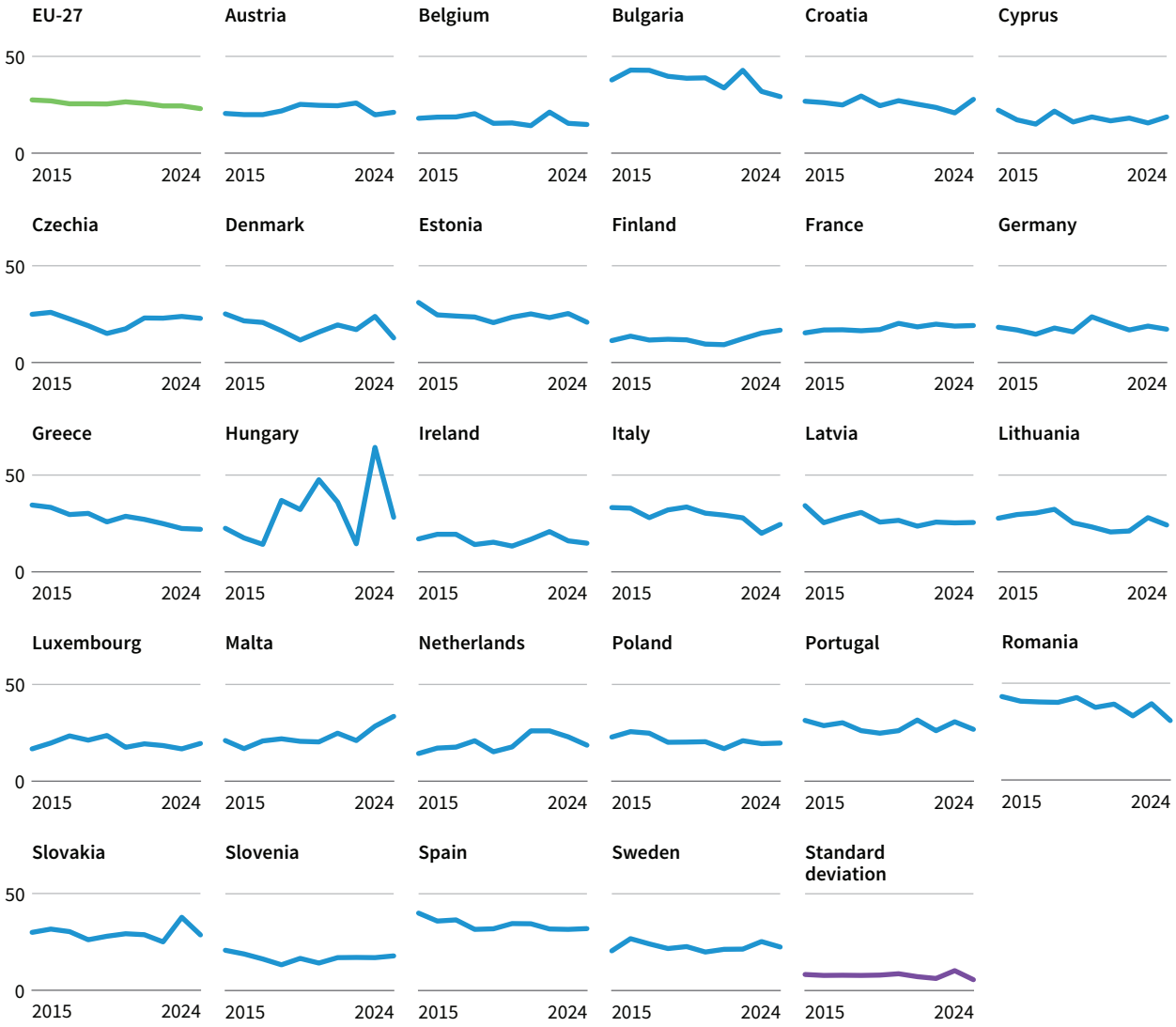
Nevertheless, the shares in Member States with small percentages of households in this situation did not change substantially, hence the diverging pattern observed in the data. With regard to ascertaining the effects of COVID-19 by looking at the changes between 2020 and 2019, the data show the biggest changes occurred in Germany, France and Lithuania.

Relative median at-risk-of-poverty gap for children

The relative AROP gap is a key indicator used to quantify inequality within a society, as it measures the gap between the income of the median person who is AROP and the AROP threshold. A larger gap implies that the median income of children who are AROP stands well below the AROP line.

The EU-27 average for the relative median AROP gap among children was 23 % in 2024 (Figure 4), reaching more than a third in Malta (33.5 %), Spain (32 %) and Romania (30.7 %). Denmark, Ireland and Belgium present the smallest differences between the median incomes of those who are AROP, with 12.7 %, 14.8 % and 14.8 %, respectively.

Figure 4: AROP gap for children, EU-27 and standard deviation, 2015–2024 (%)



Source: *EU-SILC [tesov016].*

Table 1: Summary of results – child poverty

Indicator	Time frame	Policy target	Disparities	Data source
Children who are AROPE	2015–2024	Upward	Convergence	[tepsr_lm412], accessed June 2025
AROP rate for children	2010–2024	Upward	Divergence	[ilc_li02], accessed June 2025
Severe material and social deprivation rate for children	2015–2024	Upward	Convergence	[ilc_mdsd11], accessed June 2025
Children living in a household with very low work intensity	2015–2024	Upward	Convergence	[tepsr_spi130], accessed June 2025
Relative median AROP gap for children	2015–2024	Upward	Divergence	[tesov016], accessed June 2025

Analysis over time of the relative median at-risk-of-poverty gap for children, 2015–2024

The EU-27 average of this indicator for children reduced significantly from 27.5 % in 2015 to 25.5 % in 2017, then fluctuated at around 25.5 % up to 2021. In both 2022 and 2023, the average was 24.4 %, which then fell to 24 % in 2024. Thus, for the whole period, the average decreased by - 3.5 pp. Between 2015 and 2022, a reduction in disparities can be seen between Member States, which is reflected in the decrease over time in the standard deviation. Therefore, **upward convergence** is recorded in the EU-27 during this period.

Overall, Hungary experienced the largest increase in the AROP gap to then catch up to pre-pandemic levels. Other Member States that recorded widening AROP gaps were Malta (+ 12.5 pp), Finland (+ 5.4 pp) and the Netherlands (+ 4.3 pp). On the other hand, Greece (- 12.5 pp), Denmark (- 12.4 pp) and Romania (- 12.4 pp) showed the greatest improvements between 2015 and 2024.

Several Member States experienced notable fluctuations over time. For example, Finland, which scored lowest in most years, reported an AROP gap of 11.3 % in 2015. Between 2020 and 2021, its relative median AROP gap for children dropped below 10 % but the trend reversed in 2022 (12.3 %) and 2024 (16.7 %).

Table 1 above provides a summary of the indicators for child poverty.

Early childhood education and care

The analysis in this section covers the share of children in formal ECEC and the out-of-pocket cost of childcare.

Share of children in formal early childhood education and care

Participation in ECEC, as measured in EU-SILC, includes care obtained through formal arrangements with those other than family members. This includes education at preschool, education at compulsory school, childcare at centre-based services outside school hours (before/after) and childcare at daycare centres. This indicator includes data on children under three years of age and from three years of age up to the minimum compulsory school age.

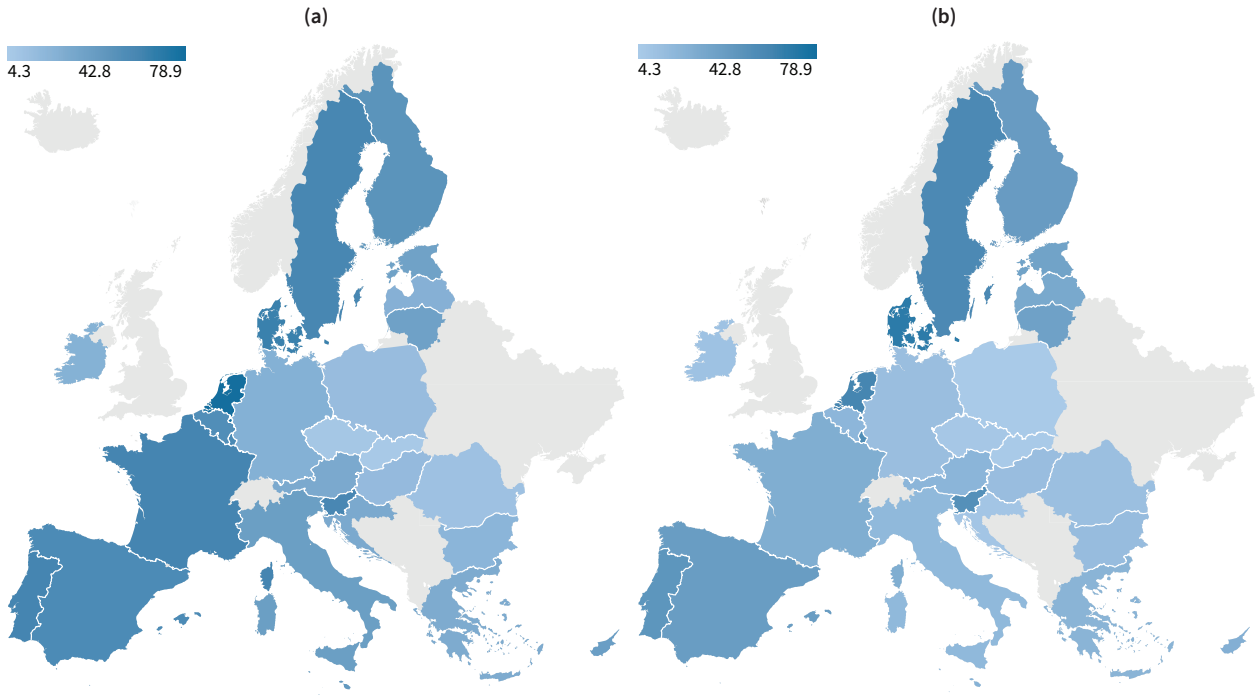
In 2024, 39.3 % of children under the age of three in the EU-27 participated in ECEC for one hour or more on average every week. The figures range from 78.9 % in the Netherlands, 62.9 % in Denmark and 59.4 % in France to 11.4 % in Romania, 7.3 % in Czechia and only 5.1 % in Slovakia (Figure 5).

According to EU-SILC data [2], 89.2 % of children aged from three years up to the minimum compulsory school age in the EU participated in ECEC services for at least one hour per week in 2024. Denmark and Hungary (100 % each) and Sweden (98.9 %) recorded the highest percentages, while Poland (78.7 %), Slovakia (73.3 %) and Romania (72.7 %) showed the lowest participation rates in 2024, despite still having 3 out of 4 children participating in schooling activities.

For children who are AROPE, the EU-27 average for children under the age of three years was 23.6 % in 2024. The participation rates varied from 67.4 % in Sweden to 4.3 % in Slovakia, although the reliability of the data for most Member States is low for this age group. On the other hand, the EU-27 average for children between three years of age and the minimum compulsory school age was 82.4 % in 2024. Estonia (98.3 %), Sweden (98.3 %) and Belgium (98 %) showed the highest ECEC participation rates. Conversely, Croatia (66.1 %), Romania (58.2 %) and Slovakia (53 %)

[2] While the Barcelona targets and the European Education Area benchmarks for children between three years of age and the minimum compulsory school age are measured using administrative data, no AROPE breakdown is available. Therefore, EU-SILC data were used instead.

Figure 5a and 5b: ECEC participation rate for (a) all children under the age of three and (b) children who are AROPE, EU-27, 2024 (%)



Source: *EU-SILC [ilc_caindform25b].*

displayed the lowest rates. Cyprus, Denmark, Hungary and Lithuania were excluded in this instance owing to unreliable data.

In the case of children who are not AROPE, the EU-27 average for children under the age of three was 43.9 % in 2024. The highest figure was found in the Netherlands (81.5 %), while the lowest one was in Slovakia (5.3 %). For children between the age of three and the minimum compulsory school age, the EU-27 average for 2024 was 91.3 %. Malta recorded a rate of 99.6 %, while Slovakia recorded the lowest percentage, with 79.8 %.

Analysis over time of shares of children in formal early childhood education and care, 2015–2024

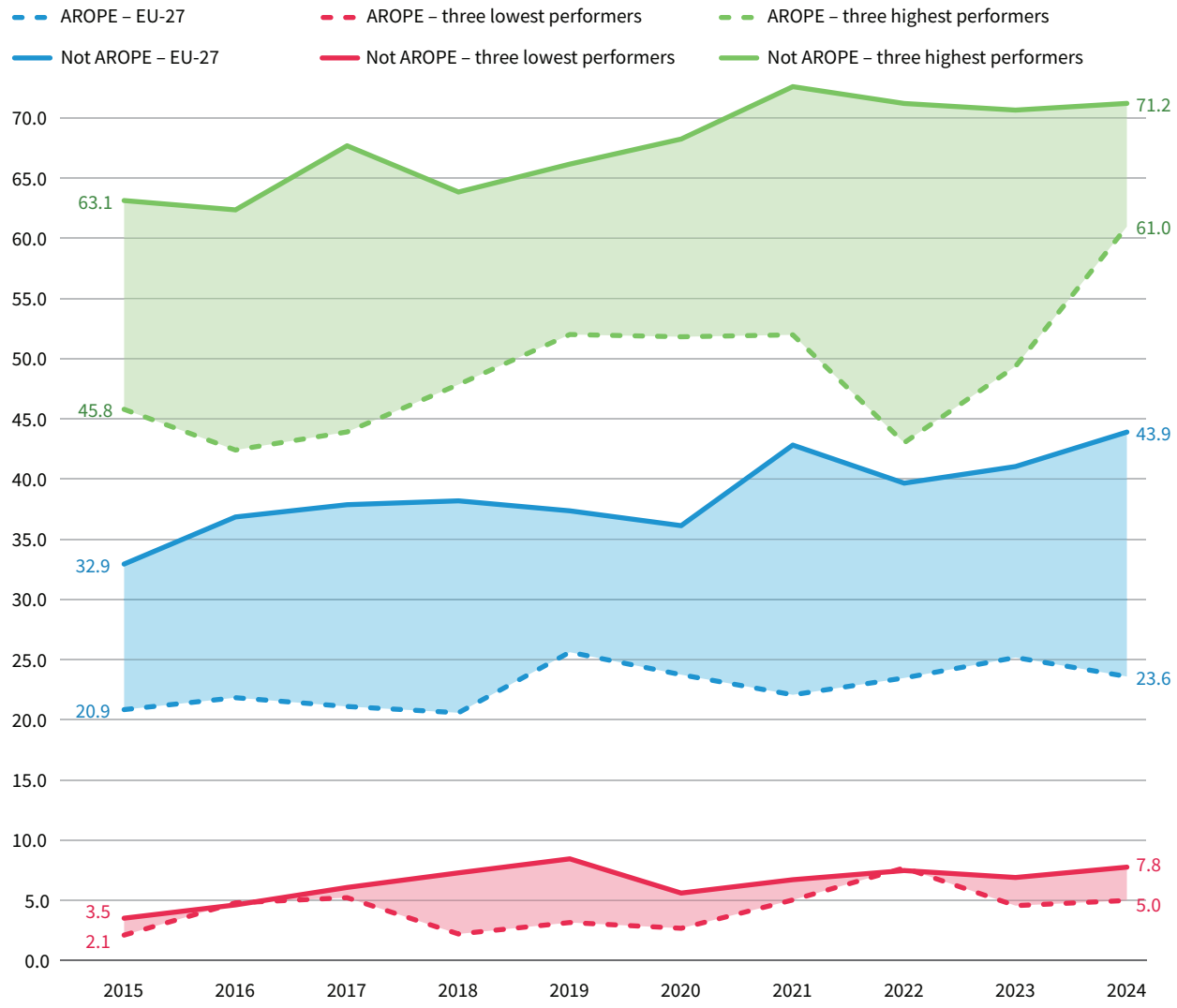
The rate of children not AROPE aged under three participating in ECEC for at least one hour a week on average has increased since 2015 (Figure 6). In terms of disparities between Member States, the standard deviation has increased over time. The change over time can thus be described as **upward divergence**. The Netherlands recorded the largest positive difference in participation in ECEC between 2015 and 2024, with an increase of + 32 pp, followed by Malta (+ 27 pp) and Lithuania (+ 19.1 pp). At the other extreme, Denmark saw its participation rate drop by - 16.2 pp. Despite drops in 2020, Member States like Germany and Ireland managed to improve to pre-pandemic levels in 2024.

Regarding children not AROPE aged from three years up to the minimum compulsory school age, the EU-27 average rate of participation in ECEC increased between 2015 and 2024 (Figure 7). Coupled with narrowing disparities among Member States, the trend can be defined as **upward convergence**. In this case, Croatia (+ 22.2 pp), Poland (+ 21 pp) and Greece (+ 14.6 pp) experienced the largest increases in their shares between 2015 and 2024. Luxembourg recorded the largest negative difference, shrinking its share by - 5.9 pp, followed by Czechia (- 2.3 pp) and Germany (- 1.9 pp).

Looking at the ECEC participation rates of children who are AROPE and under three years old, the standard deviation has increased over time. This change can be described as **upward divergence**. This trend should be interpreted with caution because data were unreliable in roughly one third of the Member States. The largest improvement within the period was seen in Finland (+ 23.4 pp) ([3]), while Germany saw its participation rate shrink by - 10.3 pp.

([3]) Lithuania (+ 36.2 pp) and the Netherlands (+ 31.2 pp) are not mentioned due to unreliable data in 2024.

Figure 6: ECEC participation rate for children under three who are AROPE and who are not AROPE, EU-27 and highest- and lowest-performing Member States, 2015–2024 (%)



Source: *EU-SILC [ilc_caindform25b].*

Considering children who are AROPE and between three years old and the minimum compulsory school age, the EU-27 average has increased over time, while disparities decreased, showing **upward convergence**. Poland showed the greatest increase, with + 33.7 pp, followed by Croatia (+ 31 pp) and Bulgaria (+ 20.8 pp) [4]. Luxembourg (- 13 pp), Germany (- 13 pp) and Malta (- 10.7 pp) recorded the greatest drops.

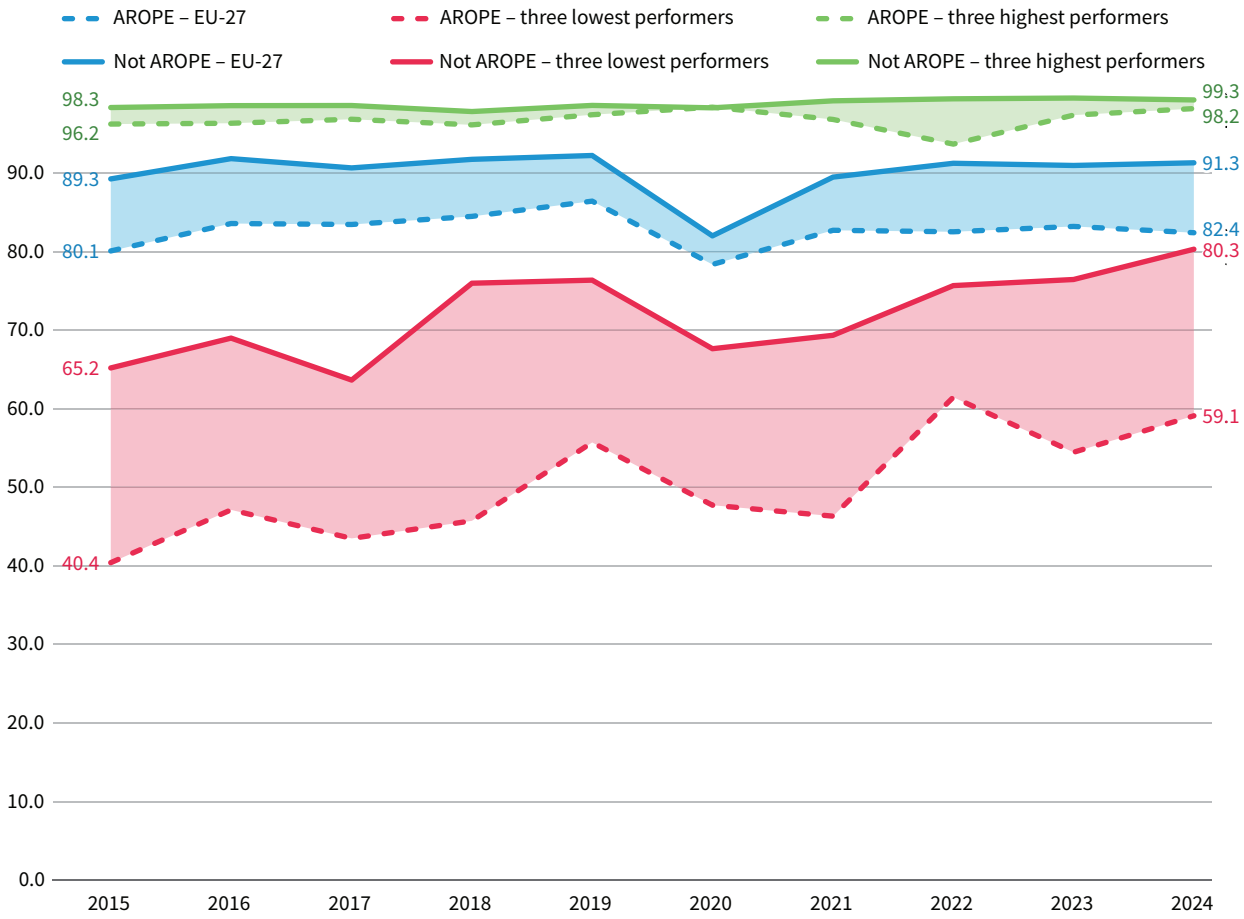
Net out-of-pocket cost of childcare

The affordability of ECEC is measured by looking at net childcare costs. This indicator comes from the Organisation for Economic Co-operation and Development (OECD) Tax and Benefit Model (TaxBEN), calculated as the reduction in disposable income of a family with two children using or not using formal childcare.

In Member States with no or very limited availability of public childcare, the calculations use the average cost of private childcare centres. The cost is calculated as a percentage of average wages for a low-income household earning the minimum wage. Data are available for 21 of the 27 Member States, as the remaining 6 do not have a statutory minimum wage.

[4] Lithuania has improved dramatically in recent years (+ 41.5 pp) but data for 2024 were unreliable.

Figure 7: ECEC participation rates for children aged between three and compulsory school age who are AROPE and who are not AROPE, EU-27 and highest- and lowest-performing Member States, 2015–2024 (%)



Source: *EU-SILC [ilc_caindform25b].*

The unweighted average childcare cost for those 21 Member States was 7 % in 2023. The Member States with the highest percentages that year were Ireland (19 %), Slovakia (17 %) and Czechia (15 %). Bulgaria, Estonia and Malta all reported 0 %.

Analysis over time of shares of net out-of-pocket cost of childcare, 2015–2023

The unweighted average for the 21 Member States for which data are available decreased between 2015 and 2023. The standard deviation also decreased over that period. The change over time can thus be described as **upward convergence**, since there was an improvement in the situation over that period (a decrease in the out-of-pocket cost), together with a decrease in the disparities between Member States. Poland, Luxembourg, Latvia and Ireland were the Member States that improved their scores most significantly, reducing their shares of childcare costs by 10 % or more. Luxembourg and Bulgaria went from scoring below the EU average in 2015 to being among the best performers in 2023. Conversely, the share increased in Slovakia by 8 %, while most other Member States recorded small fluctuations of around 1 % and 2 %.

Table 2 provides a summary of the indicators for ECEC.

Table 2: Summary of results – ECEC

Indicator	Time frame	Policy target	Disparities	Data source
Share of children under the age of 3 in formal ECEC	2015–2024	Upward	Divergence	[ilc_caindform25b], accessed June 2025
Share of children from the age of 3 to compulsory school age in formal ECEC	2015–2024	Upward	Convergence	[ilc_caindform25b], accessed June 2025
Net out-of-pocket cost of childcare	2015–2023	Upward	Convergence	OECD TaxBEN, received November 2024

Education

The European Child Guarantee includes recommendations for Member States to support free and effective access to education and school-based activities. The analysis here covers the rate of low-achieving students in three core school subjects, access to school trips and school events that cost money, access to regular leisure activities and the share of early school-leavers.

Share of low-achieving 15-year-olds in maths, reading and science

The share of 15-year-old students failing to reach level 2 ('basic skills level') on the Programme for International Student Assessment (PISA) scale for three core school subjects – maths, reading and science – is an OECD metric used by the European Commission. In 2022, 26.6 % of students in the EU-27 were low achievers in maths, reading or science, with small differences across the disciplines (29.5 %, 26.2 % and 24.2 %, respectively) (Figure 8).

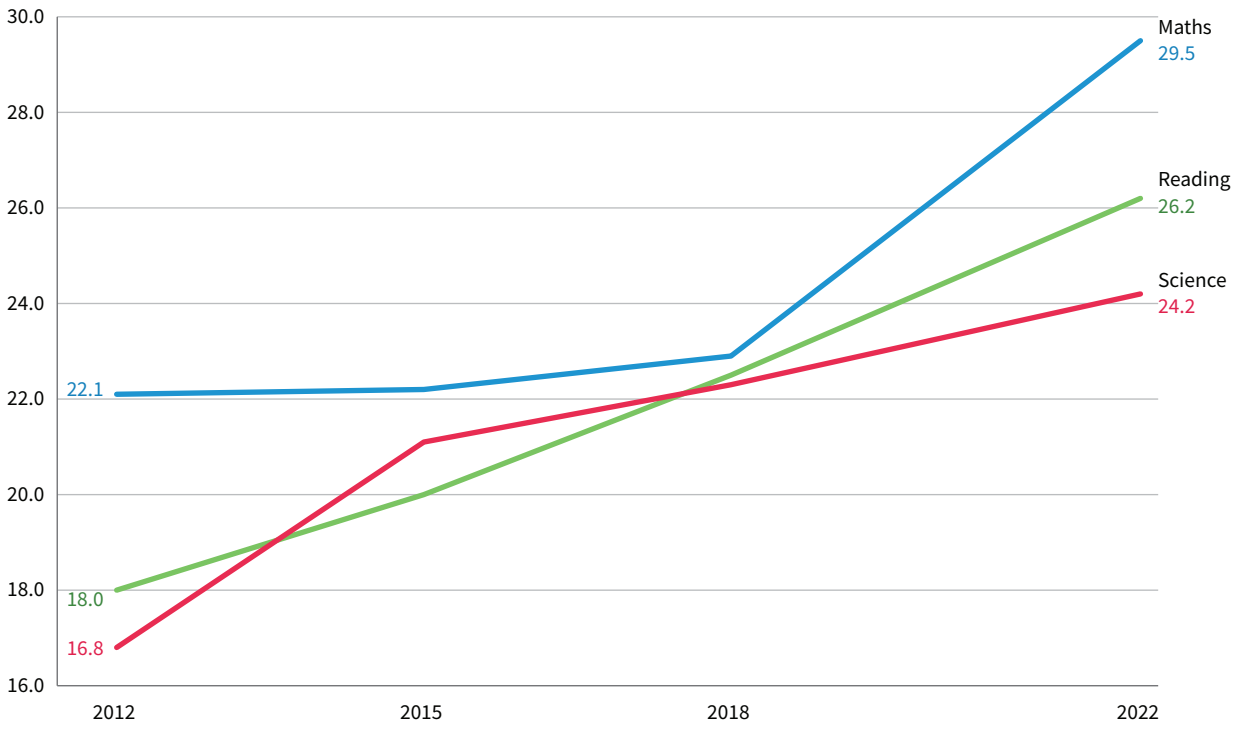
For 2012–2022, the period covered by this indicator, the EU-27 average share of low-achieving 15-year-olds increased for maths, reading and science. The increase was particularly large among low-achieving students in maths. The EU-27 average stayed constant at around 22 % until 2022, when the rate increased to 29.5 %. Moreover, disparities increased between Member States, showing **downward divergence**.

Germany, Greece and the Netherlands recorded a deterioration in performance of more than 10 pp across the three subjects. All Member States saw their shares increase, with Bulgaria, Greece and Romania scoring well above the EU-27 average. Denmark, Estonia and Ireland had a low share of low-achieving children throughout the period and across the three disciplines, although performance decreased.

Share of low-achieving 15-year-olds in maths, reading and science (combined) by socioeconomic status

This indicator takes a deeper look at severe underachievement and breaks it down by socioeconomic status (SES). The indicator was developed by the Commission's Joint Research Centre (JRC) in collaboration with the Directorate-General for Education, Youth, Sport and Culture as part of their work on equity in education and was first introduced in

Figure 8: Share of low-achieving students in maths, reading and science, EU-27, 2012–2022 (%)



Source: *UNESCO, OECD and Eurostat data [educ_outc_pisa].*

the 2022 Education and Training Monitor ([5]). The new indicator combines the scores for the three subjects with the SES of the student, reflecting the material and cultural resources possessed by the student's family. Students are divided into quartiles of SES, and the analysis presents the differences between the highest and lowest quartiles. Data are available for 2018 and 2022.

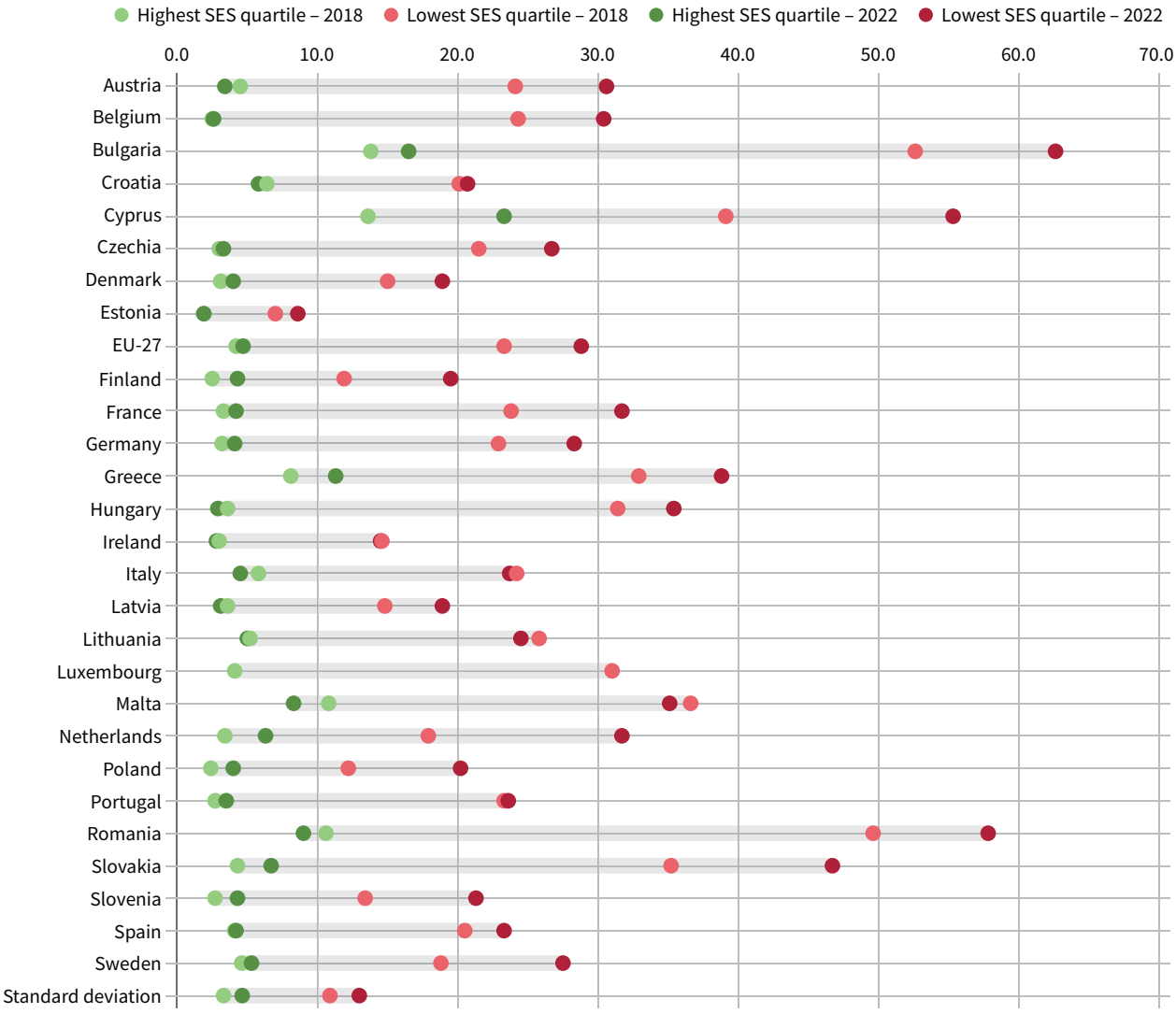
In 2022, the EU-27 average for the share of low-achieving students in maths, reading and science combined was 16.1 %. When broken down by SES quartile, the share of low-achieving students in the highest SES quartile was 4.7 %, whereas the EU-27 average for low-achieving students in the lowest SES quartile was 28.8 % (Figure 9).

Analysis over time of shares of low-achieving 15-year-olds in reading, maths and science by socioeconomic status, 2018–2022

Between 2018 and 2022, the EU-27 average rose by 3.1 pp, from 13 % to 16.1 %. For students in the highest SES quartile, the share grew by 0.5 pp between 2018 and 2022, whereas for students in the lowest SES quartile the share grew by 5.6 pp. Moreover, the gap between the highest and lowest SES quartiles increased by 5 pp between the two years. At the same time, disparities increased for the overall population and especially among students in the lowest SES quartile. This trend is therefore described as **downward divergence**.

In 2018, Estonia, Poland and Finland were the Member States that recorded the highest performance levels, with low shares of underachievers in the highest quartile (1.9 %, 2.4 % and 2.5 %, respectively) and in the

Figure 9: Share of low-achieving students by highest and lowest SES quartile, 2018 and 2022 (%)



Sources: *UNESCO, OECD and Eurostat data [educ_outc_pisa] and JRC and Directorate-General for Education, Youth, Sport and Culture calculations.*

([5]) More information regarding the Education and Training Monitor can be accessed at https://op.europa.eu/webpub/eac/education-and-training-monitor/en/monitor-toolbox/themes/equity-in-education.html.

lowest one (7 %, 12.2 % and 11.9 %, respectively) and a gap between the highest and lowest SES quartiles of less than 10 %. Four years later, the gap had widened for all Member States. In 2022, Estonia was the only Member State where the gap was below 10 %. Among the best-performing Member States for students in the highest SES quartile, Belgium and Hungary display the largest gaps between socioeconomic groups (27.8 % and 32.5 %, respectively). Bulgaria and Romania display the largest shares of underachieving students for both the highest and lowest SES quartiles, as well as some of the largest gaps (46.1 % and 48.8 %, respectively).

Share of children who suffer from enforced lack of access to school trips and school events that cost money

This EU-SILC indicator measures the share of children, (broken down by whether or not they are AROPE), under the age of 16 who are suffering from enforced lack of access to school trips and school events that cost money. In 2021, the percentage of children in this category who were not AROPE in the EU-27 was 16.1 %. The Netherlands (1.3 %), Austria (1.5 %) and Estonia (2.2 %) were the best performers that year. Conversely, Latvia (45.1 %), Cyprus (50.1 %) and Romania (52.9 %) had the highest percentages of children who are not AROPE and who cannot attend school trips or school events that cost money.

The percentage of children in this category who were AROPE was 34.9 % in the EU-27 in 2021. The Netherlands (5.4 %), Estonia (5.5 %) and Finland (6.8 %) performed best, while Hungary (60.4 %), Bulgaria (70.2 %) and Romania (78.6 %) recorded the highest rates of children who are AROPE and who are unable to access school trips and events costing money.

Share of children (< 16 years old) who suffer from enforced lack of access to regular leisure activities

This EU-SILC indicator measures the share of children, broken down by whether or not they are AROPE, under the age of 16 who are suffering from enforced lack of access to regular leisure activities. This refers to those who cannot participate regularly in activities such as sports, cinema trips or concerts due to financial difficulties. The activities taken into account for this indicator are ones that occur outside the home and for which the person needs to cover an expense, such as bicycle rides, swimming lessons or entrance tickets (Eurostat, undated). In 2021, 29 % of children who were not AROPE in the EU-27 suffered from a lack of access to regular leisure activities. The Netherlands (12.6 %), Spain (14.4 %) and Estonia (14.9 %) performed best in this regard. The highest percentages of children who are not AROPE and who cannot access regular leisure activities were found in Latvia (48.4 %), Romania (54.2 %) and Bulgaria (58.4 %).

By comparison, 53.2 % of children who are AROPE in the EU-27 suffered from a lack of access to regular leisure activities in 2021. Estonia (23.6 %), Ireland (31 %) and Poland (37.6 %) had the lowest percentages, while Slovakia (70.4 %), Bulgaria (87 %) and Romania (89.9 %) recorded the highest shares of children who are AROPE and who are suffering from enforced lack of access to regular leisure activities.

Share of early school-leavers

The EU Labour Force Survey (EU-LFS) indicator measures the share of the population aged 18–24 with, at most, lower secondary education who were not involved in any education or training during the four weeks preceding the survey. In order to understand the patterns among early school-leavers, several breakdowns are included, such as by sex ([6]), parental education, degree of urbanisation, presence of young children in the household and jobless households. In 2024, 9.4 % of young adults aged 18–24 in the EU-27 were early school-leavers (11 % of male young adults and 7.7 % of female young adults).

Analysis over time of the share of early school-leavers by sex, 2015–2024

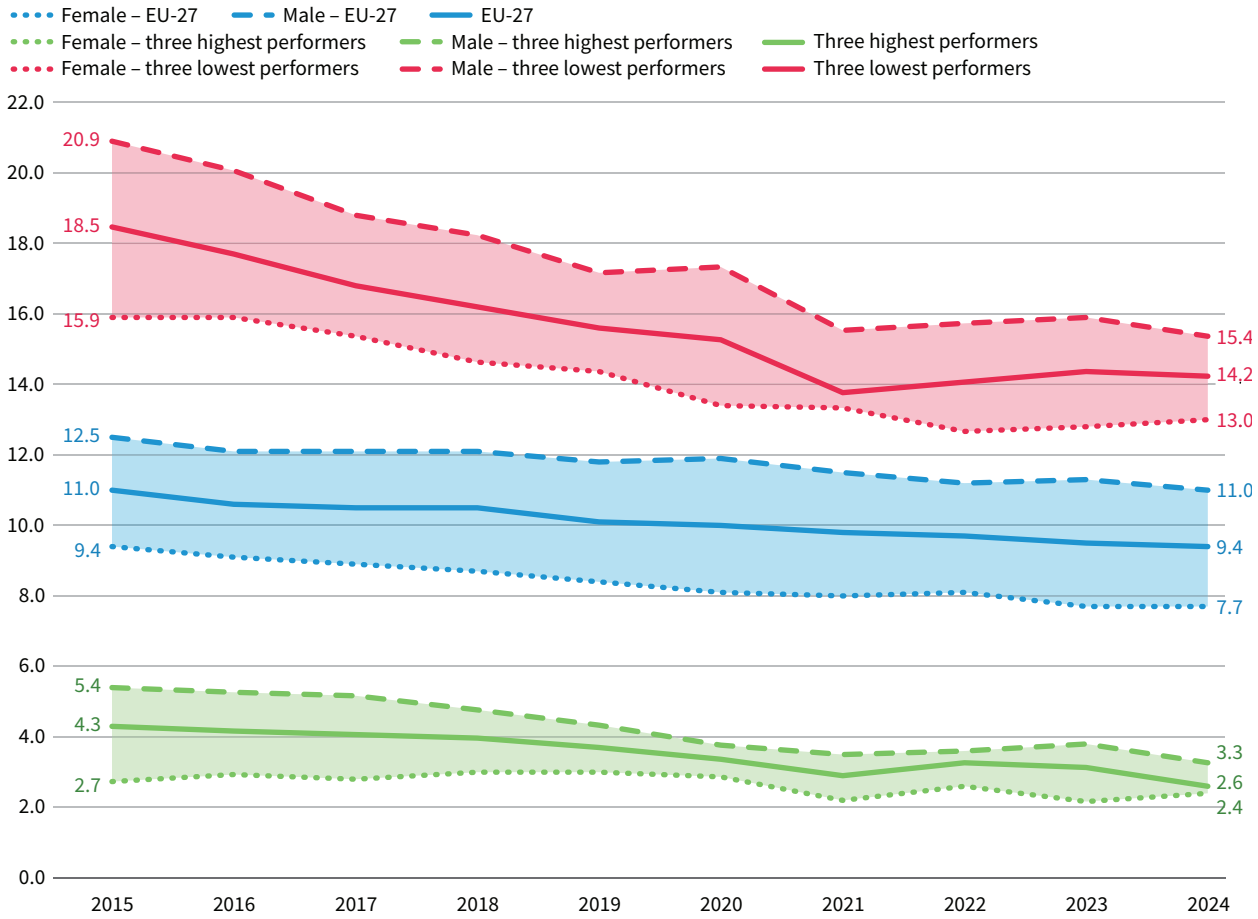
The EU average decreased by 1.6 pp for young adults between 2015 and 2024 (Figure 10). The share of early school-leavers was especially large for the population with parents with low educational attainment. During the same period, there was a decrease in disparities between Member States for all groups, which is reflected in the decrease over time in the standard deviation. Therefore, **upward convergence** is recorded, as reflected in the improvement of the situation in the EU-27 over time together with the decrease in disparities between Member States.

Although the EU average shows balance in the levels of improvement for male and female young adults, the dynamics between the Member States are slightly different. For instance, Portugal notably improved its performance during the period, falling below the EU average for early school-leavers. Malta and Spain also showed significant reductions, both moving closer to the EU average. These Member States displayed an improvement rate for male young adults that was notably higher than that for female young adults.

On the other hand, Cyprus (+ 5.2 pp), Lithuania (+ 2.9 pp) and Germany (+ 2.8 pp) showed the largest increases in early school-leavers.

([6]) While Eurofound acknowledges that the concepts of gender and sex are different, in this report, unless otherwise stated, gender is used to denote female and male characteristics. Certain survey data (e.g. those collected by Eurostat and the EU-LFS) are coded using the term 'sex' and survey results in this report based on these sources retain that term.

Figure 10: Early school-leaving rate by sex, EU-27 and highest- and lowest-performing Member States, 2015–2024 (%)



Note: *Highest performers refers to the lowest rates of early school leaving.*
Source: *EU-LFS [edat_lfse_14].*

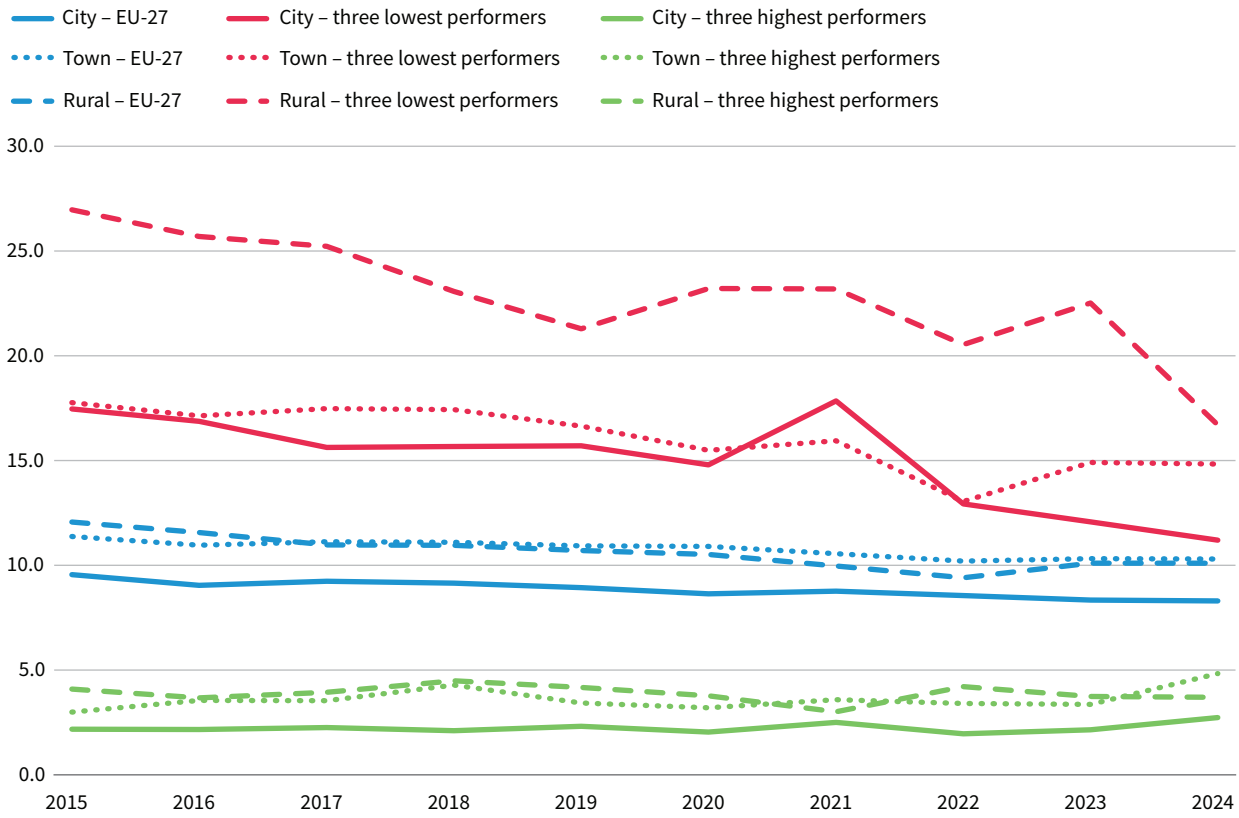
Analysis over time of the share of early school-leavers by parental educational attainment, 2015–2021

The average EU results show that being an early school-leaver is more common among those whose parents have low educational attainment (26.2 %) and much less common among those whose parents have medium (6.9 %) or high (2.9 %) levels of education. The percentage is slightly higher among male respondents than female respondents, but differences between men and women become smaller as the educational attainment of parents increases. Despite the missing values for the rates in some Member States, some observations can be made. In Slovakia, Romania, Bulgaria and Hungary, early school-leavers whose parents have a low level of education account for more than 50 % of early school-leavers (69.7 %, 57.5 %, 55.5 % and 51.1 %, respectively).

Analysis over time of the share of early school-leavers by degree of urbanisation, 2015–2024

The EU average and standard deviation decreased for cities, towns and rural areas, meaning that **upward convergence** was found at all levels of of urbanisation. In cities, the share of early school-leavers was slightly lower (8.3 %) than in towns (10.3 %) or rural areas (10.1 %) (Figure 11). In rural areas, this is due to the high shares in Romania, which remained above 20 % for the whole period, whereas the shares in other Member States improved. In cities, the lowest-performing Member States were Germany (12.4 %) and Malta (11.4 %). The other three Member States with rates above 10 % were Austria, Italy and Spain. Despite the high shares in Spain, the Member State improved its performance dramatically, reducing its early leavers by a third in nine years.

Figure 11: Early school-leaver rate by degree of urbanisation, EU-27 and highest- and lowest-performing Member States, 2015–2024 (%)



Note: *Highest performers refers to the lowest rates of early school leaving.*
Source: *EU-LFS [edat_lfse_30].*

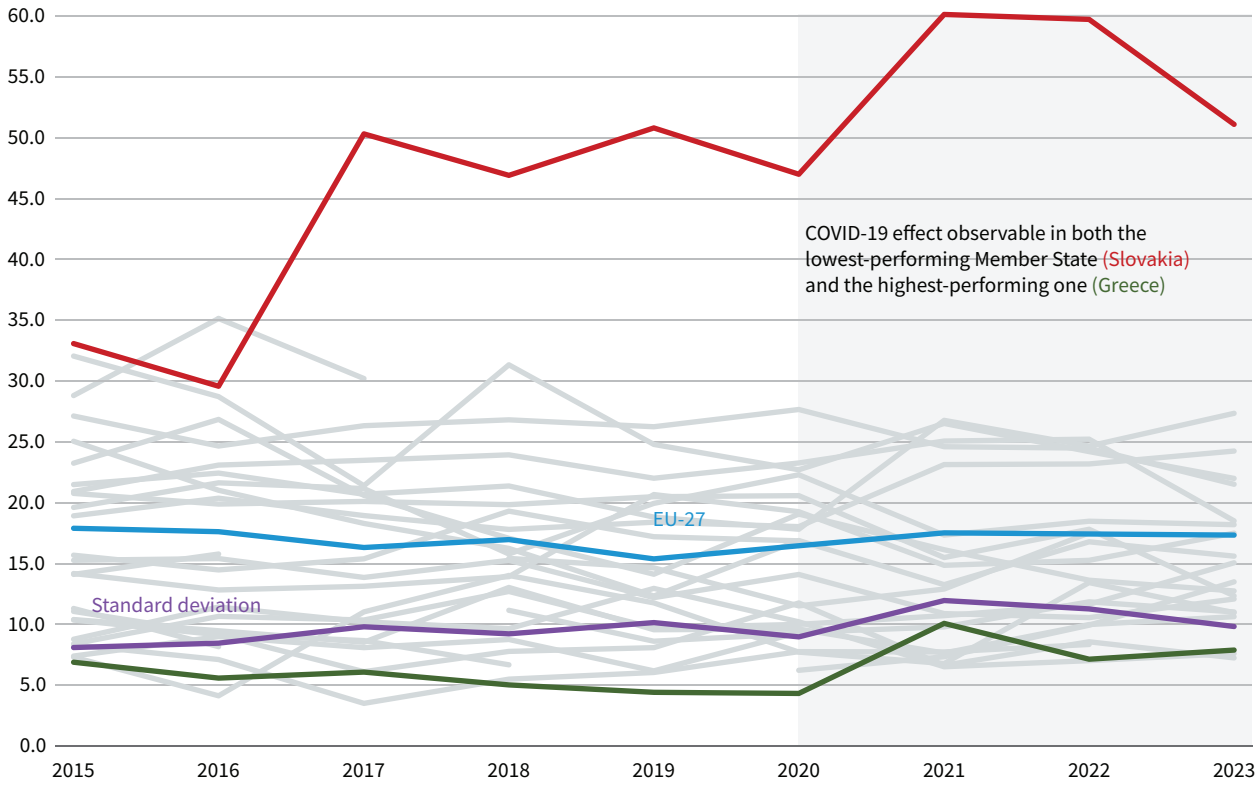
Analysis over time of the share of early school-leavers by female respondents and presence of children in the household, 2015–2023

Previous findings show that most care duties fall on women in the household. It is therefore important to analyse those households with children and the sex distribution of early school-leavers. The European average early school-leaving rate for female respondents with children in the household was 42.4 % in 2023, an increase of 1.6 pp since 2015. Notwithstanding, disparities decreased, so the trend is one of **downward convergence**. Conversely, the share of female respondents from childless households was 5.9 %, with decreasing disparities, thus showing **upward convergence**. The difference is stark and, although not all Member States have data available for this breakdown, Greece, Spain and Romania held the largest shares in 2023 (65.5 %, 63.5 % and 58.1 %, respectively). Greece experienced the largest increase, with an increase in early school-leavers of around 6.6 pp. Conversely, Bulgaria and Spain managed to decrease their shares substantially. There is no clear pattern when it comes to effects of the COVID-19 pandemic: only two Member States, Belgium and Germany, increased their shares dramatically between 2020 and 2021, and the trend reverted quickly.

Analysis over time of the share of early school-leavers by jobless households, 2015–2023

The share of early school-leavers from jobless households stagnated over the eight years, but disparities increased, showing **upward divergence**. The effect of the COVID-19 pandemic is clearly visible among these respondents. Shares decreased by 2.5 pp from 2015 to 2019, then slowly picked up again and held at around 17.3 % in 2023, with an improvement of just 0.5 pp compared with 2015 (Figure 12). Conversely, disparities continued to increase, with the standard deviation reaching the highest point in 2021 at 12, and then declining to 9.8 in 2023. The steep increase was due to the rates in Slovakia and Romania, which increased by more than 10 % between 2020 and 2021. Romania's share remained high at 27 %, whereas Slovakia managed to reduce its share by almost 10 pp in 2023, bringing it back to pre-pandemic levels.

Figure 12: Early school-leavers rate in jobless households, EU-27, standard deviation and highest- and lowest-performing Member State, 2015–2023 (%)



Notes: *The standard deviation is calculated based on the unweighted EU-27 average to fully capture the convergence dynamics that would otherwise be hidden by the weights.*
Source: *EU-LFS [edat_lfse_30], Eurostat calculations.*

Table 3 provides a summary of the indicators for education.

Table 3: Summary of results – education

Indicator	Time frame	Policy target	Disparities	Data source
Share of low-achieving 15-year-olds in maths, reading and science	2012–2022	Downward	Divergence	[educ_outc_pisa], accessed March 2025
Share of low-achieving 15-year-olds in maths, reading and science by SES	2018–2022	Downward	Divergence	[educ_outc_pisa], received March 2025
Share of early school-leavers by sex	2015–2024	Upward	Convergence	[edat_lfse_14], accessed March 2025
Share of early school-leavers by parental education	2015–2021	Upward	Convergence	[edat_lfse_30], received May 2024
Share of early school-leavers by degree of urbanisation	2015–2024	Upward	Convergence	[edat_lfse_30], accessed June 2025
Share of early school-leavers by sex and presence of children in the household	2015–2023	Downward	Convergence	[edat_lfse_30], received May 2024
Share of early school-leavers by jobless households	2015–2023	Upward	Divergence	[edat_lfse_30], received May 2024

Healthcare

The European Child Guarantee outlines recommendations for Member States to support effective and free access to high-quality healthcare for children who are AROPE. The analysis covers infant mortality, poor mental health, reported levels of very good health and unmet healthcare needs among children.

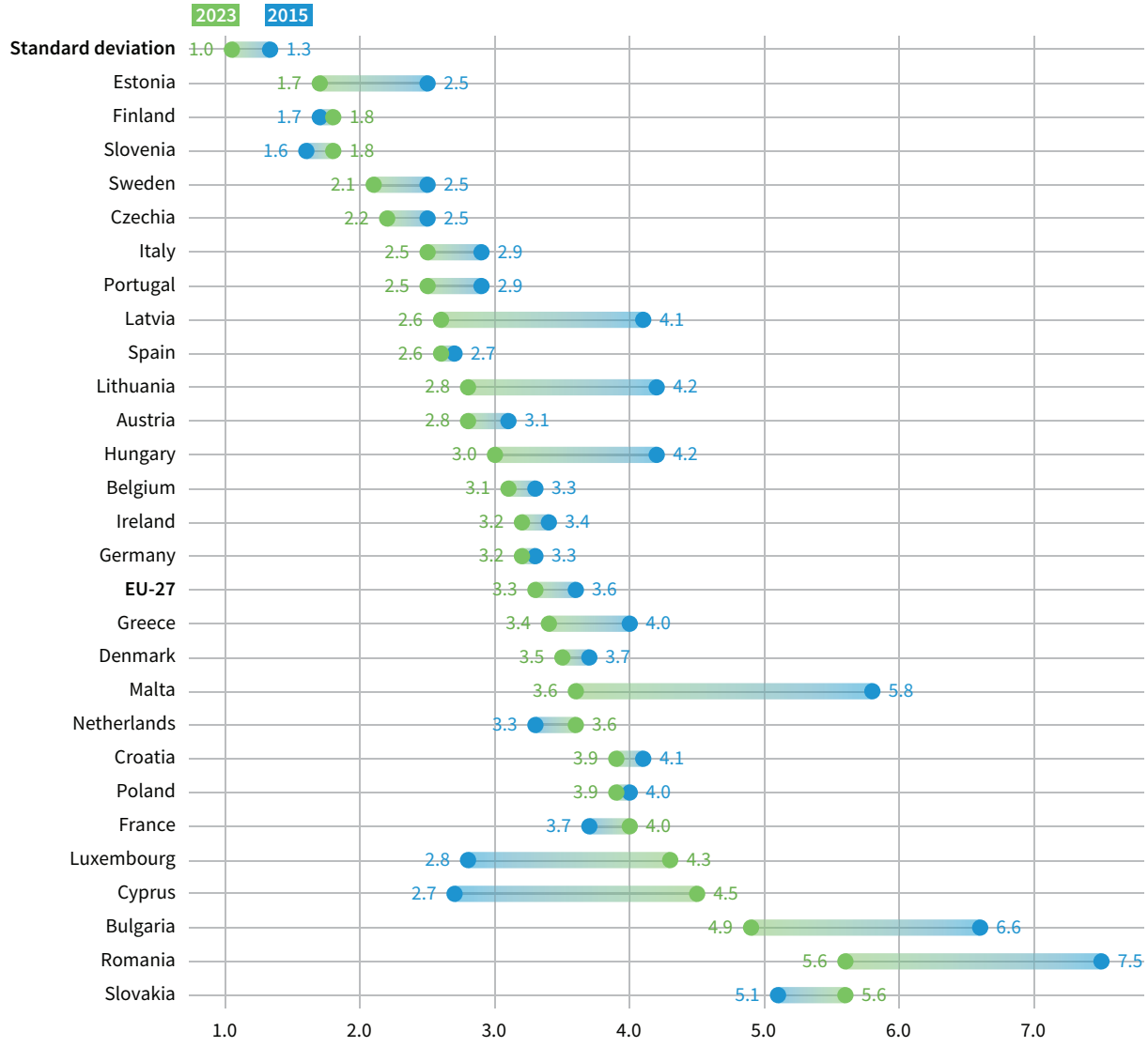
Infant mortality rate

The infant mortality rate is expressed as the ratio of the number of deaths of children under one year of age during a year to the number of live births in that year. The value is expressed per 1 000 live births. The latest Eurostat data for 2023 show an infant mortality rate in the EU-27 of 3.3 deaths per 1 000 live births (Figure 13).

Analysis over time of shares of infant mortality rates, 2015–2023

Between 2015 and 2023, the EU-27 average infant mortality rate decreased from 3.6 to 3.3 deaths per 1 000 live births. Regarding disparities between Member States, the standard deviation decreased over time, showing **upward convergence**. The largest improvements were recorded in Malta (- 2.2), Romania (- 1.9) and Bulgaria (- 1.7).

Figure 13: Infant mortality rate, EU-27 and standard deviation, 2015–2023 (per thousand)



Source: *Eurostat [demo_minfind].*

Share of children who reported feeling low

The mental health of children is measured by looking at the percentage of children in three age groups (11-, 13- and 15-year-olds) who report feeling low more than once a week. Italy was the Member State with the highest percentage of 11-year-olds (40.1 %) who reported feeling low more than once a week in 2022. Austria recorded the lowest level (10 %). Although no EU-27 average is available, the unweighted average for the Member States for which data were available was 18.8 %.

For children aged 13, a similar picture emerges. Italy and Austria ranked as the lowest and highest performers again, respectively, while the unweighted EU-27 average amounted to 27.3 %. Lastly, for children aged 15, the unweighted EU-27 average was 33.1 %. For this age group, Denmark recorded the lowest percentage, with Italy once again having the highest percentage.

Analysis over time of the share of children who reported feeling low, 2014–2022

A higher percentage of children aged 11 reported feeling low more than once a week in 2022 than in 2014 (Figure 14). Disparities between Member States have increased, as has the standard deviation. These changes over time can be described as **downward divergence**.

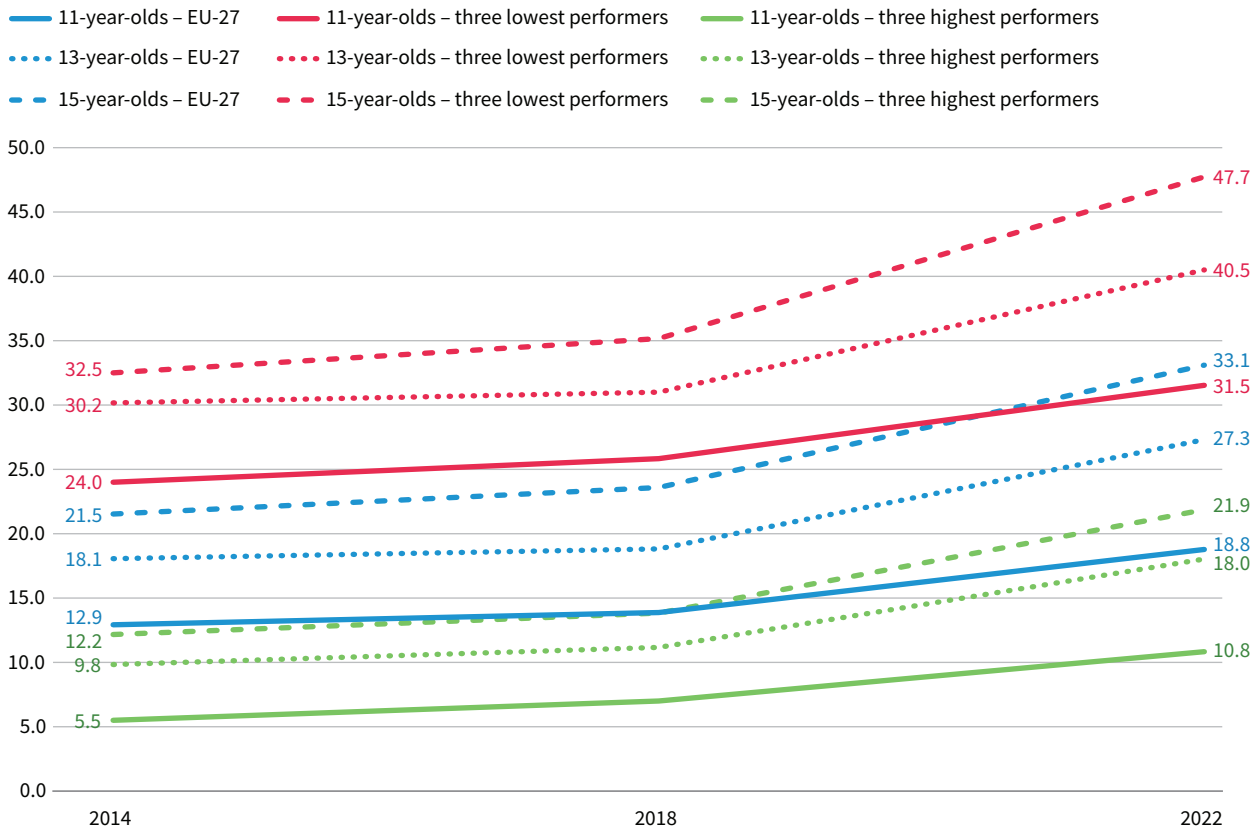
In the case of 13-year-olds, the EU unweighted average increased steadily between 2014 and 2022. The standard deviation also increased over time, so the trend can also be described as **downward divergence**.

For 15-year-olds, between 2014 and 2022, the EU unweighted average increased, but the standard deviation decreased. The change over time can thus be considered as **downward convergence**.

Shares of children with very good health

The EU-SILC ad hoc module on health and children's health is one of the three modules that are repeated every three years. Information is available about children under 16 years of age, with additional age breakdowns available within that age group. In 2024, 64.8 % of children in the EU-27 had 'very good' health. Greece (93.8 %), Cyprus (92.7. %) and Croatia (88.7 %) recorded the highest percentages, while Italy (47.9 %), Latvia (30.8 %) and Estonia (30.7 %) reported the lowest.

Figure 14: Share of children reporting feeling low, EU-27 and highest- and lowest-performing Member States, 2014–2022 (%)



Note: *Highest performers refers to the lowest rates of children reporting feeling low.*
Source: *World Health Organization (WHO), Health Behaviour in School-aged Children (HBSC) survey.*

Data for children who are AROPE and not AROPE were available up until 2021. For children who are AROPE, the EU-27 average for children with 'very good' health in 2021 was 62.7 %. Broken down by Member State, Greece (96.1 %), Cyprus (84.8 %) and Croatia (82.8 %) recorded the highest percentages, while Portugal (37.4 %), the Netherlands (36.5 %) and Latvia (22.9 %) showed the lowest percentages.

For children who are not AROPE, the EU-27 average in 2021 was 70.9 %. The Member States with the highest percentages were the same as those in the case of children who are AROPE (Greece (96.1 %), Cyprus (89.7 %) and Croatia (87.3 %)). The Netherlands (56.4 %), Lithuania (55.6 %) and Latvia (32.3 %) recorded the lowest percentages.

Analysis over time of the shares of children with very good health, 2017–2024

The EU-27 average for children under 16 years of age with very good health decreased from 66.1 % in 2017 to 64.8 % in 2024. In terms of disparities between Member States, the standard deviation decreased during the period. This reflects **downward convergence**.

Slovakia recorded the greatest improvement (+ 10.2 pp), followed by Lithuania (+ 10 pp) and Latvia (+ 8.1 pp). At the other extreme, Denmark demonstrated a drop of 12.9 pp, followed by Luxembourg with 11.8 pp and Austria with 7.4 pp.

For children who are AROPE under 16 years of age, data are available up until 2021. Italy (+ 16.6 pp), Estonia (+ 14.2 pp) and Lithuania (+ 12.4 pp) recorded the largest improvements between 2017 and 2021. Hungary (- 8.5 pp), Luxembourg (- 6 pp) and Spain (- 5.4 pp) recorded the largest deteriorations. In the case of children who are not AROPE, Estonia and Lithuania led the ranking with + 12.6 pp and + 11.6 pp, respectively; on the other hand, Denmark (- 14.9 pp), Luxembourg (- 9 pp) and Bulgaria (- 4.2 pp) saw the percentages of children with very good health drop considerably.

Share of children with unmet needs for medical examination or treatment

Data on unmet healthcare needs also come from the EU-SILC module on health and children's health. The data relate to any children under the age of 16 in a household. In 2024, 3.2 % of children had unmet healthcare needs. Finland (9.4 %), France (5.7 %) and Ireland (4.8 %) reported the highest percentages. Meanwhile, Malta (0.1 %), Croatia (0.1 %) and Cyprus (0.6 %) recorded the lowest percentages.

For children who are AROP, the EU-27 average for children with unmet medical needs in 2024 was 4.2 %. Greece (0.3 %), Malta (0.3 %) and Germany (0.9 %) recorded the lowest percentages for the group. Conversely, Estonia (8.5 %), France (7.3 %) and Denmark (7 %) reported larger shares of children with unmet medical needs.

For children who are not AROP, the EU-27 average for children with unmet medical needs in 2024 was 3 %. Croatia, Cyprus and Malta reported the lowest percentages (all 0.1 %), while Finland (10.1 %), France (5.3 %) and Ireland (5.2 %) reported the highest percentages.

Analysis over time of the shares of children with unmet healthcare needs, 2017–2024

The EU-27 average for children under 16 with unmet healthcare needs increased from 1.6 % in 2017 (estimated) to 3.2 % in 2024. In terms of disparities between Member States, the standard deviation decreased over the period. This is described as **downward convergence**.

Considering all children aged 15 or younger, Finland (+ 6 pp), France (+ 4.2 pp) and Spain (+ 2.8 pp) experienced the largest increases in their figures for 2024 compared with 2017, showing that substantially larger shares of children faced unmet healthcare needs. Romania reported the largest improvement, shrinking its share by - 5.2 pp, followed by Greece (- 1.6 pp) and Belgium (- 1.1 pp). Data covering Austria and Ireland were not available for 2017.

For children who are AROP, France saw the largest deterioration in the share of those with unmet healthcare needs, with an increase of + 5.6 pp between 2017 and 2024, followed by Poland (+ 5.3 pp) and Estonia (+ 5 pp). Romania and Belgium reported the greatest improvements in their shares of children with unmet healthcare needs, with changes of - 9.9 pp and - 4.4 pp, respectively. Data covering Denmark and Ireland were not available for 2017.

In the case of children who are not AROP, Finland (+ 6.8 pp), France (+ 3.8 pp) and Spain (+ 2.8 pp) experienced the largest deteriorations between 2017 and 2024; Romania again experienced the largest improvement (- 3.1 pp).

Table 4 provides a summary of the indicators for healthcare.

Table 4: Summary of results – healthcare

Indicator	Time frame	Policy target	Disparities	Data source
Infant mortality rate	2015–2023	Upward	Convergence	[demo_minfind], accessed March 2025
Share of 11-year-old children who reported feeling low	2014–2022	Downward	Divergence	HBSC survey, accessed February 2024
Share of 13-year-old children who reported feeling low	2014–2022	Downward	Convergence	HBSC survey, accessed February 2024
Share of 15-year-old children who reported feeling low	2014–2022	Downward	Convergence	HBSC survey, accessed February 2024
Share of children with very good health	2017–2024	Downward	Convergence	[ilc_hch12], data about children by AROPE status received May 2024 and accessed July 2025
Share of children with unmet needs for medical examination or treatment	2017–2024	Downward	Convergence	[ilc_hch14], accessed July 2025

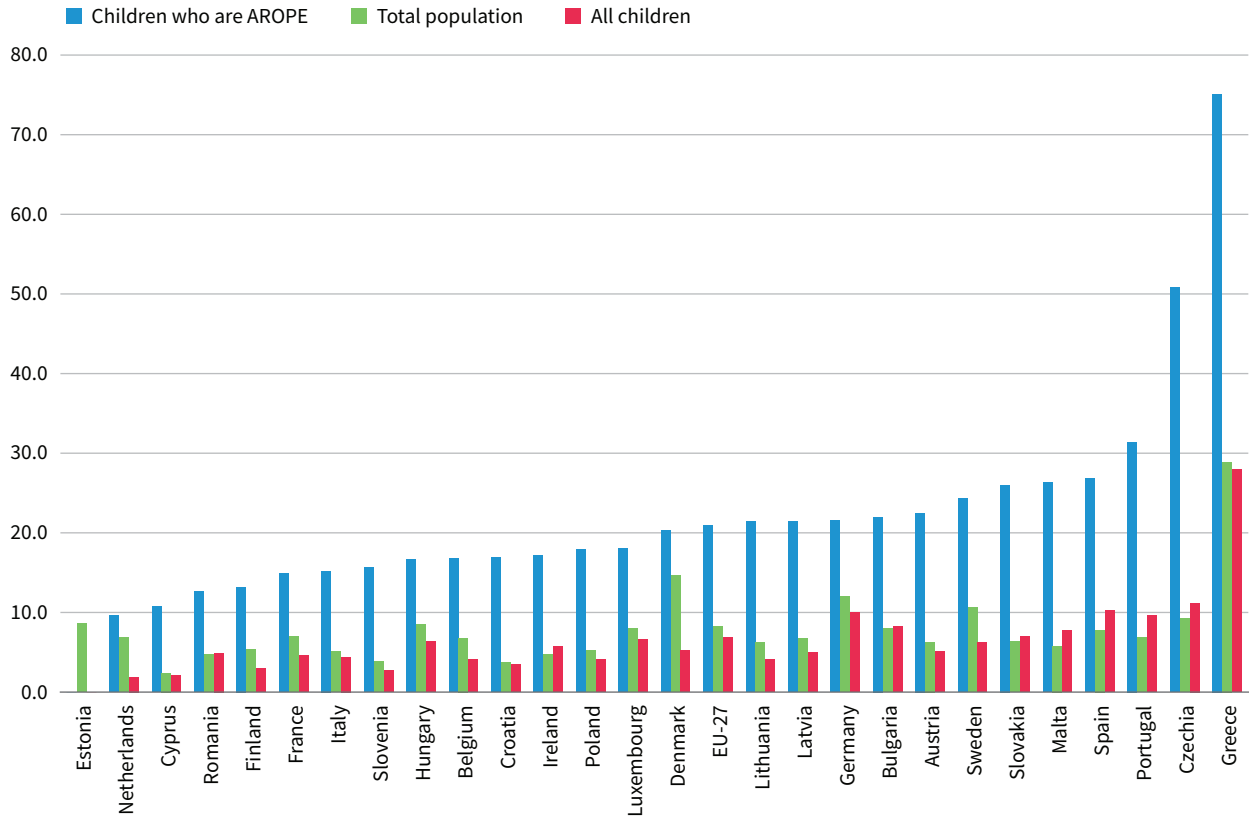
Housing

The analysis in this section covers children in households facing housing cost overburden, severe housing deprivation, overcrowding and inadequate temperatures.

Share of children in households facing housing cost overburden

This indicator measures the percentage of children living in a household where the total housing costs (net of housing allowances) represent more than 40 % of the total disposable household income (net of housing allowances). In 2024, 6.9 % of all children in the EU-27 lived in a household facing housing cost overburden (Figure 15). Greece presented the highest share (28 %), followed by Czechia (11.2 %) and Spain (10.2 %); conversely, the Netherlands (1.9 %), Cyprus (2.1 %) and Slovenia (2.7 %) had the lowest shares for 2024.

Figure 15: Housing cost overburden rate for total population, all children and children who are AROPE, EU-27, 2024 (%)



Source: *EU-SILC [ilc_lvho07a and ilc_chg04], Eurostat calculations.*

For children who are not AROPE, the EU-27 average share decreased to 2.4 % in 2024. Greece presented the highest share (9.7 %), followed by Germany (6.5 %) and Portugal (3.9 %). Croatia (0.3 %), Italy (0.4 %) and the Netherlands (0.5 %) had the lowest shares for 2024.

However, in 2024, the EU-27 average rate of housing cost overburden jumped to 20.9 % for children who are AROPE. The highest shares of overburdened households were found in Greece and Czechia, with 75.1 % and 50.8 %, respectively. The Netherlands reported the lowest figure (9.6 %), followed by Cyprus with 10.7 % and Romania with 12.6 %.

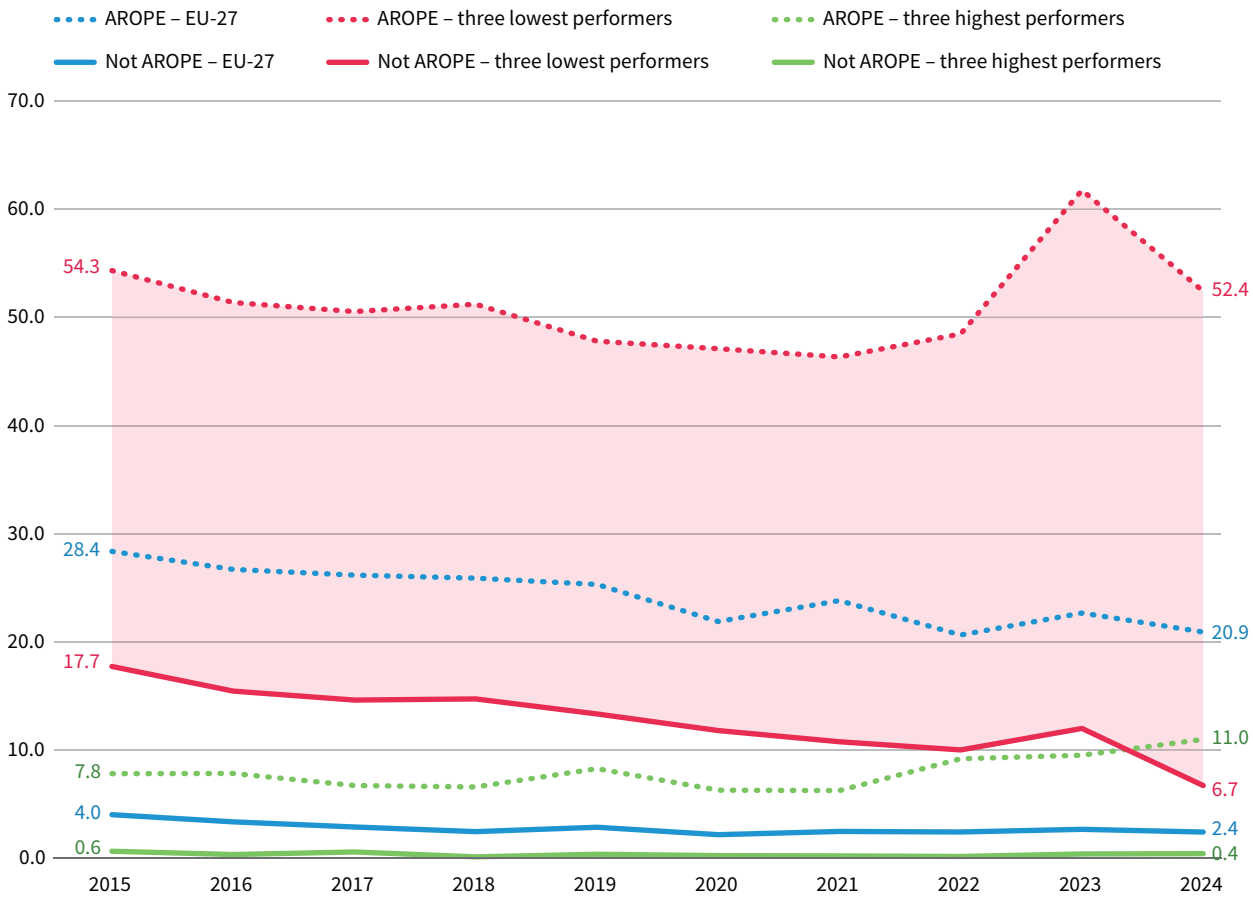
In terms of children living in households facing housing cost overburden in 2024, the biggest differences between children who are AROPE and children who are not AROPE were found in Greece, Czechia and Portugal. Greece and Czechia also had the highest rates of housing cost overburden among children who are AROPE. Cyprus and the Netherlands had the smallest gap between the rates for children who are AROPE and children who are not AROPE.

Analysis over time of shares of children at risk of poverty or social exclusion living in a household facing housing cost overburden, 2015–2024

Over the period 2015–2024, the EU average rate for all children living in a household facing cost overburden decreased (Figure 16). The reduction was especially large for children who are AROPE, falling from 28.4 % in 2015 to 20.9 % in 2024. Nonetheless, the gap between children who are AROPE and children who are not AROPE in households facing cost overburden was 18.5 pp in 2024. A reduction in disparities can be seen between Member States for all groups of children and **upward convergence** was therefore observed.

Malta recorded the largest increase in households with children who are AROPE overburdened by housing costs, reporting an increase of + 22.5 pp for the overall period. At the opposite end of the scale, the Netherlands showed the greatest improvement, with a reduction of - 24.2 pp.

Figure 16: Housing cost overburden rate for children who are AROPE and children who are not AROPE, EU-27, standard deviation and highest- and lowest-performing Member States, 2015–2024 (%)



Note: *The highest performers have a low housing cost overburden rate.*
Source: *EU-SILC [ilc_chg04].*

Share of children facing severe housing deprivation

Housing deprivation, which indicates inadequate amenities, is determined by identifying households in the EU-SILC survey that have a leaking roof, that do not have a bath/shower or indoor toilet, or that are deemed to be too dark. The severe housing deprivation rate is defined as the percentage of the population living in the dwelling that is considered to be overcrowded, while also exhibiting at least one of the housing deprivation measures. The EU-27 average rate of all children facing severe housing deprivation was 6.4 % in 2020, rising to 15.5 % in Latvia, 16.2 % in Hungary and 24.6 % in Romania. On the other hand, the Netherlands (2.1 %), Malta (1.5 %) and Finland (1.4 %) had the lowest rates.

Children who are AROPE appear to be more exposed to housing deprivation, similarly to other indicators. In 2020, 15.9 % of children who were AROPE in the EU-27 faced severe housing deprivation, compared with 3.2 % of children who were not AROPE. Romania (52.8 %) and Hungary (39.4 %) had the highest rates for children who are AROPE, while Latvia (11.8 %), Hungary (9.7 %) and Italy (6.1 %) had the highest rates for children who are not AROPE.

Analysis over time of the shares of children at risk of poverty or social exclusion facing severe housing deprivation, 2015–2020

Between 2015 and 2020, the EU-27 average rate for all groups of children decreased (- 1.6 pp for all children, - 3.1 pp for children who are AROPE and - 0.5 pp for children who are not AROPE). Overall, disparities between Member States decreased. The trend can therefore be described as **upward convergence**.

During this period, Spain (+ 3.7 pp), Belgium (+ 2.6 pp) and France (+ 1.9 pp) showed the highest increases in the total shares of children in conditions of severe housing deprivation. Spain's rate for children who are AROPE increased by + 8.6 pp, followed by Greece with + 4.8 pp and Finland with + 4.2 pp. Shares of children who are not AROPE facing severe housing deprivation have particularly increased in Belgium (+ 2.4 pp), Portugal (+ 2 pp) and Spain (+ 1.7 pp).

Hungary showed the greatest progress, recording an improvement of - 9.2 pp, followed by Romania (- 8.1 pp) and Poland (- 7 pp). Among children who are AROPE, Italy (- 13.8 pp), Lithuania (- 11.4 pp) and Latvia (- 10.4 pp) recorded the largest improvements; for children who are not AROPE, Romania (- 6.3 pp), Poland (- 4.6 pp) and Italy (- 3 pp) recorded the largest improvements.

Share of children living in an overcrowded household

This indicator measures the percentage of children living in an overcrowded household, defined as not possessing a minimum number of rooms, which varies according to the age of the occupants. In 2024, 25.6 % of children in the EU-27 were living in an overcrowded household. Among Member States, Romania reported the highest share at 61.3 %, followed by Bulgaria at 55.1 % and Latvia at 53.4 %. On the other hand, Cyprus recorded the lowest percentage (3.8 %), followed by Malta (4.5 %) and the Netherlands (7.5 %).

Among children who are AROPE, the EU-27 average of those living in an overcrowded household was 42.6 % in 2024. Romania had the largest share (74.8 %), followed by Latvia (69.3 %) and Bulgaria (67.3 %), while Malta (12.4 %), Cyprus (16.1 %) and Luxembourg (19.5 %) showed the smallest shares (Figure 17b).

In the case of children who are not AROPE, 20.1 % were living in overcrowded households in 2024. The largest share was recorded in Romania (54.4 %), while Malta was once again the best performer (1.7 %).

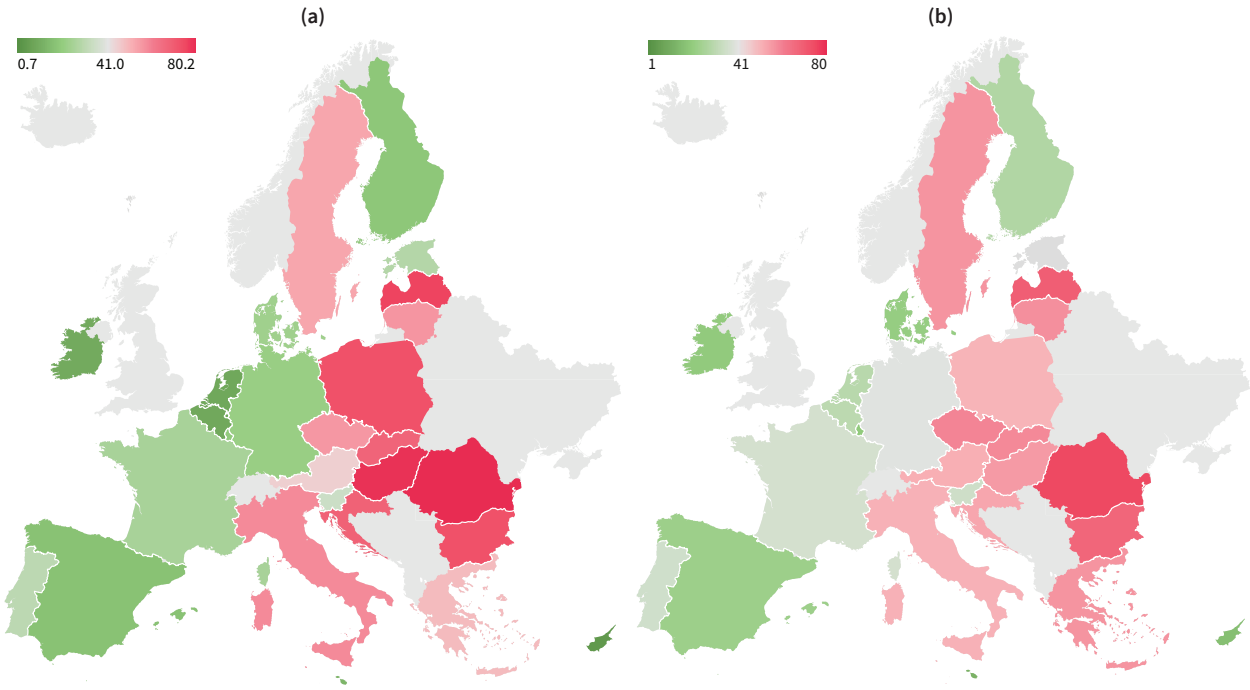
Analysis over time of shares of children at risk of poverty or social exclusion living in an overcrowded household, 2015–2024

The EU average rate of children living in an overcrowded household stagnated over the period, with an increase of 0.8 pp between 2015 and 2024. In terms of disparities between Member States, however, the standard deviation decreased markedly over time. The trend can be described as **downward convergence**. Belgium presented the largest increase in children living in an overcrowded household with + 9.2 pp, followed by Germany (+ 8.5 pp) and France (+ 6.5 pp). At the other end of the scale, Hungary showed the largest reduction, improving its overcrowding rate for children by - 36.5 pp, followed by Slovakia (- 12 pp) and Poland (- 11.1 pp).

Considering children who are AROPE in overcrowded households, disparities have decreased, as reflected in the standard deviation. Despite a small hike in 2020, the average share improved by 0.5 pp overall, so the trend can be considered **upward convergence**. The largest deteriorations in performance between 2015 (Figure 17a) and 2024 (Figure 18b) were seen in Belgium (+ 21.7 pp), the Netherlands (+ 21.1 pp) and Germany (+ 18.6 pp). Hungary recorded the largest improvement (- 23.6 pp), together with Poland (- 22.3 pp) and Croatia (- 15.4 pp).

However, children who are not AROPE saw their conditions erode, while differences across Member States narrowed. This change is defined as **downward convergence**. While Greece again appears among the lowest performers (+ 9 pp), Hungary repeatedly improved its overcrowding rate (- 33.2 pp).

Figure 17a and 17b: Overcrowded household rate for children who were AROPE (a) in 2015 and (b) in 2024, EU-27 (%)



Source: *EU-SILC [ilc_chg05].*

Share of children living in a household unable to keep the home adequately warm

This indicator measures the share of children living in households that cannot keep the dwelling adequately warm. The EU-27 average rate for all children was 9 % in 2024. Greece recorded the highest figure (18.4 %), followed by Spain (18 %) and Bulgaria (17.6 %). Poland scored the lowest (2.4 %), together with Croatia (2.6 %) and Slovenia (2.8 %).

AROPE status repeatedly coincides with larger shares of inadequate housing conditions for children. In 2024, 24 % of children who were AROPE were living in households unable to keep the home adequately warm. Among low-performing Member States, Cyprus led the ranking with 62.6 %, along with Greece (46.1 %) and Slovakia (39.4 %). Poland again had the lowest share, with 6.9 %, followed by Sweden with 7.5 % and Croatia with 8.1 %.

In 2024, 4.2 % of children who were not AROPE lived in households with inadequate temperatures. This figure is nearly six times smaller than that for their AROPE counterparts. The figures for children who are not AROPE ranged from 9.7 % in Lithuania to 1.1 % in Latvia.

Analysis over time of shares of children at risk of poverty or social exclusion living in a household unable to keep the home adequately warm, 2015–2024

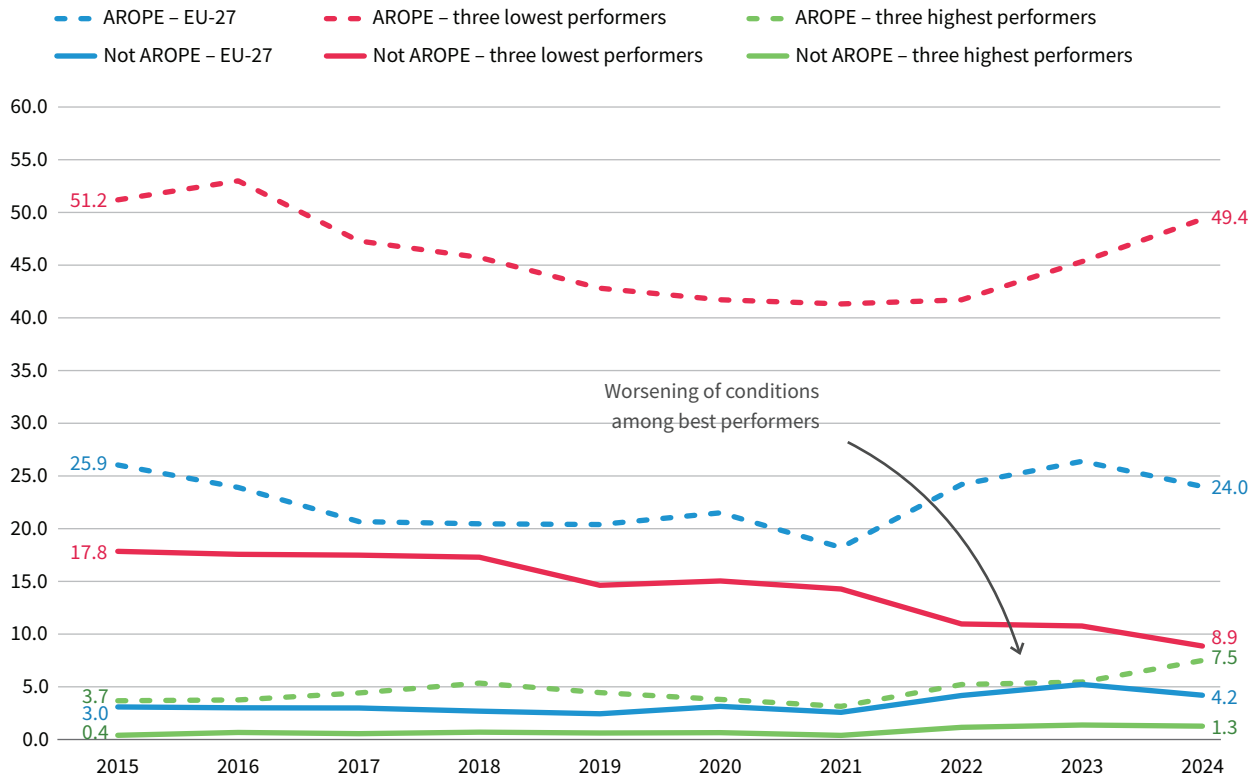
The EU-27 average of all children living in a household unable to keep their home adequately warm decreased between 2015 and 2021, despite a surge in 2020.

However, the trend was reversed in 2022. In 2023, it surpassed the share at the start of the series, falling to 9 % in 2024. The negative difference of - 0.3 pp recorded, together with narrowing disparities as shown by the standard deviation, represents an overall trend of **upward convergence**. In France and Spain, the percentage of children living in a household unable to keep the home adequately warm increased by + 6.7 pp over time, marking the largest increase; they were followed by Luxembourg (+ 5.3 pp). At the other extreme, Bulgaria improved the most with a change of - 20.1 pp, followed by Cyprus with - 13.4 pp and Latvia with - 11.5 pp.

In the case of children who are AROPE, the EU-27 average followed a similar pattern, and the indicator decreased by - 1.9 pp between 2015 and 2024. As disparities also decreased, the trend is again described as **upward convergence**. Slovakia recorded the largest increase over the period (+ 18.7 pp), followed by the Netherlands (+ 14.7 pp) and France (+ 10.8 pp). Latvia improved the most, with a change of - 24.6 pp, together with Bulgaria (- 24.5 pp) and Italy (- 16.7 pp).

The EU-27 average share of children who are not AROPE living in households unable to maintain adequate temperatures increased over time (+ 1.2 pp) (Figure 18). Disparities decreased as well, such that the trend can be seen as **downward convergence**. Luxembourg showed the largest increase over the period (+ 5.3 pp), while the share in Cyprus decreased the most (- 13.1 pp).

Figure 18: Share of children who are AROPE and children who are not AROPE in households unable to keep the home warm, EU-27 and highest- and lowest-performing Member States, 2015–2024 (%)



Source: *EU-SILC [ilc_chg06], Eurostat calculations.*

Table 5 provides a summary of the indicators for housing.

Table 5: Summary of results – housing

Indicator	Time frame	Policy target	Disparities	Data source
Share of children in households facing housing cost overburden	2015–2024	Upward	Convergence	[ilc_chg04], accessed July 2025
Share of children who are AROPE in households facing housing cost overburden	2015–2024	Upward	Convergence	[ilc_chg04], accessed July 2025
Share of children facing severe housing deprivation	2015–2020	Upward	Convergence	[ilc_mdho06a], received May 2024
Share of children who are AROPE facing severe housing deprivation	2015–2020	Upward	Convergence	[ilc_mdho06a], received May 2024
Share of children living in an overcrowded household	2015–2024	Downward	Convergence	[ilc_chg05], accessed July 2025
Share of children who are AROPE living in an overcrowded household	2015–2024	Upward	Convergence	[ilc_chg05], accessed July 2025
Share of children living in a household unable to keep the home adequately warm	2015–2024	Upward	Convergence	[ilc_chg06], accessed July 2025
Share of children who are AROPE living in a household unable to keep the home adequately warm	2015–2024	Upward	Convergence	[ilc_mdes01, ilc_chg06], received and accessed July 2025

Nutrition

Ensuring access to at least one healthy meal each school day is one of the objectives of the European Child Guarantee. Furthermore, the recommendation establishing the Guarantee states the need to provide access to healthy nutrition on non-school days.

Daily access to fruit and vegetables

This indicator provides information regarding children's access to fruit and vegetables once a day in households with dependent children aged up to 15 years. The total share of children able to access fresh fruit and vegetables once a day, as an EU-27 average, was 97.7 % in 2021, with the highest figures reported in Austria and Finland (99.9 %) and the lowest in Hungary (89.6 %), Romania (89.2 %) and Bulgaria (84.3 %).

In 2021, 99.6 % of children aged under 16 who were not AROPE had daily access to fruit and vegetables. Seven Member States reported no children lacking access to fruit vegetables: Austria, Croatia, Denmark, Estonia, Ireland, Portugal and Sweden. The lowest percentages were found in Bulgaria (95.4 %), Hungary (98.1 %) and Romania (98.8 %).

For children who are AROPE, the percentage in 2021 was 91.7 %. The Member States with the highest percentages were Finland (100 %), Austria (99.7 %) and Cyprus (99.5 %). The lowest percentages were found in Bulgaria (61.4 %), Hungary (61.8 %) and Romania (75.4 %).

Analysis over time of daily access to fruits and vegetables, 2014–2021

The share of children not AROPE aged under 16 years who were able to access fruit and vegetables daily increased by 0.3 pp between 2014 and 2021. The largest improvements were found in the three lowest-performing Member States: Bulgaria (+ 8.6 pp), Estonia (+ 3 pp) and Slovakia (+ 2.5 pp). Disparities between Member States decreased, showing **upward convergence**.

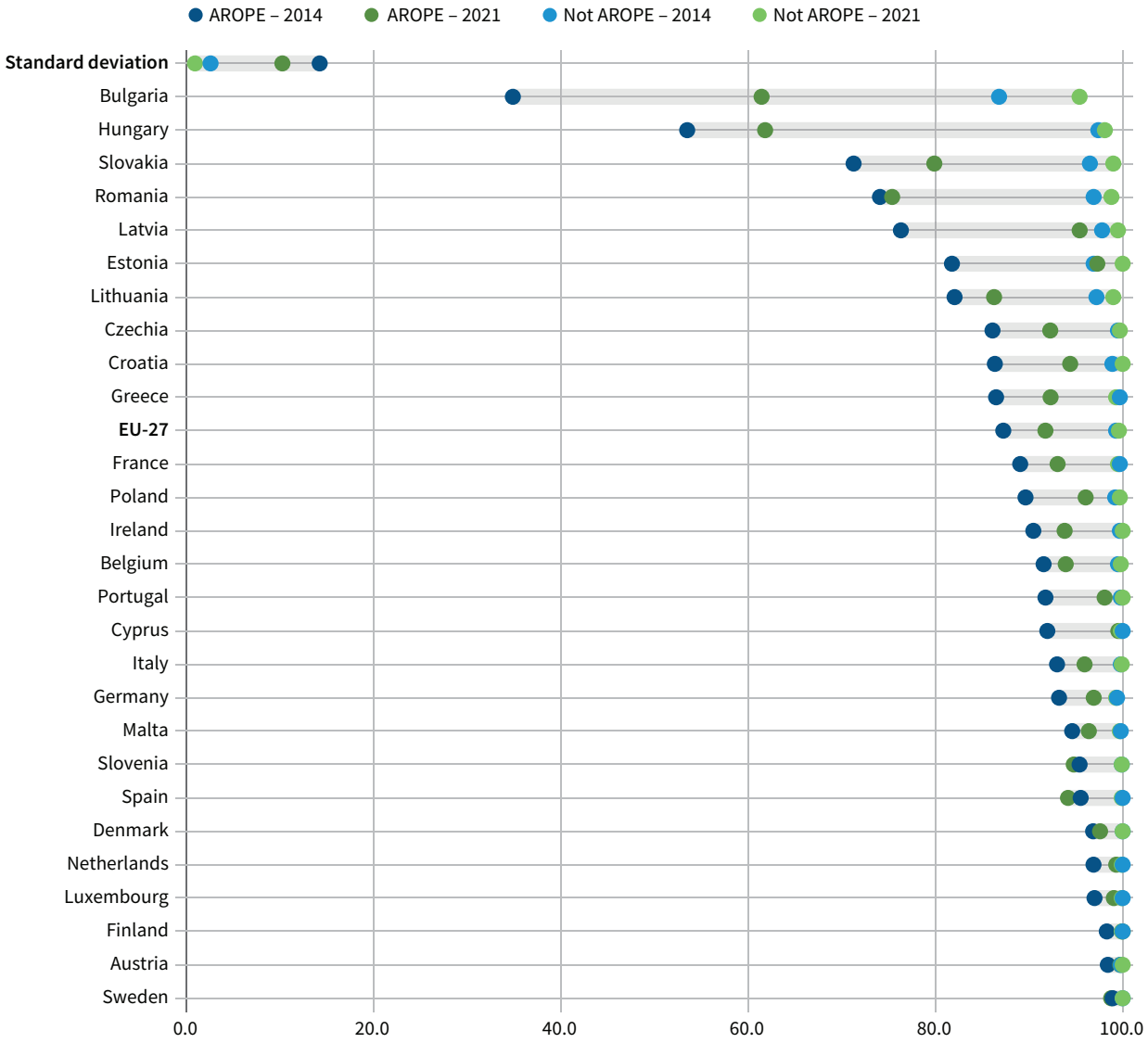
The percentage of children who were AROPE who had daily access to fruit and vegetables increased between 2014 and 2021 (Figure 19). Most Member States witnessed an increase in the share of children who were AROPE with daily access to fruit and vegetables. The EU-27 average increased from 87.2 % in 2014 to 91.7 % in 2021. Bulgaria, Latvia and Estonia recorded the largest increases (26.6 pp, 19.1 pp and 15.5 pp, respectively), while Spain recorded the only decrease larger than 1 pp (- 1.4 pp). Notwithstanding, disparities decreased, showing **upward convergence**.

Daily access to one meal with meat, chicken or fish (or vegetarian equivalent)

This indicator is available for 2014 and 2021. The EU-27 average rate of all children aged up to 15 able to afford one meal with meat, chicken or fish (or vegetarian equivalent) at least once a day was 96.9 % in 2021. Portugal had the highest percentage at 100 %, while Hungary (88.8 %), Bulgaria (85.4 %) and Romania (85.1 %) stood at the lower end of the spectrum. The indicator shows large differences between socioeconomic status. About one in three children who were AROPE in Romania (66.1 %), Bulgaria (65.1 %) and Hungary (61.2 %) were unable to access one daily meal with meat or equivalent protein. Bulgaria, Hungary and Romania, despite being the worst performers in 2021, recorded the largest positive differences in the rates of all children able to afford a meat-based meal or protein equivalent compared with 2014 (+ 27.8 pp, + 11 pp and + 9.2 pp, respectively).

The EU-27 average share of children who were AROPE who could access a protein-based meal daily in 2021 (89.2 %) was notably lower than the share of children who were not AROPE (99.3 %). The percentage of children who were AROPE who had daily access to fruit and vegetables increased between 2014 and 2021 from 83.7 % to 89.2 %. Bulgaria, Estonia and Croatia recorded the largest increases (35.1 pp, 17.1 pp and 14.1 pp, respectively). Conversely, Belgium (- 2.6 pp), Spain (- 1.1 pp) and Sweden (- 0.7 pp) were the only three Member States that showed a deterioration in performance. The standard deviation was smaller in 2021 than in 2014 for both groups, indicating that disparities appeared less pronounced in recent times, thus displaying **upward convergence**.

Figure 19: Share of children who are AROPE and children who are not AROPE unable to afford fruit and vegetables daily, EU-27 and standard deviation, 2014 and 2021 (%)



Notes: *The standard deviation is calculated based on the unweighted EU-27 average to fully capture the convergence dynamics that would otherwise be hidden by the weights.*
Source: *Eurostat calculations.*

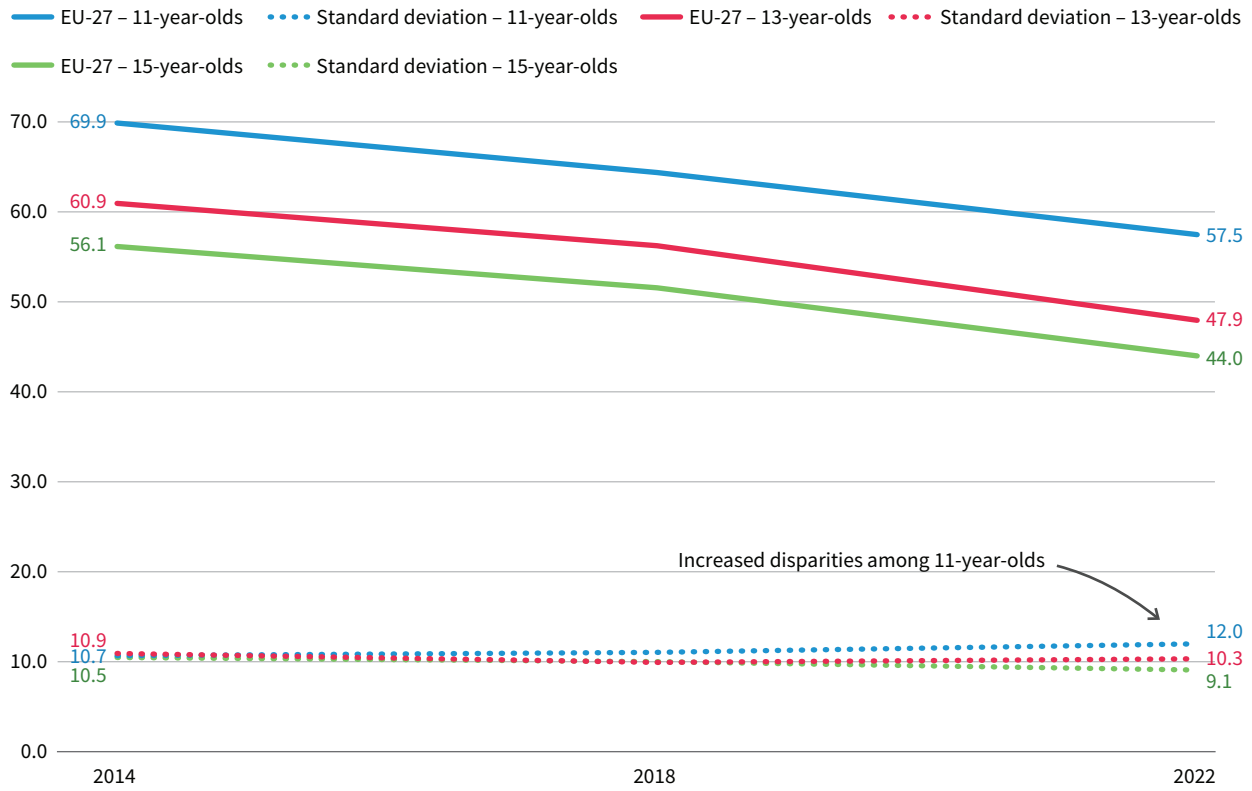
Share of 11-, 13- and 15-year-old children who eat breakfast every school day, by gender and family affluence

This indicator presents the percentage of children aged 11, 13 and 15 who eat breakfast every weekday (i.e. more than a glass of milk or fruit juice on school days). The share of EU-27 children aged 11 years old who ate breakfast every school day was 57.5 % in 2022 (Figure 20); the values were 59.8 % for boys and 55.3 % for girls. Among Member States, the Netherlands ranked highest, with 85.3 %, followed by Ireland at 79.5 % and Sweden at 77 %. Conversely, Austria, Lithuania and Romania reported shares of between 43 % and 42 %.

Gender differences increased over time in most Member States, with boys eating breakfast on school days more frequently than girls. The biggest differences were found in Bulgaria, Lithuania and France (9.5 pp, 8.7 pp and 7.6 pp, respectively).

Similar trends can be seen for children aged 13 years old. In 2022, 54.1 % of boys and 41.5 % of girls reported having breakfast on school days. Compared with the previous age group, gender disparities consistently appeared more pronounced, often exceeding a difference of 10 pp. The Netherlands, Portugal and Ireland recorded the highest shares among Member States (71.8 %, 62.4 % and 60.9 %, respectively). On the other hand, Spain, Slovenia and Austria recorded the lowest shares (34.8 %, 33.4 % and 32.8 %, respectively).

Figure 20: Share of 11-, 13- and 15-year-old children who eat breakfast every school day, EU-27 and standard deviation, 2014–2022 (%)



Notes: *The standard deviation is calculated based on the unweighted EU-27 average to fully capture the convergence dynamics that would otherwise be hidden by the weights.*
Source: *HBSC survey.*

Regarding children aged 15 years old, fewer than half (44 %) had breakfast on school days in 2022. Gender differences are larger than in the previous age groups, ranging between 10 pp and 15 pp. The Netherlands ranked first again at 64.1 %, followed by Portugal at 59.6 % and Denmark at 56 %. Malta, Romania and Slovenia ranked last at around 30 %.

This indicator accounts for the Family Affluence Scale, which asks young people about material assets in the household and sets three categories of relative socioeconomic position: low, medium and high. The following analyses consider all children, irrespective of their age group.

In 2022, the share of EU children of low family affluence status who ate breakfast every school day was 40.2 %, while, for children of medium and high family affluence status, the shares were higher (49.8 % and 53.6 %, respectively). The Netherlands, Ireland and Denmark scored the highest across categories of affluence status, whereas Hungary, Austria and Slovenia scored the lowest.

Analysis over time of children who eat breakfast every school day, 2014–2022

Over the period 2014–2022, the share of 11-year-olds able to have breakfast on school days decreased by - 12.4 %, with the lowest value in 2022. The decrease affected boys and girls equally, with a slight increase in gender disparities in 2018 and 2022. Portugal (- 23.1 pp) and Spain (- 30.2 pp) showed the largest decreases. At the same time, disparities increased slightly, showing a **downward divergence** trend. A similar downward trend can be observed for the other age groups, with decreases of around 12 % for both 13- and 15-year-olds. Conversely, disparities stagnated among 13-year-olds but reduced among 15-year-olds. Portugal and Spain also saw percentages decrease for both 13- and 15-year-olds.

Regarding family affluence levels, the shares of children who ate breakfast on weekdays showed a consistently downward trend. Children of low family affluence status showed the largest decline (- 17.2 pp) compared with those of medium and high family affluence (- 12 pp and - 11.5 pp, respectively). No Member State showed any improvement between 2014 and 2022, but disparities stagnated among 13-year-olds and reduced for 11- and 15-year-olds, showing **downward convergence**. Similarly, Portugal (- 24.5 pp) and Spain

(- 36.5 pp) recorded the largest decreases, although shares in several Member States dropped by around 20 pp among children of low family affluence.

Share of 11-, 13- and 15-year-old children who are overweight or obese, by gender and family affluence

This indicator shows the proportion of children aged 11, 13 and 15 who are overweight or obese, using the international body mass index standards. The share of European children aged 11 years old who were overweight or obese was 18.3 % in 2022, with more boys (21.4 %) than girls (15.2 %). Malta ranked highest with 28.7 % (31.1 % for boys and 26.7 % for girls), followed by Romania (23.8 % in total; 27.5 % for boys and 19.7 % for girls). The Netherlands recorded the lowest share at 10.4 % (10 % for boys and 10.7 % for girls), but this was similar to the share in Denmark (10.6 % in total; 12.3 % for boys and 8.9 % for girls).

Similar trends can be seen for the other age groups, with a slight increase in gender differences. In 2022, the shares of European 13- and 15-year-olds who were overweight or obese were 18.6 % and 18.9 %, respectively, and slightly higher for boys (22.8 % and 22.9 %, respectively) than for girls (14.4 % and 14.9 %, respectively).

Here, again, Malta recorded the highest shares among the two age groups (26.9 % among 13-year-olds and 29.6 % among 15-year-olds), with a slight increase among 15-year-olds. Austria was the second-highest-ranking Member State for this indicator, with 24.2 % among 13-year-olds, but the share dropped significantly among 15-year-olds. On the other hand, Denmark, France and the Netherlands recorded the smallest percentages for 2022 for both age groups, with shares of around 10 %. When looking at the largest gender differences, Bulgarian 15-year-old boys (31.6 %) were reported to be more overweight than girls in the same age group (10.5 %).

In 2022, the share of children of low family affluence who were overweight or obese was 24.8 % in the EU-27. Austria, Bulgaria and Malta ranked the highest with shares of above 30 %, with Austria's share reaching 39.1 %. France, Ireland and the Netherlands scored the lowest, with shares of around 15 %.

Children of medium family affluence scored significantly lower than the previous group, with the unweighted EU-27 average being 18.9 %. Malta, Romania and Austria recorded the highest shares (29.6 %, 22.3 % and 21.3 %, respectively), while Denmark, France and the Netherlands recorded the lowest, with shares of around 10 %.

The same trend can be seen for children of high family affluence. The EU unweighted average was 14.4 % in 2022, with Greece, Malta and Romania recording the highest shares, at around 20 %, whereas Denmark, France and the Netherlands again recorded the lowest, at below 10 %.

Analysis over time of children who are overweight or obese, 2014–2022

Disparities stagnated over time, showing no significant reduction or increase between 2014 and 2022. Regarding trends, shares of overweight children seemed to have increased over time for all age groups, usually by 3–4 pp. Moreover, the increase seems larger among boys than girls across age groups.

Among 11-year-olds, the largest increases in overweight children were recorded in Romania (+ 6.3 pp), Germany (+ 6.6 pp) and Lithuania (+ 7 pp). On the other hand, Spain (- 1 pp), Slovenia (- 1.3 pp) and Greece (- 3 pp) showed the largest decreases over time.

In the case of children aged 13, Hungary (+ 8 pp), Lithuania (+ 9.5 pp) and Austria (+ 9.6 pp) recorded the largest differences, whereas only Italy (- 0.6 pp) and the Netherlands (- 1.4 pp) recorded improvements.

Lastly, shares of children aged 15 who were overweight or obese increased the most in Romania (+ 9.4 pp), Austria (+ 8.3 pp) and Lithuania (+ 7.9 pp), whereas only Sweden (- 0.1 pp) and Spain (- 0.4 pp) recorded improvements.

In terms of family affluence, an increase in disparities can be seen among children of low and high family affluence, while disparities stagnated for children of medium family affluence. For all affluence groups, the shares increased over time, showing **downward divergence** trends. Bulgaria (+ 13.9 pp), Romania (+ 11.8 pp) and Austria (+ 11.6 pp) presented the largest increases; Sweden (- 0.5 pp), Spain (- 0.7 pp) and the Netherlands (- 2.1 pp) recorded the largest decreases.

Table 6 provides a summary of the indicators for nutrition.

Table 6: Summary of results – nutrition

Indicator	Time frame	Policy target	Disparities	Data source
Daily access to fruit and vegetables	2014–2021	Upward	Convergence	Eurostat calculations, received May 2024
Children who are AROPE who have daily access to fruit and vegetables	2014–2021	Upward	Convergence	Eurostat calculations, received May 2024
Daily access to one meal with meat, chicken or fish (or vegetarian equivalent)	2014–2021	Upward	Convergence	Eurostat calculations, received May 2024
Children who are AROPE who have daily access to one meal with meat, chicken or fish (or vegetarian equivalent)	2014–2021	Upward	Convergence	Eurostat calculations, received May 2024
Share of 11-, 13- and 15-year-old children who eat breakfast every school day, by gender	2014–2022	Downward	Divergence	HBSC survey, received October 2024
Share of 11-, 13- and 15-year-old children who eat breakfast every school day, by family affluence	2014–2022	Downward	Convergence	HBSC survey, received October 2024
Share of 11-, 13- and 15-year-old children who are overweight or obese, by gender	2014–2022	Downward	Convergence	HBSC survey, received October 2024
Share of 11-, 13- and 15-year-old children who are overweight or obese, by family affluence	2014–2022	Downward	Divergence	HBSC survey, received October 2024

Conclusions and discussion

The previous sections showed the convergence analysis that was conducted regarding child poverty, ECEC, education, healthcare, housing and nutrition in order to analyse the trends and disparities in progress towards the policy targets. Whenever disaggregation is possible, it distinguishes between children who are AROPE and children who are not AROPE in order to investigate the trends among different socioeconomic groups.

All indicators for child poverty show upward trends towards policy targets. This is one of the more notable results, as it shows the commitment of Member States to reducing child poverty. The COVID-19 pandemic had a limited effect on these indicators, with a small increase in 2021 and 2022 for some Member States. Although converging trends are prevalent, the AROP rate for children and the median AROP gap still show divergence.

Similarly, all indicators for ECEC show an upward trend. Children below the age of three who are AROPE participate in ECEC much less than children who are not AROPE, but the gap seems to disappear when considering children between the age of three and the minimum compulsory school age. Overall, the indicators show a successful convergence trend. Disparities increased only for ECEC services for children below the age of three. Education is an area where attention is needed. The most worrying result is the share of low-achieving students, for which a clear downward divergence trend is noted. The share of low-achieving students continued to increase, with historical highs in 2022, and large disparities emerged among Member States. This signals a worrying trend in the quality of education. Regarding the quantity of education, expressed in years spent in education, more positive results can be observed. The number of early school-leavers is decreasing, and Member States are performing more homogeneously. Most breakdowns show upward convergence trends. However, the situation is particularly worrisome for young women and girls with children in their households: early school-leaver rates for this cohort are one in two. The trend increased during the pandemic and did not revert.

The mental health of children plummeted during the COVID-19 pandemic, with large differences between Member States. Data from 2024 show downward trends (deteriorations) in mental health scores and levels of unmet medical needs. On the positive side, child mortality continues to decrease, showing that the pandemic had a limited impact on this indicator.

Housing is another area in which efforts seemed to bear fruit. Both children who are AROPE and children who are not AROPE saw their situations improve, with better-quality housing being reported across Member States. Most indicators reported upward convergence. The COVID-19 pandemic affected the financial stability of many families, as seen in the increase in households unable to heat their homes properly. This affected children who are/are not AROPE equally.

Finally, mixed results can be seen concerning nutrition. EU children of all economic statuses seem to have increased daily access to healthy food and one protein-based meal a day, signalled by the upward convergence trends. A similar trend was seen for children having breakfast every school day, with the share understandably decreasing in 2022. This holds true mostly among the children from the least affluent families. Finally, EU children are slightly more overweight than in the past, and disparities are widening among Member States.

3 Services for children: Workforce situation

Staff are the main guarantors of the European Child Guarantee. In order to ensure effective access to high-quality services, it is important to have enough staff with adequate working conditions and qualifications.

The recommendation establishing the European Child Guarantee reiterates the need to invest in the workforce. In the resolution 'Children first – Strengthening the Child Guarantee, two years on from its adoption', the European Parliament (2023) stated that 'some countries are lacking transparency and have failed to include children and families, ECEC staff and service providers, and their representative organisations, as well as CSOs, in the consultation process for drafting the NAPs [national action plans]'. In the resolution, the European Parliament also highlighted the 'importance of involving civil society, ECEC staff and service providers and vulnerable groups, and of facilitating the meaningful, inclusive and safe participation of children and their families and CSOs representing children and their carers, in developing and implementing the monitoring and evaluation framework'. The European Parliament also called on 'Member States to support professional training for ECEC staff, including by increasing their number' (European Parliament, 2023).

This chapter deals with the situation of the workforce. The main focus will be on the workforce needed to deliver the European Child Guarantee in the areas of ECEC, primary secondary education and healthcare. Other relevant sectors, particularly those that are linked to the provision of school meals, will be discussed to the extent that information is available.

Previous research carried out by Eurofound on the basis of the European Working Conditions Survey pointed to a number of issues that were more prevalent for those working in the education, ECEC and healthcare sectors (Eurofound, 2023). For example, the percentage of workers in healthcare and social work exposed to adverse social behaviours (e.g. bullying, harassment or violence) was higher than the EU-27 average across all sectors of the labour market. The following sections analyse the links between some of these issues and the accessibility of services. Each section starts with definitions of how to measure and quantify each type of job. Next, the sections look at how initial qualifications and in-service training affect the accessibility of services, and then discuss the aspects of working conditions that are linked to the accessibility of services.

Workforce-related measures in the European Child Guarantee national action plans

Workers providing services for children are crucial for ensuring effective access to the services that are part of the Guarantee. One of the main EU funding instruments for the Guarantee is the ESF+, which can be used to invest in skills, training and the improvement of working conditions. Therefore, the Guarantee and the funds associated with it provide a unique opportunity to improve the recruitment and retention of workers.

There were more than 160 workforce-related measures in the European Child Guarantee national action plans. Almost three quarters (70 %) of these measures addressed workforce training. The vast majority of these training-related measures can be classified into three main categories: working with vulnerable groups, improving teaching competencies and well-being.

- **Vulnerable group training** involves any training of the workforce targeted towards improving skills when working with vulnerable groups and minorities, such as Roma, migrant children, single-parent families, children with disabilities and survivors of child abuse. Out of the workforce measures identified, 55 measures, or 31 % of the total, involved training the workforce on working with children in vulnerable situations. Most of these training measures were found in childcare (24) and education (18), followed by ECEC (7), health (4) and housing (2).
- **Teaching competency training** encompasses training targeted specifically towards teachers and their teaching abilities. More than half of the Member States (17) have enacted or plan to enact workforce measures aiming to improve teaching skills. The two main areas in which training aims to enhance teachers' competencies are education (31 measures) and ECEC (8).
- **Well-being-related training** includes any measures involving the development of workers' skills for dealing with physical health, mental health, nutrition and pregnancy, for example. Just over half of the Member States (14) have included well-being-related training measures in their national action plans. Most well-being-related training measures are found in the area of health (17) and deal with training healthcare specialists (e.g. occupational therapists, psychiatrists, gynaecologists and paediatricians). Of the 24 well-being-related measures, 10 deal with mental health.

The 74 workforce-related measures identified in the national action plans that were not related to training can be classified into the following four categories. Some of the measures cover more than one category.

- **Job creation** is the aim of 28 measures. This encompasses measures such as ensuring a certain number of qualified staff, hiring specialists, engaging in capacity building and creating new positions.
- **Reorganisation and collaboration** includes all measures aimed at reorganising the composition of teams, organising collaboration between groups of professionals and ensuring a better exchange of information between professionals or between professionals and parents or children. In total, 19 measures from 14 national action plans fit into this category.
- **Support** includes all measures that provide financial, material or other forms of support to the workforce, such as the provision of materials, access to information or opportunities, increases in wages and further financing. Support measures are concentrated in the three most common areas: education (12), health (7) and ECEC (7). At Member State level, support measures were identified in 12 national action plans, with no Member State having more than two support measures.
- **Setting standards** covers measures that set quality standards, ensure a specific staff–child ratio, reform curricula and evaluate standards. Overall, 13 workforce measures involve setting standards. These measures are dispersed across Member States and are included in 10 national action plans. In terms of areas, the measures are mainly concentrated in ECEC and education, with four measures in each area.

Labour shortages

Following the 2023 European Year of Skills, an action plan on labour and skills shortages was established in March 2024 (European Commission, 2024). This action plan provides another opportunity to improve the conditions of the workforce.

Among the occupations for which there are widespread labour shortages in Europe, several are related to services for children. Nursing professionals, doctors, healthcare assistants, early childhood educators and special needs teachers were among the top 30 occupations with more widespread labour shortages in 2023; 'widespread shortage' is defined as a shortage that has been identified by European Employment Services (EURES) national coordination offices in at least 15 countries (ELA, 2025). This section therefore focuses particularly on labour shortages in services for children.

Tackling these shortages in services for children is important when it comes to improving the labour market. Job vacancies increasingly appear to have been filled by workers moving jobs. This could indicate ineffective activation policies. It could also mean that employers have shifted their recruitment strategies towards attracting workers who are already employed (Eurofound, 2024).

As defined in other research carried out by Eurofound, labour shortages arise when the demand for workers in an occupation exceeds the supply of workers available who possess the required skills and are willing to work at a specific wage rate and under specific working conditions in a particular place at a point in time (Eurofound, 2022). Shortages can be quantitative or qualitative. Quantitative shortages arise when there is an absolute lack of workers in the labour market. Qualitative shortages imply that labour demand and labour supply are roughly in equilibrium, but a large proportion of unfilled vacancies coexist with a high unemployment rate.

While there is no one single measurement that encompasses all the dimensions of labour shortages, job vacancy rates ([7]) tend to be used as a proxy. Comparable data disaggregated by economic activity are available only up to level 1 of the European statistical classification of economic activities (NACE) Revision 2 (i.e. for education and human health and social work activities) in most Member States. In 2024, vacancy rates in human health and social work activities were higher than the cross-sectoral average in around half of the Member States with information available (see Table 7). Vacancy rates in education were higher than the cross-sectoral average in just three.

([7]) See Eurostat's Statistics Explained glossary for more information regarding job vacancy rates (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Job_vacancy_rate_(JVR)).

Table 7: Vacancy rate by Member State, 2024 (%)

Member State	Human health and social work activities	Education	All NACE activities
Austria	5	1.9	
Belgium	3	2.7	
Bulgaria	1	0.4	0.8
Croatia	4	2.5	1.6
Cyprus	3	1.3	
Czechia	1	0.7	3.3
Denmark			
Estonia	2	2.2	1.6
Finland	2	0.9	1.8
France	3	2.2	
Germany	3	2.3	3.2
Greece	1	1.4	
Hungary	4	2.3	2.1
Ireland	1	1.3	
Italy	2	2.3	
Latvia	3	1.6	2.5
Lithuania	2	0.5	2.0
Luxembourg	1	1.2	1.4
Malta	1	1	
Netherlands	4	2	4.3
Poland	1	0.4	0.9
Portugal	0	0.2	1.3
Romania	1	0.4	0.7
Slovakia	2	0.2	1.2
Slovenia	2	1.1	2.3
Spain	1	0.3	
Sweden	2	1.4	2.3

Source: *Eurostat calculations.*

The following sections provide information about labour shortages and about aspects of working conditions that have an impact on the accessibility of services.

Early childhood education and care

ECEC refers to 'any regulated arrangement that provides education and care for children from birth to the compulsory primary school age – regardless of the setting, funding, opening hours or programme content – and includes centre and family day-care; privately and publicly funded provision; pre-school and pre-primary provision' (Council of the European Union, 2019). In terms of the European Child Guarantee workforce, the most relevant ECEC workforce can be directly identified by two NACE sector codes and three International Standard Classification of Occupations (ISCO)-08 four-digit-level categories (Eurofound, 2024), as shown in Table 8.

Table 8: Main NACE and ISCO codes relevant to the ECEC sector and the European Child Guarantee workforce

NACE	ISCO
• 85.1 – Pre-primary education • 88.91 – Child daycare activities	• 1341 – Child care services managers • 2342 – Early childhood educators • 5311 – Child care workers

Source: *Eurofound, 2024.*

The availability of good working conditions for ECEC staff influences the accessibility of ECEC services.

This section presents a summary of some of the working conditions of ECEC staff that affect accessibility issues regarding ECEC services for children. These dimensions include the following:

- initial education and continuous professional development (CPD) activities,
- labour shortages and staff working conditions,
- staff–child ratios and group sizes,
- other working condition elements (e.g. salaries and wages, contractual status and working time, and physical and psychosocial working environment) and accessibility issues,
- working conditions and the accessibility of ECEC services in specific situations.

It is important to stress that existing working condition categories are often combined in practice, with cumulative consequences for the accessibility of ECEC services (OECD, 2018a). For instance, one Irish study suggests that ECEC practitioners are primarily a vulnerable group of female workers with low status and weak qualifications who receive poor remuneration and few opportunities for further education and

development and have no collective bargaining rights (Simmie and Murphy, 2023). Similarly, in the Flemish Region of Belgium, the lower initial educational levels of childcare workers are combined with high staff–child ratios, no child-free paid hours (no time for tasks other than direct childcare/teaching) and few regulations on CPD, which results in poor-quality ECEC service and low availability (León et al., 2023).

Initial education and continuous professional development activities

The existing literature identifies two main elements within the education and training domain, namely 'pre-service qualifications' (the initial education and training that staff have engaged in before they begin the job) and 'in-service training' (related to additional continuous training that ECEC staff may receive while working) (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2021). In this respect, an OECD study based on an extensive literature review shows that, overall, higher pre-service qualifications are found to be related to the availability of better-quality ECEC services, particularly in relation to settings for children aged two and under (OECD, 2018b) ([8]). Those services where staff have higher levels of initial qualifications are also better equipped to support children's development, manage behaviour effectively and create enriching learning environments that foster children's communication, language, literacy, reasoning, social, thinking and mathematical skills (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2020a).

A meta-analysis of the effects of in-service training programmes for preschool teachers shows that in-service training activities favour the constant adjustment of ECEC staff's knowledge to new pedagogical developments and tools. The meta-analysis, which was based on a systematic literature review, also demonstrates the positive effects of such programmes on the availability of high-quality ECEC services (Egert, 2015) ([9]).

Additionally, a report for the International Association for the Evaluation of Educational Achievement based on existing national data collected in eight participating countries (including Member States Czechia, Denmark, Estonia, Italy and Poland) stresses the role that the provision of training opportunities for staff plays in ensuring that cultural diversity is respected in ECEC programmes (Bertram and Pascal, 2016). Staff training opportunities are key to ensuring that all children (irrespective of their cultural background) have access to high-quality ECEC services adapted to their specific circumstances (Bertram and Pascal, 2016). However, this same report shows that not all Member States have developed national strategies in this respect.

Along the same lines, a study based on an extensive literature review shows that ad hoc training and guidance activities for ECEC staff regarding cultural sensitivity/awareness issues play a very important role in strengthening the relationship between ECEC staff and migrant parents, particularly migrant mothers, which benefits the acceptance of the service and its accessibility (Archambault et al., 2019).

Labour shortages and staff working conditions

One of the key elements jeopardising effective access to high-quality ECEC services is labour shortages. For instance, Germany faces a severe shortfall, with estimates suggesting a need for up to 72 500 skilled ECEC workers by 2025. In France, there is a need for 10 000 crèche professionals, and 120 000 home-based childminders will retire by 2030. The situation is similar in other Member States. Austria will need an additional 7 200 staff by 2025 to maintain the current quality of ECEC provision, while Croatia is short of 5 850 ECEC teachers and Finland faces a gap of 6 000 ECEC teachers nationwide (data for 2022) (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023a). A report by Eurydice noted that more than two thirds of European countries were facing shortages of core ECEC practitioners. These shortages are based on estimates from a network of national experts (European Commission/EACEA/Eurydice, 2025).

There is a wide range of literature-based evidence suggesting a relationship between poor working conditions within the ECEC sector and the labour shortage problem, often aggravated by a sense of imbalance between the poor working conditions offered to ECEC staff and their strong commitment to their work (Meyer and Alsago, 2021). In this regard, specific dimensions related to working conditions that help explain the labour shortage problem within the ECEC sector include:

- high workloads, high burnout levels and high levels of responsibility for low financial compensation and limited career opportunities, particularly when compared with those of preschool or primary school teachers (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2020b; Heilala et al., 2022; Joint Committee on Children and Youth Affairs, 2017; Koulierakis et al., 2019; León et al., 2023; OECD, 2020; Sulz, 2018);

([8]) Notwithstanding this result, it is possible to identify significant national differences among Member States in the levels of formal qualifications legally required to work in the ECEC sector (European Commission/EACEA/Eurydice, 2023a), which in turn can result in problems of overqualification and associated low payment levels in relation to other sectors (Corral-Granados et al., 2021).

([9]) An OECD study stresses that these personal development activities can take place in a number of contexts and through a variety of formal and informal activities in addition to traditional courses (e.g. staff meetings, conferences and workshops, supervision and mentoring) (OECD, 2018a).

- poor contractual and payment status (temporary, part-time, term-time-only or low-paid contracts) (Robinson et al., 2022); for instance, low wages in ECEC may correlate with the perception that working in the ECEC sector is not a high-status profession and may prevent qualified and committed individuals from considering working in the sector in the first place (Joint Committee on Children and Youth Affairs, 2017);
- the availability of other, better-paid options for those whose professional qualifications offer a choice of careers (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2020b; Robinson et al., 2022; Tonin, 2023).

Staff labour shortages are primarily underpinned by two interrelated elements, namely the low attractiveness of the ECEC sector and the impossibility of retaining qualified staff. For both elements, existing working conditions play a major role (for an extensive discussion of the main causes of staff shortages, see European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023b). Thus, an EU report stresses that the poor working conditions can lead to a perception that the sector is not very attractive and not very well recognised in society. This in turn can make it more difficult to recruit new staff and thus have a negative impact on the future availability of services (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2020b). One Italian study, based on a combination of literature analysis and a survey among 233 ECEC staff, indicates that the sector lacks attractiveness for male workers. This imbalance is explained by, among other factors, the poorer working conditions, particularly in terms of lower salary levels (Pilè, 2023). Similarly, a German study stresses the negative effects of the comparatively poorer working conditions of the ECEC sector in terms of attracting men to the sector, irrespective of other considerations (Maiwald, 2020).

The European Institute for Gender Equality (EIGE) reports that strong gender segregation in the ECEC sector contributes to gender pay gaps and unfair working conditions. The predominance of women in ECEC roles is linked to societal expectations regarding caregiving, which often result in lower status and remuneration for these positions (EIGE, 2020).

Existing working conditions also influence the capacity of the ECEC sector to retain qualified staff and reduce labour turnover rates to ensure the maintenance of high-quality ECEC services. To give an example, a survey of 23 European cities responsible for providing municipal ECEC services cited high staff turnover as a key challenge for ECEC provision (Eurocities, 2019).

These problems are currently being aggravated by the ageing and retirement of staff (OECD, 2020). In this regard, a Scottish study shows that good working conditions, particularly pay considerations, have an impact on staff retention and stability (Scobie and Scott, 2017).

Staff–child ratios and group sizes

Some of the key critical dimensions related to the working conditions of ECEC staff and accessibility issues are the number of staff per child and the size of the class. In this regard, there is substantial evidence suggesting that higher staff–child ratios and smaller group sizes (a smaller number of children per staff member) enhance ECEC quality/accessibility in a number of ways.

A report compiling international research on the impact of ECEC services on children's development shows that higher staff–child ratios and smaller groups allow staff to better interact with children (particularly younger children) in an appropriate manner. This results in the availability of better ECEC services for children and, subsequently, better educational outcomes among pupils (measured in terms of literacy and numeracy skills and better behavioural and social skills) (Melhuish et al., 2015).

Similarly, a Eurofound report based on a literature review suggests that a higher staff–child ratio has positive effects on the quality of practitioners' practices and on staff–child interactions, resulting in better-quality ECEC services (Eurofound, 2015). Meanwhile, an OECD report based on a comprehensive literature review suggests that higher staff–child ratios and smaller group sizes are associated with lower stress levels, increased job satisfaction and higher retention rates among staff, which in turn result in a more stable and experienced workforce capable of providing higher-quality support to children (OECD, 2018a). A German study suggests that, between 2015 and 2022, childcare workers had 37 % more sick days nationwide than all other occupational groups; the number of sick days was higher within the federal states (*Länder*) that had the lowest staff–child ratios (Weißflog, 2023).

Interestingly, the report developed for the International Association for the Evaluation of Educational Achievement mentioned earlier also stresses that a favourable staff–child ratio in early education programmes is particularly relevant to ensuring access to high-quality interactions between educators and less advantaged children (e.g. children with special needs or disabilities, or children with certain ethnic minority backgrounds), since these children may require additional support and attention from staff (Bertram and Pascal, 2016).

Other working condition elements and accessibility issues

Salaries and wages

The ECEC sector is usually characterised by poor salary conditions, reflected in a wide pay gap between childcare staff and general education teachers, with childcare staff in most countries being paid at around minimum wage levels (OECD, 2018a). These unfavourable salary conditions are usually linked to initial qualification requirements. For instance, in Spain, professionals working with children under three in private pre-nurseries are only required to have higher vocational education in teaching/ECEC specialist training, not a university degree. This affects their working conditions, particularly salary levels and employment contracts (Corral-Granados et al., 2021). Even when ECEC staff are required to hold a university degree, ECEC staff salaries still remain below those of other tertiary-educated workers in most countries: pre-primary teachers in OECD countries earn only 74 % of the average salary of a tertiary-educated, 25- to 64-year-old, full-time, full-year worker (OECD, 2017). As a result, they receive a working salary that does not match their qualifications or align with the minimum wage (Eurofound, 2014).

Poor salary levels have a major influence on the accessibility of services. Low salary levels in the ECEC sector are related to lower job satisfaction/motivation among staff and high staff turnover rates. This has negative consequences in terms of skills loss and higher levels of discontinuity in the availability of high-quality ECEC services (OECD, 2018a). In this regard, a policy toolkit for inclusive ECEC developed by the European Commission stresses that ECEC systems that aim to improve working conditions, including by raising wage levels, make employment in the sector a more attractive option for better-qualified staff (European Commission/EACEA/Eurydice, 2021).

Notably, an Australian study based on 85 interviews with ECEC practitioners in 9 ECEC centres shows that, despite poor pay levels in ECEC and better-paid jobs in other employment sectors, a large number of ECEC staff remain in the sector (McDonald et al., 2018). The study suggests two key reasons why educators stay, namely a sense of achievement and emotional rewards. By way of contrast, educators who leave the sector are much more likely to cite low wages, demands for qualifications and poor working conditions as reasons for leaving. Similarly, a study conducted among Irish graduates highlights a tension between the potential of ECEC to be a rewarding and satisfying career and the reality of employment conditions within the sector, which are characterised by poor salary levels and working conditions (Moloney, 2016).

Contractual status and working time, including availability of child-free time

Staff working time and contractual conditions also affect the availability of ECEC services. Several studies provide information on this topic. The OECD's Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) is the largest international survey of ECEC teachers and school leaders. It suggests that ECEC staff members with fixed-term contracts usually have fewer opportunities for CPD activities, irrespective of other staff characteristics, such as initial education attainment. This has a negative effect on the quality of the ECEC services provided and creates difficulties in attracting new staff or retaining existing staff (OECD, 2019a). The same study stresses that ECEC staff who work full-time reported using more practices to support the learning, development and well-being of children than staff who work part-time.

Meanwhile, a Spanish study based on a survey conducted among 163 education professionals (including ECEC staff) shows that staff with permanent contracts and higher labour stability are more satisfied with their jobs, which has positive effects on the motivation of staff to achieve the desired pedagogical objectives and improve the efficiency of the tasks entrusted to them (Muñoz-Méndez et al., 2017).

An Irish study combining qualitative and quantitative research methodologies shows that a high level of casualisation ([10]) and seasonal work in the ECEC sector (as a result of closures during the summer months when funding from the government initiative does not apply) results in lower salaries and high turnover rates that compromise the availability and continuity of the ECEC services (ICTU, 2016).

One OECD study based on an extensive literature review also shows that the availability of 'child-free' time – paid time outside working with the children that is used to complete other tasks (e.g. liaising with parents, documenting/recording a child's learning progress, planning activities, discussing pedagogical/organisational approaches with colleagues, engaging in continuous training activities) – is seen to improve the quality of the ECEC services available. On the other hand, too much work done outside of time with children and not linked to the preparation of work with children is also a significant source of stress and job dissatisfaction for staff and has negative effects on their performance (OECD, 2020).

([10]) Workforce casualisation can be defined as the process in which employment shifts from a preponderance of full-time and permanent positions to one of casual and temporary agency work.

Physical and psychosocial working environment

There are several examples of literature that suggest the importance of ensuring an appropriate physical and psychosocial working environment to ensure the accessibility of ECEC services. In regard to physical working conditions, a Spanish study reports that the availability of sufficient and appropriate space and materials/tools within the ECEC facility offers better age-appropriate learning opportunities for children to play, relax and learn in a variety of ways, while at the same time increasing job satisfaction among staff (Ancheta-Arrabal et al., 2022). Meanwhile, a German theoretical analysis stresses that a poor supply of material resources at work is a major trigger of exhaustion and disengagement among staff, with negative consequences for the availability and quality of ECEC services (Weißflog, 2023).

In addition to the physical working environment, assigning staff large emotional and physical workloads may have negative effects on the availability of ECEC services. ECEC staff often report experiences of burnout, substantial physical exertion during work, a high incidence of musculoskeletal pain and a high rate of sickness absence due to the physical activities required at work (e.g. lifting, carrying and supporting children, sitting on the floor when interacting with children, or other demanding body postures and movements) (Cresson et al., 2023; EU-OSHA, 2022; Unterreiner, 2018; Weißflog, 2023). A survey conducted among a sample of nursery and kindergarten staff employed in the Education Services Division of the municipality of Turin (Italy) shows that up to 53.4 % of staff reported medium or high levels of emotional exhaustion, and 42.9 % suffered moderately to severely limiting musculoskeletal pain. These problems limit their capacity to successfully interact with children, an issue that particularly affects older staff (Converso et al., 2015).

In Germany, a survey among 205 ECEC staff in Bavarian child daycare centres (*Kinderkrippen*) shows that more than three quarters of daycare ECEC educators report too much stress combined with scarce stress management strategies, which has negative consequences for their daily interactions with children (Sulz, 2018). The Arbeitsplatz und Qualität in Kitas (AQUA) Survey, a nationwide, representative survey among daycare centre (*Kita*) staff, shows that up to 36 % of staff are affected by burnout, with this percentage being higher among older staff and those in managerial positions, resulting in significant negative impacts on staff work performance (Schreyer et al., 2014).

Furthermore, studies show that a more supportive and enabling environment fostered by colleagues and managers has a significant positive influence on the availability of high-quality ECEC services. For instance, an OECD report based on the results collected from the OECD's TALIS Starting Strong finds that opportunities for team collaboration and networking with other colleagues affect the extent to which staff feel supported and part of the team, resulting in higher job satisfaction at work and higher-quality staff–child interactions (OECD, 2018b). Similarly, a German study based on an extensive literature review identifies the importance of collaboration among ECEC team members for improving team and process quality (Eling, 2022). A Swedish study based on interviews among ECEC staff shows that support from the principal and colleagues is the variable that most confidently predicts professional well-being among preschool staff (Finnman Grönaas, 2024). A policy toolkit for inclusive ECEC developed by the European Commission suggests that the presence of professional learning communities among colleagues has positive impacts in terms of developing a joint vision and mission in the organisation and speeding up induction phases for newly recruited staff, which in turn positively contribute to staff practices and thus process quality (European Commission/EACEA/Eurydice, 2021).

Finally, managers deserve a special mention, as they are one of the key factors in providing favourable working conditions for their staff. A literature review conducted by the OECD shows that ECEC practitioners who receive little professional support from their centre's management (in terms of support for CPD, regular staff meetings and consultation, for example) have lower job satisfaction and perform their teaching and caregiving tasks to a lower standard than those who are professionally supported (OECD, 2018a). Similarly, a comprehensive literature review examining the role of leadership in sustaining the availability of high-quality ECEC services shows that ECEC managers and leaders play a key role in promoting supportive working conditions for staff, particularly a positive and safe workplace climate and support for staff CPD and collaboration, which in turn enables ECEC staff to excel in their work, provide high-quality ECEC services and engage in better interactions and relationships with children and colleagues (Douglass, 2019).

Working conditions and the accessibility of early childhood education and care services in specific situations

Working conditions and geographical disparities in the accessibility of early childhood education and care services

Access to ECEC services can be hampered by the poorer working conditions offered to ECEC staff in some rural/remote or marginalised geographical areas. An OECD study based on a cross-national literature review and a meta-analysis suggests that the physical location of the ECEC setting (urban versus rural) affects the working conditions of staff and therefore influences the availability of high-quality ECEC services in these settings (OECD, 2018b). The study suggests that

higher-quality staff–child interactions are observed in settings located in urban areas (as opposed to rural settings) for children aged three to six, but the pattern is the opposite for settings offering services for children under three.

A qualitative study assessing the European Child Guarantee national action plans' responses to fighting inequalities in access to childcare in four Member States (Belgium, Finland, Italy and Spain) shows that all Member States acknowledge substantial territorial inequalities in the availability of high-quality ECEC services, which are due to existing differences in the qualifications of the available workforce and working conditions (León et al., 2023). In this sense, the study shows that, because regions and/or municipalities are responsible for the provision and financing of ECEC services (including staff costs), those regions/municipalities with fewer financial resources have greater difficulty providing high-quality services. This is due in part to challenges in recruiting and retaining qualified care staff and teachers, who are called on to operate in marginalised, difficult territories with limited means and lower salaries. For instance, in Italy, the study shows that municipalities located in marginalised areas with fewer financial resources in some cases opt to increase the share of lower-qualified staff or reduce the number of staff, undermining the quality, availability and inclusiveness of childcare services. The study also shows that in Member States characterised by significant levels of policy decentralisation (e.g. Austria or Spain), regional governments set their own quality standards at regional level, resulting in notable regional variations in the working conditions offered, which in turn affect the provision or quality of the services.

Similarly, other studies underline significant differences in ECEC staff working conditions between regions/municipalities, with associated effects on the quality of the available ECEC services. For instance, in Spain, a recent study conducted in the region of Navarre combining in-depth interviews and secondary sources of information demonstrates significant differences between municipalities in terms of salary conditions or working time issues, with some municipalities even having their own collective agreements. This leads to significant territorial inequalities in the quality of the ECEC services available (Martínez-Virto and Canals Botas, 2022). Another qualitative study conducted by UNICEF Austria notes that differences in existing employment conditions for ECEC staff between federal states (*Länder*) and municipalities, including differences in salaries and salary schemes, group sizes or staff–child ratios, resulted in a large quantity of ECEC professionals moving to regions offering more attractive working conditions, and therefore creating problems regarding the availability and quality of ECEC services in other geographical areas (UNICEF, 2024).

Qualitative studies conducted in Germany (Scholz et al., 2018) and Sweden (Garvis and Lunneblad, 2018) analysing inequalities in access to ECEC services stress that, in both Member States, existing shortages of (qualified) staff in the ECEC sector seem to affect disadvantaged geographical areas more. Thus, in Sweden, qualified teachers are more likely to work in areas of medium socioeconomic status (SES) than in areas of low SES. In Germany, the existing shortage of places in ECEC (exacerbated by the shortage of qualified ECEC staff) is particularly acute in deprived residential areas, with negative consequences for the availability and quality of the ECEC services.

Furthermore, many education unions in Europe complain that local authorities are either understaffed and unable to set up their own ECEC networks or use their limited fiscal capacity to fund other services. In some countries, Recovery and Resilience Facility funds initially allocated to build new ECEC facilities were partially used by municipalities, but the government then shifted the funds to other budget lines.

Working conditions and the accessibility of early childhood education and care services for children from diverse groups with special care/education needs

Effective access to ECEC services also has to take into account the special needs and difficulties of children from disadvantaged backgrounds or groups (e.g. ethnic minorities, migrants, children with specific learning difficulties). In this respect, the OECD's TALIS Starting Strong, conducted among ECEC staff and leaders in nine participating countries, suggests that accommodating children with special educational needs is a major source of stress for ECEC staff, and this topic is also an area where staff indicate that they need ad hoc training. The study also shows that staff in centres with a higher number of children with special needs are not systematically compensated with better working conditions (OECD, 2020).

The programme for the Irish Access and Inclusion Model (AIM), a model of support designed to ensure that children with disabilities can access and meaningfully participate in ECEC programmes, was recently evaluated. The evaluation notes the importance of conducting more training activities on less visible disabilities (e.g. autism spectrum disorders, emotional disturbance, speech and language difficulties) and more complex needs, including more training focused on working effectively with parents/carers of children with special needs, in order to ensure the availability of a high-quality service. The evaluation also stresses the impact that poor working conditions (including pay)

have on the recruitment and retention of high-quality staff for level 7 posts ([11]) within the AIM programme, which creates an additional barrier to the inclusion of children with special needs (Robinson et al., 2022).

Finally, a background paper based on an extensive literature review of European research and policy documents shows that the recruitment of ECEC staff from ethnic minority backgrounds is found to be a particularly successful strategy for fostering the successful ECEC service participation of children from these groups and preventing cultural and linguistic barriers from hampering access to and use of ECEC services (Vandenbroeck et al., 2013). Similarly, a policy toolkit for inclusive ECEC developed by the European Commission stresses that the provision of ECEC services for children with diverse backgrounds (e.g. ethnic minorities and migrants) is qualitatively enhanced when the available staff are provided with initial and continuing training that prepares them to work with linguistically and culturally diverse groups (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2021).

Lessons learned: Enhancing accessibility in ECEC through better working conditions

This examination of ECEC services has shown the key role that improving the working conditions of ECEC staff may play in sustaining the accessibility of ECEC services. Considering the situations of staff is central to ensuring the availability of high-quality ECEC services that underpin children's well-being, learning and developmental outcomes.

On the one hand, good working conditions for ECEC staff are the basis of a professional, competent and motivated workforce that ensures the availability of high-quality ECEC services. Such working conditions can be defined as having well-trained and qualified staff who enjoy good salary conditions; appropriate mental and physical workloads in terms of staff–child ratios or working hours; and an opportunity for staff to develop their activities in safe, well-equipped and stimulating physical and psychosocial working environments.

On the other hand, poor working conditions for ECEC staff are one of the main factors underpinning both the low attractiveness of the sector among potential students, particularly male students, and the relatively high labour turnover rates/sector retention problems, which in turn result in acute sectoral labour shortages. These labour shortages then create problems in terms of the availability of ECEC services. These can include the (temporary) closure of ECEC centres, long waiting lists for enrolment, reduced opening hours or difficulties in properly attending to new children, particularly those with special needs.

The studies discussed here have also shown that the poor working conditions of ECEC staff may have additional negative effects on the accessibility of ECEC services to specific groups of children, particularly those located in rural, remote or marginalised geographical areas and children from diverse groups with special care/education needs. In this regard, poor working conditions (including limited CPD opportunities) may further complicate attracting ECEC staff to less privileged geographical areas or properly attending to the needs of all children (regardless of their ethnic/social background or their special education/care needs).

Despite the key importance of ECEC staff working conditions, this issue has traditionally received very little attention in national-level ECEC policies. Therefore, as a response to these challenges, it is important to reinforce the attention public bodies and providers pay to improving the working conditions of ECEC staff to ensure that all children, regardless of their specificities and situations, can have access to high-quality ECEC services.

Primary and secondary education

Successful and high-quality teachers and school leaders are key to the future lives of children and young adults, the social fabric of society and the stability and growth of economies (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2020b). In this regard, teachers play the most important role in making education a fruitful experience, and the COVID-19 pandemic has further highlighted the importance of the profession in ensuring that all students have equal opportunities to access high-quality education (European Commission/EACEA/Eurydice, 2021).

With this in mind, the objective of the European Child Guarantee is to prevent and combat social exclusion by guaranteeing that children in need have access to a set of key services. The Council of the European Union therefore recommends that Member States guarantee that children in need have effective and free access to education and school-based activities (Council of the European Union, 2021).

In the context of the European Child Guarantee, the education workforce can be defined as professionals engaged in educational activities in primary and secondary education and professionals engaged in

([11]) AIM level 7 provides additional assistance/funding to Irish preschools that have a child whose needs warrant this kind of extra support. The funding can be used to reduce the child–adult ratio in the preschool room by lowering the number of children per class or hiring an additional member of staff.

Table 9: Main NACE and ISCO codes relevant to the education sector and the European Child Guarantee workforce

NACE	ISCO
85.2 – Primary education	1345 – Education managers
85.3 – Secondary education	2320 – Vocational education teachers
85.41 – Post-secondary non-tertiary education	2330 – Secondary education teachers
85.5 – Other education	2341 – Primary school teachers
85.6 – Educational support activities	2351 – Education methods specialists
	2352 – Special needs teachers
	2353 – Other language teachers
	2354 – Other music teachers
	2355 – Other arts teachers
	2356 – Information technology trainers
	2359 – Teaching professionals not elsewhere classified
	5312 – Teachers' aides

Source: *Eurofound, 2024.*

other school-based activities. This covers roles such as teachers, school administrators and support staff who facilitate educational outcomes (Eurofound, 2024). Table 9 includes the main NACE and ISCO codes relevant to the Guarantee.

This section includes a summary of several dimensions related to the working conditions of education staff, particularly those that affect the accessibility of education services for children. These dimensions include:

- initial education and CPD activities;
- labour shortages and staff working conditions;
- other working condition elements (career prospects, working time and job content issues, support from colleagues and superiors, job satisfaction) and accessibility issues;
- special situations (disadvantaged students).

Initial education and continuous professional development activities

A technical report by the JRC provides a literature review on equity in education in Europe ([12]). The report highlights that teachers are one of the key factors in attaining equity, as the teacher's own skills have a direct impact on the progression of their students (Hippe et al., 2016). In other words, the content and quality of teachers' education affect students' learning (OECD, 2019b).

A report by Eurydice that analyses teachers' and school principals' salaries and allowances in public schools in 39 European education systems highlights that teachers' and school principals' knowledge and skills, together with their commitment to the job, are essential factors in providing inclusive and sustainable education and achieving high-quality educational outcomes (European Commission/EACEA/Eurydice, 2023b).

Along similar lines, a study based on international assessment data on teachers' skills using student-level test score data found that teachers' cognitive skills (e.g. reading, learning, remembering, logical reasoning and paying attention) are a significant determinant of international differences in student performance (Hanushek et al., 2014). This study highlights that the effect of teachers' cognitive skills on student performance is substantially larger for students from low socioeconomic backgrounds (Hanushek et al., 2014).

In 2018, the OECD published a report on effective teacher policies, using data from PISA and related databases, analysing the equity of education systems and teacher policies (OECD, 2018c). According to this report, improving the effectiveness, efficiency and equity of schooling largely depends on ensuring that teachers are competent, that their teaching is of a high quality and that this high-quality teaching benefits all students (OECD, 2018c).

([12]) The report understands equity as 'the extent to which individuals can take advantage of education and training, in terms of opportunities, access, treatment and outcomes' (Hippe et al., 2016).

Box 1: Professional development in education

A 2018 report published by the European Trade Union Committee for Education (ETUCE) analyses teachers' professional needs, based on existing literature and a survey of ETUCE member organisations. It highlights that irrelevant and inappropriate training is one of the main reasons for teachers' dissatisfaction with their CPD. In this regard, close to 40 % of teachers surveyed believed that the CPD options available did not meet their professional needs. The study also shows that teachers' workloads (particularly problematic in many European countries) resulted in added difficulties in relation to attending training activities (Stevenson et al., 2018).

A report by the French Court of Auditors mentions recurring problems with in-service teacher training, such as a limited number of training days per year, the poor quality of the training (which teachers felt was inadequate and did not meet their needs) and difficulties covering the work of teachers who were on training courses during class time. In-service training is still seen as a secondary task for teachers (Court of Auditors, 2022).

Accordingly, teachers' own skills have a direct impact on the progression of their students (Charbonnier and Gouëdard, 2020), as do teachers' scientific and pedagogical training. Such training should be provided during initial training and through subsequent CPD (Hippe et al., 2016; Sirois et al., 2022) (see Box 1).

The OECD highlights three elements that usually characterise the best-performing countries in PISA rankings: (i) a mandatory and extended period of clinical practice as part of pre-service teacher education or the induction period; (ii) the presence of diverse, tailor-made options for in-service CPD; and (iii) teacher-appraisal mechanisms focused on teachers' continuous development (OECD, 2018c).

Concerning pre-service teacher education, it is clear that the first few years in the teaching profession are a key phase, meaning that an induction process or period of practice is essential for newly qualified teachers. An OECD report on teaching and learning, based on the 2013 TALIS results, highlights that teachers' past participation in induction programmes improves their performance and might better prepare them to serve as mentors. Moreover, according to this report, previous empirical evidence shows that participating in an induction programme during their first period of employment might have a long-term impact on teachers' willingness to help other teachers improve their teaching capacities (OECD, 2014).

Finally, regarding teacher evaluation or appraisal mechanisms, a Spanish report proposes a new model for the teaching profession, based on a literature review and members' own experiences. Among other aspects, the report stresses that teacher appraisal should support teachers' CPD and should be linked to teaching careers. Without a training dimension and without providing opportunities for CPD, monitoring cannot usefully contribute to the improvement of teaching quality (Manso and Moya, 2019).

Labour shortages and staff working conditions

The teaching profession is suffering a decline in its appeal, attracting fewer young people and losing qualified teachers (European Commission/EACEA/Eurydice, 2021). The attractiveness of the teaching profession – one of the main factors determining inflow, retention rates and outflow – has diminished compared with previous decades (Binder, 2024) ([13]).

According to a JRC technical report published in 2023, the lack of attractiveness of the teaching profession is often identified as one of the main drivers of teacher shortages. Many qualified teachers retire, and there are not enough younger qualified teachers replacing them. Enrolment in teacher preparation programmes (initial teacher education) is falling and even students who successfully complete these programmes may not become teachers. Furthermore, the number of young teachers leaving the profession after a few years is increasing. Low pay, job insecurity and high workloads make it difficult to attract and retain qualified teachers (Di Pietro, 2023).

The European Commission's 2023 Education and Training Monitor country comparative report on EU education and training systems indicates that teacher shortages are widely reported throughout Europe and, in some cases, are expected to increase (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023b). Shortages vary, depending on demographics, subject and geographical area. Prominent examples are

([13]) Inflow is the number of new entrants joining the teaching profession. This includes newly trained teachers and individuals entering the profession from other fields. Outflow is the rate at which teachers leave the profession, whether due to retirement, a career change or other factors. Retention rates measure how many teachers remain in the profession over a certain period, as opposed to leaving due to burnout, dissatisfaction or better opportunities elsewhere.

understaffed schools in disadvantaged regions; a lack of science, technology, engineering and maths teachers; too few language teachers; and a shortage of male teachers at lower education levels. There is also considerable ageing of the teaching workforce in Member States such as Greece, Hungary, Portugal and the Baltic states. Policy responses tend to aim to address shortages in specific subjects rather than geographical imbalances. A few Member States are also looking into innovative solutions, such as pooling teachers across schools or organising school timetables differently (European Commission/EACEA/Eurydice, 2023a).

Monitoring teacher shortages at EU level meaningfully and reliably is hard. Most Member States have introduced indicators to measure or even forecast shortages. However, methodologies vary, so coverage and comparability remain an issue. A lack of comparable data makes it hard to capture the complex interplay of supply and demand in the teaching profession (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023b). Teacher shortages are not measured by a single indicator, and data on teacher shortages from national sources cannot be compared at Member State level (Di Pietro, 2023). In OECD countries, the PISA study compiles information about shortages of educational staff based on the reports of school principals. The information provided shows the extent to which the school's capacity to provide instruction is hindered by a lack of teaching staff or inadequate or poorly qualified teaching staff. In most OECD countries, principals in 2022 were more likely than their counterparts in 2018 to perceive there to be shortages of education staff (OECD, 2023).

The Flemish Region of Belgium and Member States such as Czechia, Denmark, Estonia, France, Ireland, Latvia, the Netherlands, Portugal and Sweden are among those reporting a need for qualified teachers. The Netherlands, for example, currently faces a shortage of 2 900 teachers in primary education and 9 100 teachers in secondary education (each expressed in terms of full-time equivalents). In the German state of North Rhine-Westphalia, public schools have reported 4 000 unfulfilled vacancies. Latvia also experienced a deficit of 2 000 full-time teachers prior to the start of the 2022/2023 academic year. In Ireland, a survey showed that 91 % of public schools had experienced difficulties in recruiting teachers during the previous six months (De Witte et al., 2023).

The shortage of teachers in many countries may be attributed to a combination (and an imbalance) of supply and demand factors. Specifically, in Europe, demand for teachers is higher due to an increase in student enrolment in certain countries. For example, between 2014 and 2020, there was a 16 % increase in the number of students in upper secondary education in the Netherlands; there were also increases of 11 % in Estonia, 9 % in Sweden, 8 % in Poland and 6 % in Spain (De Witte et al., 2023). Gender imbalances and stereotypes also lead to shortages. In the EU, the teaching profession exhibits significant gender imbalances. Women constitute over 75 % of primary school teachers and 66 % of teachers at upper secondary level. However, despite their numerical dominance, women are under-represented in decision-making positions within tertiary education, indicating vertical segregation within the sector (EIGE, 2016).

Results from forecasting analyses in various Member States clearly show that teacher shortages are estimated to be even more severe in the forthcoming years. In 2022, in Slovakia, there was a shortage of 1 300 teachers, but this figure was estimated to reach 3 500 in 2023 and is expected to reach almost 8 600 in 2025. In the Netherlands, a shortage of over 4 000 teachers was expected in 2023/2024, whereas the corresponding value in 2019 was 2 322. Moreover, the future lack of teachers is expected to vary across levels of education and across regions within the Member States (Di Pietro, 2023).

As teacher shortages are commonly associated with a decline in student performance and educational outcomes, doing something about the lack of qualified teachers is high on the EU's agenda (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023b). Both recruiting and retaining effective teachers are key policy concerns for education authorities, and creating a profession that is attractive and fulfilling for new and existing teachers is a key issue for policymakers (Charbonnier and Gouëdard, 2020; European Commission: Directorate-General for Education, Youth, Sport and Culture, 2020b, 2022; Sirois et al., 2022), if they are to ensure that all students have equal access to high-quality education (De Witte et al., 2023). The lack of qualified teachers can affect students' learning and hinder the goal of providing high-quality education for all (European Commission/EACEA/Eurydice, 2023a).

A briefing report published by the European Parliamentary Research Service, based on a literature review, confirms that the current shortage of teachers is a widespread issue across the EU (Binder, 2024). The lack of qualified teachers may be due to a combination of factors, such as low rates of enrolment in initial teacher education, a high dropout rate among the profession (including a growing number of early leavers) and an ageing teacher population ([14]).

([14]) According to Eurostat data, in 2021, the proportion of teachers under 30 years of age in primary, lower secondary and upper secondary education in the EU was 8 %, while 39 % of teachers were aged 50 or above (Binder, 2024).

Teacher shortages are more acute in certain subjects, specialisations and geographical areas (Binder, 2024). The ageing of the teaching workforce, combined with high attrition rates, risks creating an imbalance between teachers leaving the profession and those joining it (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023b).

The 2023 Education and Training Monitor report compares the proportions of teachers aged 55 and over in 2016 and 2021, singling out the Member States with a particularly old and ageing teaching workforce. The trend is most worrying in Greece (in secondary education) and Portugal (in primary and secondary education), but the trends in the Baltic states (particularly secondary education in Latvia and Lithuania) and Hungary also give cause for concern. Finally, Italy stands out, with its proportion of teachers aged 55+ significantly outweighing its proportion of teachers under the age of 30. Overall, the challenge of an ageing workforce gets progressively worse from primary to lower secondary and then upper secondary education (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023b).

Concerning workforce attrition, a Dutch paper, based on a literature review ([15]), contributes to the knowledge base on teacher attrition by mapping several diverging estimates of the prevalence of attrition among Dutch teachers. However, research on teacher attrition in the Netherlands is scarce and the evidence presents an inconsistent image: it is not possible to know the true size of the problem. Within the Netherlands, the attrition rate of early career teachers, according to various documents, lies between 9 % and 25 %. Data from the reviewed studies and reports suggest that ensuring that teachers are qualified, have sufficient teaching competencies and are engaged in induction programmes may have positive effects on the attrition rate (den Brok et al., 2017).

The Network of Experts on the Social Dimension of Education and Training (NESET) has published a report offering evidence-based insights for policymakers seeking to enhance the attraction and retention of teachers, based on a literature review. This NESET document highlights that low retention within the teaching profession reduces the supply of teachers, as it leads to a high turnover rate and a smaller pool of experienced teachers (De Witte et al., 2023). A shortage of teachers often means that the remaining teachers are overloaded with work, both instructional and administrative, are unable to meet students' needs and are sometimes required to teach subjects outside their area of expertise (Schleicher, 2014).

According to a report based on a literature review and data from the United States Department of Education, a shortage of teachers harms students, teachers and the public education system as a whole, in the sense that the lack of sufficiently qualified teachers and staff instability threaten students' ability to learn and reduce teachers' effectiveness (García and Weiss, 2019). All in all, the reduced numbers of teachers may decrease the availability of education services, putting the accessibility and quality of these services at risk.

Several studies show a relationship between labour shortage problems and poor working conditions among education staff. In this regard, the Council conclusions of 26 May 2020 on European teachers and trainers for the future stress that staff working conditions are an essential element to consider when trying to improve the attractiveness and status of the profession (Council of the European Union, 2020). Poor working conditions in the education sector may lead to higher absenteeism rates and a shortage of workers, reducing service availability and negatively affecting accessibility. An OECD report based on the 2018 PISA results states that, in the absence of sufficient compensation, working in a challenging and stressful environment is expected to lead to increases in the rate of absenteeism. Teacher absenteeism may result in a loss of instruction time and the disruption of student learning, with a considerable negative impact on the quality of teaching and student achievement (OECD, 2019b).

A Spanish report on the financing of the education system, based on a literature review and experts' views, underlines the need to invest in quality, equity and inclusion (Gortazar, 2020). The report analyses the situation in Spain and highlights the changes in teachers' financing and contractual relations in public schools between 2010 and 2012 as a consequence of the economic crisis. Thus, budgetary adjustments have led to a reduction in the number of teachers in schools and created precarious conditions for many teachers ([16]), generating greater staff turnover. This may have undermined the ability of schools to deploy and give stability to their school projects (Gortazar, 2020). Therefore, job insecurity and teacher turnover may have a negative impact on the availability and quality of the services offered.

([15]) Throughout the international literature, teacher attrition is acknowledged as a problem in many countries. Some sources suggest that teacher attrition may be particularly high in the early phases of the teaching career; the figures of attrition seem to form a U-shaped curve, with peaks for newly qualified teachers leaving within their first five years of teaching and for teachers over 50 taking early retirement. In the United Kingdom, it has been reported that 50 % of qualified teachers are no longer in the teaching profession five years after graduating from teacher education, and it has been estimated that 40 % of graduates do not start teaching after graduating from a teacher education programme (den Brok et al., 2017).

([16]) In Spain, with Royal Decree-Law 14/2014, the maximum number of pupils per classroom was relaxed, the minimum commitment of staff teaching hours was increased and the hiring of substitutes was restricted (Gortazar, 2020).

By contrast, ensuring adequate financial rewards and creating good working conditions for teachers are crucial to having an enthusiastic and dynamic teacher workforce ready for the challenges ahead (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2022). A World Bank study shows that the countries with the best educational performance are able to attract highly qualified candidates to the teaching profession, partly because of the professional growth opportunities they offer (Beteille and Evans, 2021). Moreover, an attractive career incentivises teachers to stay and motivates them to perform well. Their knowledge can even be used to improve the performance of other teachers (Beteille and Evans, 2021; Sirois et al., 2022).

Similarly, a Eurydice report on careers, development and well-being – based on sources such as Eurydice data (reporting from education systems) and the OECD's TALIS – suggests that national policies aiming to make teaching a more appealing career choice often deal with teachers' working conditions, such as contractual arrangements, working hours and salaries (European Commission/EACEA/Eurydice, 2021; see also Charbonnier and Gouëdard, 2020). In regard to contractual arrangements, this report uses 2018 TALIS data to show that 82 % of teachers at EU level are on permanent contracts ([17]). However, in some countries, the share of teachers on temporary contracts is well above the EU average (European Commission/EACEA/Eurydice, 2021). Across the EU, 82.4 % of teachers have permanent contracts, with teachers in Spain (66.6 %) and Portugal (73.8 %) less likely to be permanent members of staff than teachers in Latvia (92.9 %) and Denmark (96.8 %) (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023b).

Moreover, in many Member States, particularly high shares of young teachers have temporary employment contracts. In Italy and Portugal, for example, around 80 % of teachers under the age of 35 are on fixed-term contracts; in Austria and Spain, the percentages are similarly high. While the share of fixed-term contracts normally drops as teachers get older, in some countries high proportions of teachers aged 35–49 are still in temporary employment. Italy (32 %), Spain (39 %) and Portugal (41 %) are three examples. In the context of shortages of teachers, having so many young professionals on fixed-term contracts can reduce the attractiveness of teaching as a career (European Commission/EACEA/Eurydice, 2021).

Concerning salary issues, it must be noted that salary levels are relevant to both making a teaching career attractive to graduates and retaining current teachers in the profession. Salaries are considered key to improving the quality of the teacher workforce (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2019). In this regard, a report by the Commission expert group on quality investment in education and training (based on various data sources and a literature review) suggests that the decision to become a teacher is influenced by financial rewards, as well as by expectations regarding career opportunities or social status. The OECD's 2018 TALIS collected information on teachers' satisfaction with their salaries. The analysis of responses from teachers shows that overall, at EU level, only 37.8 % of teachers consider their salary satisfactory or very satisfactory; many Member States have averages of below 30 % for teacher salary satisfaction (European Commission/EACEA/Eurydice, 2021). Competitive salaries that are on a par with the remuneration paid to other professionals with similar education levels working in comparable occupations increase the ability of schools to attract and retain teachers (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2022).

A report published by Eurydice in 2023, based on its own data, suggests that remuneration plays an important role in drawing people to the profession and ensuring that teachers feel valued and sufficiently driven to provide high-quality teaching and thus contribute to successful education systems (European Commission/EACEA/Eurydice, 2023b). This Eurydice report states that there are significant differences between European countries in the statutory salaries for teachers entering the profession. Gross statutory starting salaries can range from around 11 000 to around 59 000 per year in purchasing power standard. On average, pre-primary teachers tend to earn less, and upper secondary teachers generally earn more. In most countries, salary differences between education levels are linked to differences in minimum qualification requirements (European Commission/EACEA/Eurydice, 2023b).

The potential for statutory salaries to increase over the career span varies considerably. Depending on the country, starting salaries can increase during a teacher's career by anything from 14 % (in Albania) to 143 % (in Cyprus). The average number of years necessary to reach the top of the salary range varies from 12 years in Denmark and the Netherlands to 42 years in Hungary. In Cyprus, Ireland, the Netherlands and Poland, teachers' statutory starting salaries can increase by more than 60 % in the first 15 years in service and even more in the following years (European Commission/EACEA/Eurydice, 2023b).

([17]) According to EU-LFS data, in 2018, 15.5 % of EU-27 employees were temporary employees.

Teachers' average actual salary levels are strongly correlated to the gross domestic product (GDP) per capita of a country: the higher the GDP per capita, the higher the average annual salary. Among the 37 countries analysed in the report, teachers' average actual salary levels are above the GDP per capita for all or most education levels in 13 education systems. However, they are below the GDP per capita at all educational levels in 10 countries: Estonia, Greece, Hungary, Ireland, Latvia, Norway, Poland, Romania, Slovakia and Sweden (European Commission/EACEA/Eurydice, 2023b).

A JRC technical report on equity in education in Europe analyses teacher quality based on previous research and a literature review and posits that, while it is important to take pay conditions into account to guarantee good teacher quality, opting for increasing teachers' salaries without considering other system-level characteristics is unlikely to increase efficiency and equity in European educational systems (Hippe et al., 2016).

Other working condition elements and accessibility issues

Career prospects

A report by the OECD suggests that the traditional teaching career is generally described as 'flat', providing few opportunities for advancement or diversification. Therefore, the only way for motivated teachers to grow in their careers may be to leave the classroom and take up roles in school leadership or education administration. This can be to the detriment of student learning, since it risks depriving them of their most effective teachers (OECD, 2019c).

Similarly, a Eurydice report on careers, development and well-being suggests that career prospects can be a powerful motivational element and can encourage teachers to develop their skills and continue providing high-quality teaching to pupils (European Commission/EACEA/Eurydice, 2021) ([18]). Thus, fostering an attractive teaching career for teachers is key to improving quality, equity and accessibility in education.

Working time and job content issues

With regard to working time, teachers have to perform many duties other than teaching, such as tasks related to administration, organisation and planning, student assessment, extracurricular activities and relationships with parents. Eurydice data show that, in the EU, less than half of teachers' working time (46.8 %) is really dedicated to teaching. One quarter of their time is focused on tasks like preparing lessons and correcting students' work, and the remaining quarter is devoted to other tasks (e.g. student counselling, CPD and communication with parents). The Eurydice report suggests that maintaining the quality of teaching can be challenging while balancing different tasks (European Commission/EACEA/Eurydice, 2021). In other words, having too many tasks to perform may jeopardise the quality of the services offered (see Box 2).

Box 2: Working time in Frankfurt, Germany

A German study on working time was conducted at primary schools, grammar schools, integrated and cooperative comprehensive schools, and vocational schools (69 schools in total) to determine the relationship between the target and actual working time of teachers in Frankfurt (Mußmann et al., 2020). Some 1 199 teachers recorded their working hours in a specially developed time recording tool for school activities during the survey phase, and 1 477 teachers provided comprehensive information about their work situation and workload using an online questionnaire. In addition to their teaching duties, teachers in Frankfurt have other extracurricular tasks. More precisely, in addition to functional tasks, teachers specifically mentioned an increase in administrative tasks and documentation obligations and more and more time spent at conferences and meetings, which usually can no longer be accommodated within normal working hours.

The results of the working time recording show that these teachers work 48.27 hours per week over the year. On average, they work just under one hour (51 minutes) extra per week. Working at weekends or on public holidays shows that a seven-day week is quasi-mandatory for teachers during the school year. This leads to a lack of recovery time and shows a clear tendency to work without boundaries.

([18]) According to a 2022 national survey on well-being at work, teachers in France are on average less satisfied with their jobs than other French professionals. Teachers were also particularly dissatisfied with their career development opportunities and salaries (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023b).

Another Eurydice report, based on data from TALIS and Eurydice, highlights that there are multiple facets of teaching work (e.g. administration and planning, communication with parents) that are not always reflected in teachers' employment contracts, and they are 'based rather on a tacit understanding of what is expected of teachers as part and parcel of their activity' (European Commission/EACEA/Eurydice, 2015). This situation demotivates teachers and threatens both the quality and availability of the services.

Support from colleagues and superiors

An OECD study, based on OECD data and information from national collaborators, indicates that support from principals, collaboration with colleagues and adequate resources play a significant role in teachers' decisions to stay in their posts. Without supportive working conditions, teachers may feel ineffective and be more likely to move to other schools or quit teaching altogether (Schleicher, 2014).

A French study, based on quantitative research in 80 French public secondary schools, shows that the individual attention given to teachers by the school principal has a direct and moderate impact on their individual performance. Moreover, the application of human resource management practices that are attentive to and concerned with collective well-being at work and are also based on a participative and communicative approach have a direct impact on collective performance (Fournier, 2017).

Similarly, a report by the French Court of Auditors suggests that the need to improve the average performance of the education system will require changing the framework in which teaching professionals operate. The way they organise their work inside and outside the classroom, the relevance of their assessment and their relationship with school principals play a major role in the overall performance and success of the system (Court of Auditors, 2017).

Job satisfaction issues

Motivating teachers and school leaders and supporting their CPD, autonomy and growth are of utmost importance (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2020b). In a context of labour shortages, ensuring teachers' job satisfaction is key to promoting higher retention rates, together with the quality, equity and accessibility of education services.

Not only is job satisfaction closely related to teacher retention, it also contributes to the well-being of teachers and their students, overall school cohesion and the enhanced status of the teaching profession (see Box 3). Content teachers demonstrate stronger job commitment and are less prone to leave the profession (Toropova et al., 2021) ([19]). Systematic overload and excessive demands, as well as the associated consequences, pose a threat to the future of the school system: if teachers are constantly pushed to their limits, this can have a negative impact on the quality of education (Mußmann et al., 2020).

A Spanish study seeks to describe the job satisfaction of teaching professionals in Spain and identify the factors that influence it, using data from the Spanish National Statistics Institute's Living Conditions Survey. The study indicates that job satisfaction, linked to the availability of good working conditions, leads to greater commitment to teaching and better job performance. On the other hand, job dissatisfaction affects the system through aspects such as absenteeism or job abandonment. The study cites previous work, such as Madero (2019), which links an increase in the number of dissatisfied teachers to higher rates of absenteeism. Dissatisfaction is identified as a key predictor of both absenteeism and abandonment of the profession. The level of job satisfaction has repercussions for the student, who is the direct recipient of the good- or bad-quality service provided by the teacher (Rodríguez-Esteban and Ferreira, 2024). Most education experts agree that teacher support is a significant factor affecting students' achievement at school (OECD, 2019b).

Box 3: Examples of national-level research on job satisfaction among teachers

A regression analysis based on 2018 TALIS data from primary and secondary school teachers in the Netherlands and the Flemish Region of Belgium examines work and school conditions and teacher job satisfaction. The report mentions a negative association between job satisfaction, on the one hand, and work pressure, lack of administrative support, barriers to CPD and student misbehaviour, on the other. It notes that good relationships with colleagues and school management are positively related to teachers' commitment and job satisfaction and to their well-being (Admiraal, 2023).

([19]) The Toropova et al. (2021) study aimed to investigate the relationship between school working conditions and teacher characteristics regarding job satisfaction. It does not focus on the link between satisfaction and retention.

An Italian cross-sectional study investigated the roles of sociodemographic aspects, personal resources and aspects of well-being at school in predicting burnout dimensions in a group of primary and secondary school support teachers. The group consisted of 180 teachers (89 % female; mean age, 40.4 years; standard deviation, 5.2). The results show that teachers' happiness at school and their job satisfaction incrementally predicted the likelihood of personal-, job- and relationship-related burnout, even when controlling for the effect of sociodemographic aspects and personal resources. Furthermore, the teachers who were less likely to develop job burnout were those who consider themselves happier with their daily work and more satisfied with their employment and who had higher self-esteem (De Stasio et al., 2015).

Sources: *Admiraal, 2023; De Stasio et al., 2015*.

A Spanish study evaluated the influence of different variables on teachers' job satisfaction, based on a survey of 163 teachers. The study found that a high degree of job satisfaction has a positive impact on the performance and results of the educational institution where the employee works (Muñoz-Méndez et al., 2017).

Special situations: Disadvantaged students

A report by the European Commission expert group on quality investment in education and training, based on a literature review, suggests that disadvantaged pupils strongly benefit from high-quality education and training, as it reduces socioeconomic differences between them and those from more affluent families (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2022).

Similarly, a report by the OECD based on the 2018 PISA results concludes that children from low-income and low-educated families usually face many barriers to learning. However, teachers' support may help students cultivate resilience and reach adequate levels of academic achievement and social adjustment (OECD, 2019b). Therefore, having high-quality teachers is essential if schools intend to give all students a chance to succeed, but schools with a high concentration of disadvantaged students may face difficulties attracting the most effective and experienced teachers. Available data suggest that teachers prefer working with higher-achieving students. Some teachers may be dissuaded from applying to work in disadvantaged schools, as they anticipate the working conditions being more difficult (OECD, 2019b).

In France, disadvantaged schools receive a large number of novice teachers and have highly unstable teams. In the least attractive centres, very high proportions of new teachers are posted every year (Court of Auditors, 2017). According to a German research study in the Frankfurt area, schools with special social challenges place considerable demands on teachers, which is also reflected in a less favourable assessment of working conditions and higher burnout rates. The pedagogical task of fostering inclusion in the classroom and the frequently inadequate building infrastructure are often experienced as highly stressful (Mußmann et al., 2020). The PISA results show that countries where schools are less socially diverse also have less equitable education systems. Thus, social segregation between schools is negatively related to equity in education (OECD, 2019b).

Similarly, another study based on PISA data shows that the least favoured schools tend to be those in rural and remote settings, together with schools with higher proportions of disadvantaged children and children from ethnic minority and minority language backgrounds. According to this study, schools in these settings are more likely to have staff shortages and their students tend to be taught by the least experienced and least qualified teachers. The higher concentration of underqualified or novice teachers in schools serving disadvantaged students tends to have a negative impact on student performance (Schleicher, 2014).
On the subject of teacher attrition, a 2005 report by the OECD shows that it is higher in disadvantaged areas (OECD, 2005). The evidence suggests that attrition and turnover rates are not uniform across schools but tend to be higher in schools located in areas that are disadvantaged to some extent. In England, teacher turnover rates are substantially higher in inner London (21 % in 2000/2001) than in the north of the country (14 %). Inner London has high living costs and a highly diverse student population. Similar geographical variations in teacher turnover have been reported in the Netherlands, with vacancies harder to fill in large cities. In the United States, attrition and turnover rates are higher in schools where the enrolment of students from minority backgrounds is greater. Thus, the differential patterns of teacher turnover and attrition are likely to exacerbate inequalities among schools.

Along similar lines, a report by NESET based on a literature review aims to offer evidence-based insights for policymakers seeking to attract and retain teachers. This report notes a higher turnover of teachers in schools with a high proportion of disadvantaged students (i.e. learners with a low SES). Schools with more ethnically diverse student populations and higher concentrations of low-performing students are less likely to retain their teachers and usually experience greater staff shortages (De Witte et al., 2023). This situation exacerbates educational inequality in terms of opportunities, access, treatment and outcomes and has

negative effects on the availability, accessibility and quality of education services for all children.

In Spain, an Ombudsman's report on children criticises the insufficient provision of personal resources in educational guidance teams in schools with pupils who have special educational needs. According to this report, there is a clear lack of resources (people), which delays the adoption of measures to guarantee equal opportunities for all pupils (Defensor del Pueblo, 2023). Thus, the limited availability of specialised professionals has a negative impact on the availability and accessibility of education services under equal conditions for children with special educational needs.

Lessons learned: Enhancing accessibility in education by improving staff working conditions

This section on education highlights the crucial importance of improving the current working conditions of education staff to enhance the accessibility of educational services. Considerations regarding staff are pivotal to ensuring the availability of high-quality education services that provide all children with equal access to the necessary knowledge, skills and competencies.

Several aspects related to the working conditions of education staff, which affect the quality and accessibility of services, have been identified. For instance, the knowledge and skills of teachers are critical in providing inclusive and sustainable education. In other words, ensuring that teachers possess the necessary competencies through initial training and CPD, encompassing both scientific and pedagogical training, is essential to deliver high-quality teaching that benefits all students.

This section also shows that the teaching profession is experiencing a labour shortage problem, with fewer young people entering the field and many qualified teachers leaving it. This shortage of competent educators may result in poorer educational outcomes and unequal access to education for all children. The current teacher shortage is a widespread problem across the EU, and improving teachers' working conditions is vital to making the sector more attractive.

In this regard, ensuring adequate financial compensation and creating favourable working conditions for teachers are crucial to maintain an enthusiastic and dynamic workforce offering high-quality services. An appealing career path encourages teachers to remain in the profession and improves the availability of services. Various factors, such as contractual arrangements, working hours or salaries, should therefore be considered when designing more attractive and rewarding teaching careers. Ensuring teachers maintain high motivation and job satisfaction levels is key to promoting higher retention rates and improving the quality, equity, availability and accessibility of education services. Supporting teachers' satisfaction and enhancing the social value of the teaching profession could lead to higher motivation and improved performance among educators.

Finally, it must be highlighted that schools with a high concentration of disadvantaged students may struggle to attract the teachers who are most effective and experienced due to perceptions/expectations of poorer working conditions. Therefore, extra efforts should be made to attract teachers to these specific schools in order to ensure educational equality in terms of opportunities, access, treatment and outcomes for all children.

Provision of school meals

In terms of the European Child Guarantee, the most relevant workforce involved in ensuring healthy nutrition in school meals can be identified by a combination of five ISCO-08 occupational categories and two main NACE sector codes (Eurofound, 2024) (see Table 10).

Table 10: Main NACE and ISCO codes relevant to the school meal sector and the European Child Guarantee workforce

NACE	ISCO
• 85 – Education • 88.91 – Child daycare activities	• 2265 – Dieticians and nutritionists • 3257 – Environmental and occupational health inspectors and associates • 3434 – Chefs • 512 – Cooks • 94 – Food preparation assistants (including 9411 – Fast food preparers and 9412 – Kitchen helpers)

Source: *Eurofound, 2024.*

School food service workers perform a variety of duties at work, including the preparation of work areas; the planning and preparation of food/drinks with registered dieticians to help meet the nutritional needs of children; the completion of food service activities in line with portioning guidelines; and the cleaning of tables, dining areas and food preparation surfaces/equipment (Krow, undated). Complementary to this, the school meal sector encompasses different types of employees with a variety of skills and educational backgrounds, ranging from frontline workers and food preparation staff to chefs and individuals with management roles, with significant differences among sector workers in terms of their associated working conditions (Billings et al., 2022). For instance, school food service managers usually have higher levels of education and are more likely to work full time or have higher salaries than food preparation assistants.

There are significant national and regional/municipal differences in school meal systems within the EU, including differences among schools within the same municipality (Piirsalu et al., 2022), which strongly influence the working and employment conditions of the workers (Hoinle and Klosterkamp, 2023). These differences comprise different models of school food provision (e.g. schools with in-house catering versus those that use external contract catering. In the case of the latter, food is prepared in centralised public or private kitchens and delivered to schools in a ready-to-serve state or chilled so that it can be reheated in the individual schools). There are also different food procurement models (e.g. central procurement versus a decentralised system in which each institution individually procures its food and catering services). Moreover, municipality-owned kitchens offer better working conditions than the school-owned and externalised models, since the canteen workers have regular salaries based on fixed, long-term contracts with a public employer. The availability of free full school meals in preschools, primary schools and secondary schools, particularly the availability of free school meals for low-income children in compulsory education, differs substantially across Member States (see Baptista et al., 2023, for an extensive discussion of this).

Studies and research focusing on the existing relationships between the accessibility of (healthy) school meal services and staff working conditions are limited. Most of the existing literature on the accessibility of school meals tends to be 'food-centric', in that it pays particular attention to issues related to either the quality of the meals and drinks provided (what meals/drinks are on offer, nutritional values, freshness, portion sizes, availability of different options) or pricing elements (prices and subsidies for parents) (Byrd, 2016).

Notwithstanding this, there are several examples in the literature that stress the key role that staff (and their associated working conditions) play in ensuring the accessibility of healthy school meals. Three main elements can be identified:

- the relationship between staff's initial education and CPD activities, staff working conditions and the availability of high-quality school meal services,
- the relationship between staff working conditions and how the meals are accepted by children/adolescents and their parents,
- the relationship between staff working conditions and existing labour shortages, including issues related to the attraction and retention of staff.

These three relationships are discussed in the following sections.

Initial education and continuous professional development activities

Several research studies and documents stress the link between the presence of competent and highly skilled staff and the availability of high-quality school meals. For instance, a German study on quality standards for meals in schools stresses that school meal employees with appropriate skills and knowledge help to ensure the availability of consistent high-quality catering services (IN FORM, 2023). Moreover, this report stresses that staff with good working conditions (reflected in fair payment, the presence of open and constructive relations with superiors and colleagues, and the presence of ergonomic workplaces, for example) have higher levels of job satisfaction. This in turn results in higher performance and motivation at work.

A Spanish study based on a literature review examines the existing relationship between the presence of qualified staff (particularly in fields related to nutrition and dietetics) and the availability of high-quality/nutritionally balanced menus that may also take into account special requests from children/adolescents with special needs (e.g. in terms of allergies) (Aranceta Bartrina et al., 2008). However, this study stresses that most school meal staff just take compulsory hygiene-related and food-handling-related training courses ([20]). As a result, they often lack the appropriate skills and knowledge when it comes to nutrition, dietetics, allergen management and other aspects of collective catering (including customer orientation and communication skills involving children and

([20]) An official food handler's licence is compulsory for those wishing to work in school meal services.

adolescents) that lead to higher service quality. Therefore, the authors stress the importance of further professional training activities to promote staff's competencies and update their knowledge to ensure consistent catering quality.

Another German study, based on the practical experience of the author as a coach in various Bavarian schools and daycare catering services, stresses the importance of both formal and informal training activities, such as team meetings and study visits to other centres. To ensure the availability of a good school meal service, these activities can focus on areas such as hygiene rules, correct and efficient use of catering equipment, identification/labelling of additives and allergens, educational aspects of daycare centre catering and customer-oriented food serving (KErn, 2021) ([21]).

Similar trends are identified outside the EU. A study from the United States based on a systematic review of school food service training interventions highlights the importance of effective training for school food service professionals in ensuring the availability of healthy meals for children/adolescents that comply with national nutrition standards (Stephens and Byker Shanks, 2015).

Staff working conditions and the acceptance of school meals

Interestingly, several studies also stress that school meal staff (and their associated working conditions) can play a key role in fostering the acceptance of the school meal service among children and adolescents. The acceptance of school meals can thus be identified as another key dimension of the accessibility of school meal services.

A comprehensive study based on a combination of a literature review and analysis of policy interventions suggests that the availability of professional school meal staff with positive attitudes and engagement creates a pleasant eating environment that upgrades the school meal experience and increases uptake of school meal services (European Commission: Directorate-General for Employment, Social Affairs and Inclusion et al., 2021). This study suggests that pupils tend to reject school meals strictly regulated by adults or where no alternatives are given to cater for meal preferences (e.g. dietary requirements among specific religious or ethnic minorities).

A study based on a survey conducted among 1 991 students aged from 11 to 18 years old in 18 schools in Germany and complemented by ad hoc interviews with key sector stakeholders shows that, in addition to the provision of meals that are healthy, tasty and varied, highly skilled and competent, friendly and service-oriented staff have a positive impact on the acceptance of school meal services among pupils, particularly among the oldest ones (Lülfs and Spiller, 2006). The study shows that, in general terms, pupils' assessment of staff is relatively poor, as friendliness is rated as only satisfactory and the staff's cooking skills are also rated as inadequate.

Similarly, the previously mentioned KErn study suggests that acceptance of school catering is facilitated not only by tasty food and good canteen design, but also by friendly, respectful, competent and highly qualified kitchen and serving staff. The authors stress that appropriate communication, respectful treatment of pupils and consideration of individual preferences are decisive contributions that staff can make to ensure that pupils feel comfortable in the canteen and enjoy using it (KErn, 2021).

Finally, one Latvian study establishes an interesting link between the experience/motivation of school meal staff and food waste, which in turn affects the availability and cost (affordability) of meals (Riekstina-Dolge et al., 2019). The study identifies three kinds of food waste in school canteens: food waste generated in the preparation process, food waste generated in the distribution process and food waste from the leftover food portions (which account for 41 %, 20 % and 39 % of food waste, respectively). In all cases, the lack of experienced, well-trained and motivated staff is one of the main reasons for this food waste, with consequences for the cost of the service itself.

Labour shortages and staff working conditions

Last but not least, poor staff working conditions within the school meal sector lead to problems regarding labour shortages and the retention and attraction of qualified staff. This in turn results in difficulties in the provision and availability of these services (see Box 4). It can also lead to a greater reliance on the private sector. For example, in Germany, commercial catering companies deliver 88.7 % of school food through the external provision model (Hoinle and Klosterkamp, 2023), whereas in Spain school meal provision is currently outsourced in 64 % of schools that provide the service (CCOO, 2023). In Italy, the outsourced share increases to nearly 80 % of school meal provision (Slow Food Italia, 2015). Some studies stress that the current trend towards the externalisation and outsourcing of meal services to private companies is

([21]) Despite the importance of training, it is not clear that the provision of training opportunities for school food service staff is a common practice. For instance, in Italy, a study shows that just 58 % of schools with their own food services provide training and refresher courses for their school food service staff (Slow Food Italia, 2015).

Box 4: Poor working conditions and labour shortages in the school meal sector

Research shows that school food service workers often face challenging working conditions, including low wages, a high presence of (undesired) part-time and temporary work or high levels of workload, stress and burnout. These factors negatively affect the overall morale, job satisfaction and commitment of the staff and therefore the quality of the available school meal services. In addition to this, the typical work environment within the school meal sector exposes workers to a number of significant occupational risks, including ergonomic risks (e.g. long periods of standing, repetitive movements and activities, awkward postures, carrying heavy loads/trays of food), risks associated with extreme temperatures (e.g. hot steam, poor air quality and bad smells, exposure to sudden changes in temperatures, fires), risks associated with slips, trips and falls (e.g. food spills on walkways, wet/damp or otherwise dangerous floors), exposure to potentially dangerous chemicals and biological risks, risks related to work equipment and tools (e.g. presence of sharp objects and hot substances and materials, inadequate dimensions of working spaces) and, finally, psychosocial and organisational risks (e.g. high workloads and time pressure during meal times, high noise levels associated with school meals, pressure to meet tight deadlines at peak times, emotional demands from children and young students). These risky situations increase the possibility of work accidents, job-related stress and mental fatigue, discomfort or negative occupational-related health outcomes (e.g. musculoskeletal disorders) and high absenteeism levels (Billings et al., 2022; EU-OSHA, 2023; Filippelli et al., 2008; INRS, 2019; Krow, undated; USO, 2019). In this regard, food service operations have accident and illness rates as high as other sectors commonly thought of as hazardous places to work (dos Santos Ferreira et al., 2022).

generally associated with the worsening of working conditions, which negatively influences the quality of school meals (Hoinle and Klosterkamp, 2023). Several reports stress that occupations associated with food preparation are some of the economic activities most affected by labour shortages in more countries in Europe (ELA, 2025).

A comprehensive French report on the working conditions in the restaurant sector (in general) suggests that tough working conditions within the sector result in higher levels of absenteeism and accident rates and make the sector less attractive for young graduates (CNFPT, 2019). The study suggests that these elements make it increasingly difficult to recruit operational professionals in the sector, with negative consequences for the availability of services.

Lülfs and Spiller (2006) show that catering companies have to lay off catering staff during the holidays, meaning that these companies have to put up with correspondingly high staff turnover and face difficulties in bringing experienced staff back after the holidays, which in turn make it harder to ensure the availability of the service.

A comprehensive report by the European Agency for Safety and Health at Work (EU-OSHA) on the hotel, restaurant and catering sector in general stresses that poor working conditions and the occupational risks within the sector are at the root of the sector's labour shortage problems. The report is based on a literature review, in-depth interviews with key EU stakeholders and an analysis of the European Survey of Enterprises on New and Emerging Risks results (EU-OSHA, 2023). According to the report, these problems are currently being exacerbated by the difficulties enterprises face in attracting and recruiting staff (particularly young people), high absenteeism levels and a higher rate of accidents (albeit the majority of which are not fatal) per employed worker than the average for all sectors.

Lessons learned: Enhancing accessibility in school meal services by improving staff working conditions

School meal services play a crucial role in supporting the health and well-being of students by providing healthy meals and teaching healthy eating habits. Despite limited evidence, some of the available studies show that the accessibility of school meal services is linked to the working conditions of the relevant staff.

Several studies show that the existence of well-qualified and motivated staff with appropriate skills/knowledge and good working conditions – reflected in fair pay levels, the presence of ergonomic workplaces and good relationships with colleagues and bosses – is linked to the availability of high-quality and less costly school meals. Moreover, highly motivated, well-qualified, customer-oriented staff can play a key role in creating a pleasant eating environment that upgrades the school meal experience and increases the uptake and acceptance of school meal services among children and adolescents.

In addition to this, several studies stress the key role that poor working conditions (particularly low wages, high workloads, exposure to hazards or high levels of undesired part-time and temporary work) play in fostering labour shortages within the sector, leading to high staff turnover, high absenteeism and difficulties attracting qualified staff. All these elements have negative effects on service availability.

Healthcare services

The Council recommendation establishing the European Child Guarantee mentions a variety of healthcare services, including but not limited to dental care, ophthalmology, screening programmes, disease prevention and health promotion programmes, vaccination, parenting support, curative or rehabilitative follow-up, treatment of developmental problems, mental health services, periodic medical examinations, access to medicines and rehabilitation services for children with disabilities. In terms of the European Child Guarantee workforce, the most relevant healthcare workforce can be directly identified by the ISCO-08 four-digit-level categories shown in Table 11 (Eurofound, 2024).

Before examining the workforce trends in this sector, it is important to stress that there are particular requirements for and concerns raised in relation to the work of healthcare staff who work with children and adolescents that affect these workers' working conditions (see Box 5).

This section presents a literature-based summary of several dimensions of the working conditions of healthcare staff that mostly affect the accessibility of healthcare services for children. These dimensions include:

- initial education and CPD activities;
- labour shortages and staff working conditions;
- psychosocial risks and burnout problems;
- working conditions and the accessibility of paediatric healthcare services in specific situations.

Table 11: Main ISCO codes relevant to the healthcare sector and the European Child Guarantee workforce

NACE
1342 – Health services managers
2211 – Generalist medical practitioners
2212 – Specialist medical practitioners
2221 – Nursing professionals
2222 – Midwifery professionals
2240 – Paramedical practitioners
2261 – Dentists
2262 – Pharmacists
2264 – Physiotherapists
2266 – Audiologists and speech therapists
2267 – Optometrists and ophthalmic opticians
2269 – Health professionals not elsewhere classified
2634 – Psychologists
3221 – Nursing associate professionals
3222 – Midwifery associate professionals
3251 – Dental assistants and therapists
3253 – Community health workers
3254 – Dispensing opticians
3255 – Physiotherapy technicians and assistants
3256 – Medical assistants
3258 – Ambulance workers
3259 – Health associate professionals not elsewhere classified
5321 – Healthcare assistants

Source: *Eurofound, 2024.*

Box 5: The unique situation of paediatric healthcare staff

Caring for children requires different knowledge and skills from those needed when caring for adults, particularly because of the specific nature of paediatric diseases and the negative effects that treatment may have on the child's development and future life (Ridremont, 2022). Additionally, interactions with family members play a prominent role in the paediatric care process. Unlike adult patients, who can be autonomous, children or adolescents frequently need a parent or carer to accompany them to hospital or medical appointments. As well as having to deal with young patients who are ill and may in some cases die, staff have to respond to the emotional needs and numerous requests of patients' parents or other family members. Having to balance the care and needs of both the patient and the family unit can be a source of stress and conflict for the team.

Furthermore, specific legal, ethical and moral issues may arise when caring for sick children, particularly in relation to medical decisions. For example, should healthcare workers give decision-making authority to a terminally ill adolescent who is judged to be cognitively and emotionally mature, even if legally the adolescent does not have this authority? Thinking that the course of treatment is not in the child's best interests and the perceived inability of the carer to advocate for the child are common stressors among carers working in paediatric settings. Different ideas regarding the causal factors leading to patients' illnesses/clinical situations are often present, and perceptions of the innocence of children and the prematurity and unnaturalness of paediatric illness (i.e. that it is not the child's fault that they are ill) contribute to the distress of the healthcare workers in paediatric intensive care. In this regard, the death of a child is particularly distressing for carers, and carers do not always know how to react to the dilemma posed by having to choose between curative and palliative care.

Initial education and continuous professional development activities

The availability of a well-qualified healthcare workforce, with appropriate technical and communication skills, is key to ensuring the effective accessibility of (high-quality) healthcare services. Several studies show this link. One Spanish study, based on a systematic review of 51 scientific articles in English, deals with the main barriers to and challenges involved in accessing mental healthcare services for children and adolescents and their families. It suggests that access to these mental healthcare services might be hampered by the lack of training and the lack of relevant professional specialised skills among mental healthcare providers to effectively diagnose, understand and address the mental health needs of children and adolescents and the possible comorbidities (Carbonell et al., 2023).

Similarly, a systematic literature review of 24 international studies in English on the main barriers to and facilitators of healthcare access for autistic children in the United Kingdom shows that autistic children are often not diagnosed early by primary care providers due to the providers' lack of autism knowledge and their lack of confidence in treating behavioural and co-occurring mental health conditions associated with autism (Babalola et al., 2024). The review stresses the critical need for general practitioners' training to facilitate access to healthcare services, since general practitioners are often the first point of contact for parents and are responsible for making decisions about autistic children's health. This includes the referral process to facilitate the provision of the additional resources needed to care for this group. Meanwhile, an Italian study based on a literature review shows that one of the main barriers to properly diagnosing and providing support to autistic children is that most healthcare professionals have minimal training on autism spectrum disorders, which makes it more difficult to provide good-quality care or identify the best way to obtain it (Grigolon, 2023).

Similarly, a study on the management of child and adolescent mental health problems based on an extensive literature review of 43 international studies in English shows that lacking the knowledge and skills needed to address mental health issues, partially explained by insufficient attention being paid to the issue during paediatric residency training, is one of the main barriers to effectively managing these issues among children and adolescents. The lack of appropriate time and resources to carry out proper exploratory screenings and evaluations is also a barrier (O'Brien et al., 2016).

A Canadian study based on a review of relevant literature dealing with inequalities in accessing healthcare services among deprived social groups (irrespective of age) stresses the important role that appropriate training can play in ensuring better access to healthcare services for these disadvantaged patients. The study identifies several examples of formal/informal training programmes to improve attitudes, skills and competencies in relation to addressing social determinants of health. These include community work placements with underserved patient groups for medical students and ad hoc training to increase paediatric specialists' screening and referrals for those experiencing domestic violence. Another example would be training for healthcare providers on the communication skills needed to facilitate safe and trustful spaces to help patients disclose what are often sensitive and personal social challenges and to allow staff to work with them in finding solutions (Andermann, 2016).

Linked to this point, the studies previously mentioned also stress the key importance of empowering paediatric healthcare staff with appropriate communication skills to facilitate their acceptance by children and (particularly) the children's parents. Thus, the literature review conducted by Babalola et al. (2024) on autistic children also reports significant negative experiences of communication with healthcare professionals, resulting in parents avoiding seeking help because they feel judged by professionals. Meanwhile, the study by Carbonell et al. (2023) identifies several reports that describe how parents and adolescents feel that they are not listened to, making it difficult to establish a good therapeutic relationship between all parties involved and eventually leading to poor-quality services.

Similarly, an Italian study on the use of birth services by migrant women, based on a combination of quantitative and qualitative research methods (interviews, focus groups, literature review), stresses the key role that good communication and a patient-centred approach to the provision of health services (including a more communicative and empathic relationship between mothers and healthcare professionals based on trust) can have in ensuring parents have a positive experience of childbirth and breastfeeding (Musumeci, 2018).

Interestingly, a German study also stresses the importance of empowering healthcare professionals with the appropriate skills and knowledge to adequately respond to the specific healthcare needs and challenges of some groups (Kesting, 2022). Specifically, this study, which is based on a combination of a literature review and interviews with healthcare professionals, identifies that professional carers dealing with adolescents with cancer need to have a wide range of knowledge and skills in order to attend to this group's needs. This includes not only disease-related knowledge (e.g. knowledge about the disease, treatment and therapy; knowledge about treatment side effects and how to handle them; medication management) but also relationship-building and communication skills (e.g. with regard to family

members, partners and peers) and the interpersonal skills needed to tackle development-related conversations (e.g. discussions of body image, sexuality, autonomy, handling of emotions, death).

Meanwhile, a qualitative descriptive Canadian study based on focus groups and open-ended interviews with parents of children with disabilities shows the main requests that parents have in relation to healthcare services. These include effective communication with service providers; practical, emotional and informational support; and being treated with respect, care and empathy (Pozniak et al., 2023). Another literature review of 44 international articles in English on access to psychological treatment for mental health conditions in children and adolescents shows that feeling like they are not being listened to or are being dismissed/blamed by professionals was frequently reported as a barrier to parents seeking and accessing help, as was the presence of non-supportive professionals [22] (Reardon et al., 2017). Similarly, an extensive literature review of 90 studies on mental health conditions in adolescents shows that holding negative beliefs regarding mental health services and professionals was the second most relevant barrier that prevented adolescents from accessing mental healthcare services (Aguirre Velasco et al., 2020). These negative perceptions can be counterbalanced by improving the mental health literacy and emotional competencies of mental healthcare professionals, among other elements (Aguirre Velasco et al., 2020).

Labour shortages and staff working conditions

Europe is currently facing a severe and widespread shortage of healthcare professionals (ELA, 2025). There are several factors driving this labour shortage problem (see Box 6), including the challenging working conditions and poor work–life balance of healthcare workers. These negative circumstances were particularly aggravated for frontline workers during the COVID-19 crisis (Allinger and Mairhuber, 2021; Carbonell et al., 2023; de Vries et al., 2023; Zapata et al., 2023). Some authors also stress the gendered dimension of these challenges given that 78 % of healthcare workers in the EU are women, who often face poorer working conditions (WHO Regional Office for Europe, 2022).

Box 6: Working conditions and their impact on the retention of nurses and physicians in EU hospitals

A detailed literature review of 37 European studies on factors affecting the retention of nurses and physicians in hospitals (irrespective of the age cohort covered) identifies both 'push factors' (factors that lead to the intention to leave the hospital setting and eventually the profession) and 'pull factors' (factors that increase the intention of nurses or physicians to stay in the hospital setting) (de Vries et al., 2023).

According to this literature review, there are several elements related to working conditions that foster staff turnover (push factors). They include:

- burnout symptoms, including emotional exhaustion and depersonalisation;
- job dissatisfaction related to expectations or individual experiences;
- high workloads and quantitative demands, including high staff–patient ratios and emotional and mental strain;
- lack of career development, including limited opportunities for education and personal growth;
- effort–reward imbalances;
- work–life balance issues, including irregular working hours and conflicts between work and family responsibilities;
- inadequate staffing and a high level of job strain (high demands, low control);
- negative organisational culture, including lack of support from management, horizontal violence and poor leadership styles;
- poor patient outcomes, such as higher mortality rates or low patient satisfaction.

[22] Concern about the confidentiality of discussions with professionals was another barrier suggested in several of the studies analysed.

Meanwhile, the literature review identifies several elements related to working conditions that have a positive impact on staff retention (pull factors). They include:

- job satisfaction;
- career development opportunities, including education, opportunities for renewing qualifications and positive career experiences;
- supportive leadership by superiors;
- a positive work environment, including good communication, supportive colleagues and social support from superiors;
- adequate staffing, ensuring a more balanced workload and reduced job strain;
- a good work–life balance and flexible work schedules;
- financial incentives, including good salary/rewards or social benefits provided by the employer;
- adequate means to do the job.

Healthcare professionals are highly mobile. The EU has played a significant role in relation to their freedom of movement. European Parliament Directive 2005/36/EC on the recognition of professional qualifications (subsequently amended by European Parliament and Council Directive 2013/55/EU on the mutual recognition of professional qualifications) was adopted to foster the recognition of professional qualifications acquired in other countries and grant mobility to several 'regulated' professions. Six out of the seven professions outlined in the directive are in the healthcare sector: general care nurses, dental practitioners, veterinary surgeons, midwives, pharmacists and doctors. Owing predominately to the variation in working conditions across the EU, some Member States have benefited from the directive more than others (Brady and Kuiper, 2023). This high labour mobility, coupled with aggressive recruitment strategies from other European and non-European countries (usually based on providing better working conditions, particularly pay), has resulted in additional labour shortages in some Member States, particularly eastern and southern Member States (Brady and Kuiper, 2023; Zapata et al., 2023). For instance, a Spanish study based on a survey among 1 109 professionals working in child medicine or in training to become a child medicine specialist shows that up to 5.7 % of the surveyed individuals are seriously considering leaving Spain to work abroad for better salary conditions, whereas 57.2 % have considered this possibility and 37.1 % have never considered this (Castaño Alegre et al., 2020).

The healthcare sector is also characterised by gender segregation. Approximately 14 % of female workers in the EU are employed in healthcare occupations, compared with about 3 % of male workers. This disparity is largely attributed to traditional gender roles and stereotypes that associate women with caregiving responsibilities. Such segregation not only limits the talent pool but also reinforces the undervaluation of women's work, leading to lower wages and reduced economic independence (European Commission: Directorate-General for Employment, Social Affairs and Inclusion, 2023).

There is some literature dealing with the relationship between labour shortages in the healthcare sector for children and the consequences for access to these healthcare services. In this regard, the study conducted by Carbonell et al. (2023) suggests that labour shortages create feelings of desperation and uncertainty in families, causing people to mistrust the services. Meanwhile, the literature review by Babalola et al. (2024) outlines the closure of specialist services due to a lack of funding and the existence of shortages of autism specialists, which led to both higher complaint levels among parents of autistic children and difficulties accessing healthcare services for autistic children due to the under-provision of healthcare services, longer waiting lists and the shorter-term and poorer-quality professional support on offer.

Similarly, a systematic review of 53 quantitative and qualitative studies reporting barriers to and facilitators of children and adolescents seeking and accessing professional help for mental health conditions in Europe and elsewhere shows that the limited provision of specialist services (which results in long waiting lists and difficulties making appointments) is one of the key barriers to accessing child and adolescent mental health services (Radez et al., 2021).

A study based on a survey among active paediatric nephrologists in France in 2023 shows that the shortage of paediatric nephrologists has led to a reduction in care availability. The repercussions include the cancellation of non-urgent care, increased transfers of children due to bed shortages and a deterioration in service quality, as fewer healthcare professionals are available to meet the existing service demands (Bacchetta et al., 2024). According to the study, France ranks 22nd in terms of

paediatrician density among OECD countries, with a significant decline in the last 15 years and marked difficulty in recruiting and retaining new paediatric nephrologists.

A Turkish study based on qualitative in-depth interviews with nurses who had voluntarily resigned from their jobs shows that the shortage of nurses not only increased the workload but also limited the capacity of healthcare institutions to meet patient needs effectively, compromising their ability to provide high-quality care and reducing overall healthcare service availability and quality (Çamveren et al., 2020). Similarly, another study from the United Kingdom based on a systematic literature review of 18 international studies shows that low nurse staffing levels (often explained by existing labour shortages) are significantly associated with increased reports of missed or omitted nursing care (i.e. tasks that are delayed or not completed due to inadequate staffing), which directly affects patient outcomes and access to high-quality healthcare services (Griffiths et al., 2018). The study also shows that missed care is particularly prevalent in tasks requiring more time and personal interaction with patients (e.g. emotional and psychological support, patient education, movement assistance, patient surveillance and monitoring vital signs), which are often the first tasks to be neglected when staffing is inadequate.

Finally, the detailed literature review carried out by de Vries et al. (2023) shows that high turnover rates among healthcare staff have a negative impact on the quality of care provided – for instance, in terms of higher rates of medical errors and loss of care continuity – which results in increasing patient dissatisfaction and a lack of confidence in the system on the part of potential users.

Psychosocial risks and burnout problems

One of the key elements underpinning working conditions among healthcare professionals (including child healthcare professionals) covers issues related to burnout and psychosocial risks, particularly in terms of psychological stress, fatigue, anxiety and depression. This has significant consequences for the accessibility of healthcare services (de Vries et al., 2023; Dyrbye et al., 2017; Søvold et al., 2021).

An extensive international literature review conducted by researchers in the United States (Dyrbye et al., 2017) stresses that burnout problems among healthcare professionals can have significant consequences in terms of the accessibility of healthcare services. First, the literature review suggests that burnout and stress have a direct effect on the quality of service provision and the risk of medical malpractice suits and medical errors; they are also linked to lower patient satisfaction levels. Second, the literature review suggests that feelings of burnout are positively associated with plans to leave one's current job and with higher absenteeism levels, adding further strain to meeting access needs. Linked to this point, the literature review shows that a high labour turnover rate has financial implications for healthcare organisations. Direct costs increase due to the need to replace healthcare specialists and indirect costs (e.g. in relation to higher rates of medical errors and malpractice claims, absenteeism, lower job productivity) also rise.

Another qualitative study from the United States based on an extensive international literature review identifies several significant, detrimental consequences for burnout levels among healthcare staff in general. The study finds that excessive burnout levels result in increased rates of job turnover, decreased productivity and poorer work performance levels, with negative consequences such as lower staff morale and a lower overall quality of care (including lower patient satisfaction, increased numbers of medical errors, higher rates of healthcare-associated infections and higher 30-day mortality rates) (Moss et al., 2016). According to this study, symptoms associated with burnout include psychological symptoms (frustration, anger, fear, anxiety, inability to feel happy, being unprofessional, feeling overwhelmed, disillusionment, hopelessness, lack of empathy, feeling insufficient at work) and physical symptoms (exhaustion/fatigue, insomnia, muscle tension, headaches, gastrointestinal problems). Another qualitative study based on an extensive review of international literature on the topic identifies several adverse impacts on patient care quality, including suboptimal patient care practices and higher risks of medical errors, as well as higher levels of absenteeism, low organisational commitment, increased turnover of skilled staff and greater patient dissatisfaction (Søvold et al., 2021). Similarly, the literature review conducted by Carbonell et al. (2023) stresses that high workload levels (one of the predictors of burnout situations) result in poorer-quality provision and are reflected in breaks in treatment, providers facing difficulties in fully understanding patients' circumstances, or difficulties in carrying out timely diagnoses and effective interventions.

A Spanish study based on a survey among 411 primary health specialists shows a prevalence as high as 20 % for high levels of burnout among the primary specialists surveyed. The consequences were significant at the personal and professional levels (higher levels of stress, dissatisfaction at work) and at the organisational level (related to a lower quality of services and lower organisational outcomes) (Párraga Martínez et al., 2018).

A French study on stress and burnout among paediatric healthcare staff based on a survey of 195 paediatric healthcare professionals (128 physicians and 67 nurses) in French hospitals shows a very high prevalence of burnout (51 % among doctors and 46 % among nurses), where the factors predicting burnout in paediatric staff

are mainly related to working conditions (workloads and work–life imbalance). This study also identifies some of the major consequences of burnout, not only for the health of staff (e.g. fatigue, sleeping disorders) but also for their patients. The latter is reflected in a drop in the quality of care, higher levels of staff absenteeism, reduced performance at work, high labour turnover or a deterioration in the relationship between the carer and the patient/family (Ridremont, 2022).

Interestingly, a study based on a survey of 510 French staff in paediatric oncology services also shows that the psychological health of healthcare providers in paediatric oncology has significant consequences in terms of the provision of better-quality healthcare services. Managerial factors (e.g. perceived autonomy, support and transformational leadership) and organisational factors (e.g. organisational justice and perceived organisational support) are among the elements affecting these providers' psychological health (Lejeune et al., 2017).

Working conditions and the accessibility of paediatric healthcare services in specific situations

Several studies stress the existing geographical differences in working conditions and their effects on the labour shortage problem, with significant implications for access to and availability of health services in certain geographical areas. For more information, see 'Labour shortages and staff working conditions'.

Other studies stress that rural and remote regions in all Member States have greater difficulties when it comes to the recruitment and retention of healthcare workers. A Spanish study based on quantitative information stresses the increasing difficulties in finding and recruiting health specialists in remote areas due to poorer working conditions. Forecasts suggest that these problems could increase in the coming years, posing a problem for the sustainability of the health system (Arévalo Manso et al., 2019).

Other Spanish studies also stress the existing differences between regions in terms of working conditions for child healthcare specialists (e.g. in terms of salary levels, job tenure or doctor–child ratios), which imply additional difficulties in retaining healthcare specialists in some regions and ensuring the same level of high-quality provision of paediatric services across regions (Castaño Alegre et al., 2020; Hernández Guillén et al., 2014). One German study highlights the notable differences between federal states and municipalities in the financing of healthcare services for asylum seekers and the cost reimbursement procedures, and differences in the use of the electronic health card (*elektronische Gesundheitskarte*) and treatment vouchers (*Behandlungsscheine*) among regions and municipalities (Lindner, 2022).

Last but not least, some studies strongly recommend the promotion of ICT and virtual technologies to facilitate access to healthcare services for children and adolescents located in remote/rural areas. This may help to overcome problems with the availability of specialist services in these remote areas and difficulties regarding travelling to physical appointments (NICE, 2021; Radez et al., 2021). In this regard, the study by Radez et al. (2021) suggests that young people seem to be particularly likely to identify opportunities to communicate distress and attend treatment via digital tools that can act as facilitators to seeking/accessing treatment.

Working conditions and the accessibility of paediatric healthcare services to migrant children and children from diverse cultural/ethnic groups

Several studies underline the importance of having a diverse paediatric healthcare workforce to ensure better access to and acceptance of the service. Thus, the literature review conducted by Babalola et al. (2024) shows that some parents seem to be particularly concerned about the lack of a more diverse workforce/professionals with different cultural backgrounds, as parents believe that these workers would be able to provide more effective service support ([23]). The need to ensure the provision of healthcare services that are sensitive to the cultural and/or religious needs of the baby, child or young person is also stressed in other studies (see NICE, 2021).

Interestingly, a systematic literature review of 27 scientific articles on the use of and access to mental healthcare services among refugees and asylum seekers in Europe (not analysed from an age perspective) suggests the importance of having more ethnic minority staff regularly available in psychiatric services. This would help to build trusting, culturally acceptable and positive relationships. The review also highlights the importance of the availability of interpreters and appropriate language services or online services that allow refugees and asylum seekers to access help from professionals in their mother tongue (Satinsky et al., 2019).

Several studies also stress the importance of providing additional training activities to support healthcare professionals in effectively interacting with migrants

([23]) However, the same study suggests that some caregivers believe that professionals with the same cultural background as the child/family might make false assumptions based on the shared cultural background.

and people from different backgrounds, irrespective of age considerations. For instance, a literature review of healthcare practices for undocumented migrants based on 66 international studies highlights the importance of providing additional training for healthcare staff so that they can fully understand and remain updated on policies on access to appropriate care for undocumented migrants and therefore not turn undocumented migrants away based on false information (Hacker et al., 2015). Similarly, another study based on an extensive literature review of 77 studies points out that insufficient training courses on transcultural competencies for health and social care professionals are a major barrier. This hinders healthcare professionals' interactions with migrants in several Member States, which in turn makes access to healthcare services more difficult for this group of patients (Lebano et al., 2020). Finally, a Spanish study based on a literature review underlines that improving access conditions for the migrant population in general (and other ethnic minority populations) would require a series of measures, including the adaptation of human resources to the needs of these groups through training activities related to various technical and culture-related domains (Urbanos-Garrido, 2016).

Lessons learned: enhancing accessibility in healthcare by improving staff working conditions

This section on healthcare services for children shows the key role that the working conditions of healthcare staff play in ensuring effective access to these paediatric healthcare services.

The literature review underlines the importance of having well-qualified healthcare staff with appropriate technical and communication skills who are capable of effectively diagnosing, understanding and treating the healthcare needs of children and any possible associated comorbidities. The discussion shows the importance of empowering healthcare staff not only by providing them with specific disease-related technical knowledge to ensure the provision of high-quality healthcare services but also by ensuring they are equipped with appropriate communication and relationship-building skills to facilitate trust, confidence and acceptance from children and their parents.

Second, this literature review shows that poor working conditions are one of the main reasons behind the severe shortages of healthcare professionals, which are expected to be aggravated in the coming years. These labour shortages have significant effects on access to healthcare services for children and are reflected in problems related to poorer availability of (high-quality) healthcare services. These problems include under-provision of healthcare services, longer waiting lists, higher rates of medical errors and loss of care continuity, and have negative consequences in terms of increasing patient dissatisfaction or lowering levels of trust and confidence among users and their families.

Linked to this, one of the key elements underpinning working conditions among healthcare professionals in general and child healthcare professionals in particular covers issues related to burnout and psychosocial risks, particularly in terms of psychological stress, emotional exhaustion or job strain. These burnout-related problems have significant negative consequences in terms of the accessibility of healthcare services. They can lead to poorer-quality service provision (including more medical errors), reduced availability of professionals (due to high absenteeism levels), decreased performance at work and organisational commitment, lower staff morale, lower patient satisfaction and higher costs related to the provision of services (e.g. increasing direct costs due to the need to replace absent healthcare specialists). High workload levels seem to be particularly relevant to predicting burnout situations.

This literature review has highlighted significant geographical differences in the working conditions of healthcare specialists, which result in difficulties in ensuring the availability of healthcare services and the retention of healthcare staff in some rural/disadvantaged areas, regions and Member States.

Finally, this literature review shows the importance of having a diverse paediatric healthcare workforce with different cultural/ethnic backgrounds to ensure better access to and acceptance of the service. It also highlights the importance of empowering healthcare staff by providing them with the appropriate skills to effectively interact with different groups (e.g. people from different ethnic/cultural backgrounds or migrants/refugees).

In summary, ensuring accessible, high-quality paediatric healthcare services requires a multifaceted approach that addresses the working conditions, training and well-being of the healthcare workforce. Investing in the paediatric healthcare workforce is crucial to support the health and development of Europe's children and adolescents.

Conclusions and policy pointers

Promote good mental health

The analysis of trends shows an increase over time in children reporting feeling low more than once a week. Other measurements of mental health confirm this decline over time. While the suicide rate for the general population in the EU has decreased over recent decades, it actually increased between 2011 and 2021 for children under 15 (Eurofound, forthcoming). There is evidence also that children from low-income households are more likely to suffer from mental health disorders (Save the Children, 2024). As shown in this report and other research, there is a lack of staff specialised in mental healthcare for children.

It is therefore important to ensure that policies at EU and national levels curb this trend. The communication on a comprehensive approach to mental health (European Commission, 2023) acknowledges this deterioration in the mental health of the younger generation, making reference to the role that the European Child Guarantee can play in resolving this. Children struggling with mental health issues constitute one of the groups listed in the Guarantee recommendation. However, unlike other groups listed in the recommendation, there is no further definition of or information about who is included in this group in the staff working document or any of the other documents accompanying the recommendation. It would be useful to address this in the midterm review of the Guarantee in 2026.

The communication mentions the creation of a child and youth mental health network, the development of a prevention toolkit and various actions aiming to promote a healthy digital environment. These actions can help the Guarantee and national efforts to promote mental well-being. The European Year for Mental Health and the European action on mental health provide opportunities for strengthening support in this area. In particular, the European action plan includes technical assistance and a training project: the European programme for mental health exchanges, networking and skills.

Achieve education targets

Another area where the trend analysis has identified a worsening trend is education. More specifically, expenditure on secondary education and rates of low achievement among 15-year-olds in maths, reading and science have worsened over time.

The current Social Scoreboard includes an indicator on general government expenditure that encompasses different levels of education. Should the establishment of a new action plan for the European Pillar of Social Rights lead to a revision of the Social Scoreboard, it would be advisable to include separate indicators for each level of education to be able to monitor developments accurately.

Reducing low achievement among 15-year-olds in maths, reading and science is one of the objectives of the European Education Area. The results of this trend analysis show that it would be advisable to strengthen this part of the Education Area to allow targets to be achieved by 2030. The midterm review of the European Education Area in 2025 provides an opportunity for this. The midterm review also provides an opportunity to help achieve these targets by drawing attention to specific groups that are struggling, such as women and girls with children in their households, who are experiencing an increase in early school-leaver rates.

Support the workforce

The evidence gathered here fills a gap in relation to one aspect of the social policy agenda at EU level, which often deals with the accessibility of services and workforce issues separately when, in reality, they are intertwined. This report highlights the key role that the existing working conditions of staff play in ensuring the accessibility of services in the different sectors analysed in relation to the European Child Guarantee. Investing in the workforce also has wider societal benefits when it comes to productivity and labour market participation (Eurofound, 2014; European Commission, 2025). There is also scope to replicate and/or seek complementarities with campaigns like ETUCE's '10 key demands' to increase recruitment and retention in education and other sectors (ETUCE, undated).

The national action plans rarely state explicitly how workforce measures are funded. Approximately one quarter of the workforce-related measures have some information on budgets and funding directly linked to them. The ESF+ was stated as a funding source in at least nine measures in the Greek, Portuguese and Slovak national action plans. These plans included both training-based and non-training-based measures. For example, in Greece, funding from the ESF+ Human Resources for Social Cohesion operational programme was allocated to ensure adequate and qualified staff were recruited to the National Centre for Social Solidarity, with particular reinforcement given to the administrative capacity of the European Child Guarantee national coordinator.

As described in the previous chapters, most of the workforce-related measures that are taking place in the framework of the European Child Guarantee have to do with training. There is scope for other types of measures that can be funded through the ESF+. The ESF+ Regulation states that the objectives of the ESF+ include the following:

> *The ESF+ shall support, complement and add value to the policies of Member States to ensure equal opportunities, equal access to the labour market, fair and quality working conditions, social protection and inclusion, in particular focussing on quality and inclusive education and training, lifelong learning, investment in children and young people and access to basic services.*
>
> (EU, 2021)

Other EU funds, like the Technical Support Instrument, are also available and are being used to support the implementation of the European Child Guarantee.

In the resolution 'Children first – Strengthening the Child Guarantee, two years on from its adoption', the European Parliament calls on Member States to ensure that available EU and national funds are used to their full potential. It also '[c]alls on the Commission to assess the quality of spending on children, and in particular to evaluate the effective and consistent use of the EUR 8,9 billion dedicated to the ECG [European Child Guarantee] under the ESF+' (European Parliament, 2023, p. 10). It will be important to ensure that, as part of this assessment, the Commission looks into whether the full potential of the ESF+ is being used to support the workforce. To facilitate this, more information about the funding used could be provided in the national implementation plans.

Tackle labour shortages

This report has also documented labour shortages in services for children. Labour shortages have increasingly been the main factor affecting labour markets in the EU and beyond. Job vacancies increasingly appear to have been filled by workers moving jobs. This could indicate ineffective activation policies. It could also mean that employers have shifted their recruitment strategies towards attracting workers who are already employed (Eurofound, 2024).

In March 2024, the European Commission put in place an action plan on labour and skills shortages that includes the following groups of measures:

- supporting the activation of under-represented people in the labour market,
- providing support for skills development, training and education,
- improving working conditions in certain sectors,
- improving fair intra-EU mobility for workers and learners,
- attracting talent from outside the EU.

Moving forward, it is thus important to seek complementarities between the roll-out of this action plan and the European Child Guarantee.

There are multiple ways in which the roll-out of the European Child Guarantee can capitalise on this plan. For example, as part of the action plan, the Commission will study the causes of involuntary part-time employment. As stated in the plan, this is more widespread among women, who, in turn, make up the vast majority of the workforce providing services for children.

The five areas in the action plan coincide more or less with the categories of measures tackling labour shortages identified by Eurofound in other sectors of the labour market (Eurofound, 2024). Some of the lessons learned across different sectors and occupations in the labour market are relevant to the retention and recruitment of workers delivering services for children as well. For example, shortages in rural areas can be mitigated through an adequate network of public transport.

References

All Eurofound publications are available at www.eurofound.europa.eu

Admiraal, W. (2023), 'Teachers' work conditions and their job satisfaction in primary and secondary education', *International Journal on Studies in Education*, Vol. 5, No 1, pp. 15–26.

Aguirre Velasco, A., Cruz, I. S. S., Billings, J., Jimenez, M. and Rowe, S. (2020), 'What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A systematic review', *BMC Psychiatry*, Vol. 20, 293.

Allinger, B. and Mairhuber, I. (2021), *Gesundheitsberufe in der Europäischen Union*, Forschungs- und Beratungsstelle Arbeitswelt, Vienna.

Ancheta-Arrabal, A., Romero-Crespo, J. A. and Gabaldón-Estevan, D. (2022), 'Educación y equidad en la primera infancia. El caso de las aulas de 2 años en los centros públicos de la Comunidad Valenciana', *Papers*, Vol. 107, No 3, e3066.

Andermann, A. (2016), 'Taking action on the social determinants of health in clinical practice: A framework for health professionals', *Canadian Medical Association Journal*, Vol. 188, No 17–18, pp. E474–E483.

Aranceta Bartrina, J., Pérez Rodrigo, C., Dalmau Serra, J., Gil Hernández, A., Lama More, R. et al. (2008), 'El comedor escolar: situación actual y guía de recomendaciones', *Anales de pediatría*, Vol. 69, No 1, pp. 72–88.

Archambault, J., Côté, D. and Raynault M.-F. (2019), 'Early childhood education and care access for children from disadvantaged backgrounds: Using a framework to guide intervention', *Early Childhood Education Journal*, Vol. 48, pp. 345–352.

Arévalo Manso, J. J., Diéguez de la Mata, O., Navarro Ruiz, J. L., Gallardo Correa, M. J. and Vega Méndez, E. (2019), 'Próxima escasez de enfermeras en España: el problema del que no se habla', *Index de Enfermería*, Vol. 28, No 4, pp. 235–239.

Babalola, T., Sanguedolce, G., Dipper, L. and Botting, N. (2024), 'Barriers and facilitators of healthcare access for autistic children in the UK: A systematic review', *Review Journal of Autism and Developmental Disorders*.

Bacchetta, J., Boyer, O., Hogan, J., Nobili, F., Faudeux, C. et al. (2024), 'French pediatric nephrologists are in crisis: The consequences of paradoxical injunctions and a plea for action', *Pediatric Nephrology*, Vol. 39, pp. 3131–3135.

Baptista, I., Guio, A., Marlier, E. and Perista, P. (2023), *Access for children in need to the key services covered by the European Child Guarantee – An analysis of policies in the 27 EU Member States*, Publications Office of the European Union, Luxembourg.

Bertram, T. and Pascal, C. (2016), *Early childhood policies and systems in eight countries: Findings from IEA's early childhood education study*, International Association for the Evaluation of Educational Achievement, Hamburg.

Beteille, T. and Evans, D. K. (2021), *Docentes exitosos, alumnos exitosos: reclutamiento y apoyo de la profesión más importante para la sociedad*, World Bank Group, Washington DC.

Billings, K. C., Bryan, S. L. and Donovan, S. A. (2022), *The school foodservice workforce: Characteristics and labor market outcomes*, Congressional Research Service report R47199.

Binder, K. (2024), 'Teachers: Key to achieving the European Education Area ', European Parliamentary Research Service Briefing, PE 762.284, April.

Brady, D. and Kuiper, E. (2023), *Addressing the challenges of the healthcare workforce: Ensuring the future of health in Europe*, European Policy Centre, Brussels.

Byrd, J. (2016), *Serving amid institutional camouflage: The invisibility of school food service workers*, graduate thesis, Oregon State University, Corvallis.

Çamveren, H., Arslan Yürümezoğlu, H. and Kocaman, G. (2020), 'Why do young nurses leave their organization? A qualitative descriptive study', *International Nursing Review*, Vol. 67, No 4, pp. 519–528.

Carbonell, Á., Georgieva, S., Navarro-Pérez, J.-J. and Prades-Caballero, V. (2023), 'The hodgepodge reality: A qualitative systematic review of the challenges and barriers in child and adolescent mental health care systems', *Adolescent Research Review*, Vol. 9, pp. 563–586.

Castaño Alegre, S., Celaya Fernández, I., Corbato García, Á. and Martínez Suárez, V. (2020), 'Encuesta sobre la situación profesional de la Pediatría en España', *Pediatr Integral 2020*, Vol. 24, No 5, pp. 285–294.

CCOO (Federación de Servicios de Comisiones Obreras) (2023), *Restauración Colectiva: Modelo de Funcionamiento y Empleo en los Comedores Escolares Externalizados*, Madrid.

Charbonnier, É. and Gouëdard, P. (2020), 'Les réformes à l'horizon 2030 dans les pays de l'OCDE', *Revue internationale d'éducation de Sèvres*, Vol. 83, pp. 131–141.

CNFPT (Centre National de la Fonction Publique Territoriale) (2019), *Restauration Collective*, Étude Métiers, Étude Sectorielle No 6, Paris, https://www.cnfpt.fr/sites/default/files/etude_sectorielle_restauration_2019_09_05.pdf (PDF).

Converso, D., Viotti, S., Sottimano, I., Cascio, V. and Guidetti, G. (2015), 'Capacità lavorativa, salute psico-fisica, burnout ed età, tra insegnanti d'infanzia ed educatori di asilo nido: uno studio trasversale', *Medicina del Lavoro*, Vol. 106, No 2, pp. 91–108.

Corral-Granados, A., Rogers, C. and Kruse, F. (2021), 'The forgotten ECEC staff working with birth-to-3-year-olds: The imbalances between the workforce policies and ECEC staff employment conditions in Spain', *Management in Education*, Vol. 38, No 3, pp. 125–137.

Council of the European Union (2019), Council recommendation of 22 May 2019 on high-quality early childhood education and care systems (OJ C 189, 5.6.2019, p. 4).

Council of the European Union (2020), Council conclusions on European teachers and trainers for the future (OJ C 193, 9.6.2020, p. 11).

Council of the European Union (2021), Council recommendation (EU) 2021/1004 of 14 June 2021 establishing a European Child Guarantee (OJ L 223, 22.6.2021, p. 14).

Council of the European Union (2024), La Hulpe Declaration on the Future of the European Pillar of Social Rights, 16 April.

Court of Auditors (2017), *Gérer les enseignants autrement – Une réforme qui reste à faire*, Paris.

Court of Auditors (2022), *La formation continue des enseignants de l'enseignement public – Exercices 2017–2021*, Paris.

Cresson, G., Devetter, F.-X. and Lazès, J. (2023), *Conditions de travail et d'emploi des assistantes maternelles employées par les parents*, CNAF, Paris.

Defensor del Pueblo (2023), *Infancia y adolescencia en el informe anual 2022*, Madrid.

den Brok, P., Wubbels, T. and van Tartwijk, J. (2017), 'Exploring beginning teachers' attrition in the Netherlands', *Teachers and Teaching*, Vol. 23, No 8, pp. 881–895.

De Stasio, S., Fiorilli, C., Chiarito, G. and Uusitalo-Malmivaara, L. (2015), 'Fattori predittivi nel burnout degli insegnanti di sostegno della scuola primaria e secondaria', *Psicologia dell'Educazione*, No 2–3, pp. 113–132.

de Vries, N., Boone, A., Godderis, L., Bouman, J., Szemik, S. et al. (2023), 'The race to retain healthcare workers: A systematic review on factors that impact retention of nurses and physicians in hospitals', *INQUIRY: The Journal of Health Care Organization, Provision and Financing*, Vol. 60.

De Witte, K., De Cort, W. and Gambi, L. (2023), *Evidence-based solutions to teacher shortages*, Publications Office of the European Union, Luxembourg.

Di Pietro, G. (2023), *Indicators for monitoring teacher shortage in the European Union: Possibilities and constraints*, Publications Office of the European Union, Luxembourg.

dos Santos Ferreira, J., da Purificação Nazaré Araújo, M., da Rocha Fonseca Barroso, R., Braz Assunção Botelho, R., Puppin Zandonadi, R. et al. (2022), 'Occupational risk assessment in school food services: Instruments' construction and internal validation', *Sustainability*, Vol. 14, No 3, 1728.

Douglass, A. (2019), 'Leadership for quality early childhood education and care', *OECD Education Working Papers*, No 211, OECD Publishing, Paris.

Dyrbye, L. N., Shanafelt, T. D., Sinsky, C. A., Cipriano, P. F., Bhatt, J. et al. (2017), 'Burnout among health care professionals: A call to explore and address this underrecognized threat to safe, high-quality care', *NAM Perspectives*, discussion paper, National Academy of Medicine, Washington DC.

Egert, F. (2015), *Meta-analysis on the impact of in-service professional development programs for preschool teachers on quality ratings and child outcomes*, doctoral thesis, Otto-Friedrich University of Bamberg, Bamberg.

EIGE (European Institute for Gender Equality) (2016), 'Relevance of gender in the policy area', in: EIGE, *Gender in education and training*, Publications Office of the European Union, Luxembourg.

EIGE (2020), *Gender inequalities in care and pay in the EU*, Vilnius.

ELA (European Labour Authority) (2025), *EURES report on labour shortages and surpluses 2024*, Publications Office of the European Union, Luxembourg.

Eling, V. (2022), 'Zur Bedeutung von Teamkonflikten für die Prozessqualität in Kindertageseinrichtungen', *Zeitschrift für Pädagogik*, Vol. 68, No 5, pp. 673–690.

ETUCE (European Trade Union Committee for Education) (undated), 'Make teaching attractive! 10 key demands', ETUCE website, accessed 21 April 2025, https://www.csee-etuce.org/en/campaigns/make-teaching-attractive/10-key-demands.

EU-OSHA (European Agency for Safety and Health at Work) (2022), *Workshops with childcare workers to reduce musculoskeletal disorders*, case study, https://osha.europa.eu/sites/default/files/Childcare%20work_EN.pdf (PDF).

EU-OSHA (2023), *Accommodation and food service activities – Evidence from the European Survey of Enterprises on New and Emerging Risks (Esener)*, Publications Office of the European Union, Luxembourg.

Eurocities (2019), *European Pillar of Social Rights – Cities delivering social rights: Early childhood education and child welfare in cities in Europe*, Brussels.

Eurofound (2014), *Caring for children and dependants: Effect on careers of young workers – Background paper*, Eurofound, Dublin.

Eurofound (2015), *Early childhood care: Working conditions, training and quality of services – A systematic review*, Publications Office of the European Union, Luxembourg.

Eurofound (2021), *Monitoring convergence in the European Union: Looking backwards to move forward – Upward convergence through crises*, Challenges and prospects in the EU series, Publications Office of the European Union, Luxembourg.

Eurofound (2022), 'Labour shortage', Eurofound website, 20 December 2022, accessed 15 April 2025, https://www.eurofound.europa.eu/en/european-industrial-relations-dictionary/labour-shortage.

Eurofound (2023), *Guaranteeing access to services for children in the EU*, Publications Office of the European Union, Luxembourg.

Eurofound (2024), *The European Child Guarantee workforce*, Eurofound working paper, Dublin.

Eurofound (forthcoming), *Mental health: Risk groups, trends, services and policies*, Publications Office of the European Union, Luxembourg.

European Commission (2023), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a comprehensive approach to mental health, COM(2023) 298 final of 7 June 2023.

European Commission (2024), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Labour and skills shortages in the EU: An action plan, COM(2024) 131 final of 20 March 2024.

European Commission (2025), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a Competitiveness Compass for the EU, COM(2025) 30 final of 29 January 2025.

European Commission/European Education and Culture Executive Agency (EACEA)/Eurydice (2015), *The teaching profession in Europe: Practices, perceptions, and policies – Eurydice report*, Publications Office of the European Union, Luxembourg.

European Commission/EACEA/Eurydice (2021), *Teachers in Europe: Careers, development and well-being – Eurydice report*, Publications Office of the European Union, Luxembourg.

European Commission/EACEA/Eurydice (2023a), *Structural indicators for monitoring education and training systems in Europe 2023 – The teaching profession*, Publications Office of the European Union, Luxembourg.

European Commission/EACEA/Eurydice (2023b), *Teachers' and school heads' salaries and allowances in Europe 2021/2022 – Facts and figures*, Publications Office of the European Union, Luxembourg.

European Commission/EACEA/Eurydice (2025), *Key data on early childhood education and care in Europe 2025 – Eurydice report*, Publications Office of the European Union, Luxembourg.

European Commission: Directorate-General for Education, Youth, Sport and Culture (2019), *Education and Training Monitor 2019*, Publications Office of the European Union, Luxembourg.

European Commission: Directorate-General for Education, Youth, Sport and Culture (2020a), *Early childhood education and care – How to recruit, train and motivate well-qualified staff – Final report*, Publications Office of the European Union, Luxembourg.

European Commission: Directorate-General for Education, Youth, Sport and Culture (2020b), *Supporting teacher and school leader careers – A policy guide – Report*, Publications Office of the European Union, Luxembourg.

European Commission: Directorate-General for Education, Youth, Sport and Culture (2021), *Toolkit for inclusive early childhood education and care – Providing high quality education and care to all young children*, Publications Office of the European Union, Luxembourg.

European Commission: Directorate-General for Education, Youth, Sport and Culture (2022), *Investing in our future: Quality investment in education and training*, Publications Office of the European Union, Luxembourg.

European Commission: Directorate-General for Education, Youth, Sport and Culture (2023a), *Staff shortages in early childhood education and care (ECEC) – Policy brief*, Publications Office of the European Union, Luxembourg.

European Commission: Directorate-General for Education, Youth, Sport and Culture (2023b), *Education and Training Monitor 2023 – Comparative report*, Publications Office of the European Union, Luxembourg.

European Commission: Directorate-General for Employment, Social Affairs and Inclusion (2023), *Employment and social developments in Europe 2023*, Publications Office of the European Union, Luxembourg.

European Commission: Directorate-General for Employment, Social Affairs and Inclusion, Bruckmayer, M., Picken, N. and Flemons, L. (2021), *Provision of school meals across the EU – An overview of rationales, evidence, facilitators and barriers*, Publications Office of the European Union, Luxembourg.

European Parliament (2023), European Parliament resolution of 21 November 2023 – 'Children first – Strengthening the Child Guarantee, two years on from its adoption' (2023/2811(RSP)) (OJ C, C/2024/4212, 24.7.2024).

European Union (EU) (2021), Regulation (EU) 2021/1057 of the European Parliament and of the Council of 24 June 2021 establishing the European Social Fund Plus (ESF+) and repealing Regulation (EU) No 1296/2013 (OJ L 231, 30.6.2021, p. 21).

Eurostat (undated), 'EU Statistics on Income and Living Conditions (EU-SILC) methodology – Economic strain', accessed 9 April 2025, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology_-_economic_strain.

Filippelli, C., Verso, M. G., Amicarelli, V., Di Famiani, M., Tornei, G. et al. (2008), 'Mense e personale addetto alle cucine: valutazione dei rischi occupazionali', *Annali di Igiene*, Vol. 20, No 1, pp. 57–67.

Finnman Grönaas, J. (2024), *Preschool staff's working conditions and professional well-being in contexts with high proportions of early second language learners*, doctoral thesis, Mälardalen University, Västerås.

Fournier, S. (2017), 'Les pratiques de Gestion des Ressources Humaines au sein des EPLE et les effets possibles sur la performance des établissements', *Gestion et management public*, Vol. 6, No 2, pp. 67–88.

García, E. and Weiss, E. (2019), 'The teacher shortage is real, large and growing, and worse than we thought', *The Perfect Storm in the Teacher Labor Market* series, first report, Economic Policy Institute, Washington DC.

Garvis, S. and Lunneblad, J. (2018), *Inequalities in access to early childhood education and care in Sweden: The equal access study – Expert report*, German Youth Institute, Munich.

Gortazar, L. (2020), *La financiación del sistema educativo: invertir en calidad, equidad e inclusión*, Network for Educational Dialogue and National Association of Publishers of Books and Teaching Materials, Madrid.

Griffiths, P., Recio-Saucedo, A., Dall'Ora, C., Briggs, J., Maruotti, A. et al. (2018), 'The association between nurse staffing and omissions in nursing care: A systematic review', *Journal of Advanced Nursing*, Vol. 74, No 7, pp. 1474–1487.

Grigolon, F. (2023), *Bisogni speciali o bisogni specifici? L'assistenza infermieristica ospedaliera rivolta al paziente con Disturbo dello Spettro Autistico*, master's thesis, University of Padua, Padua.

Hacker, K., Anies, M., Folb, B. L. and Zallman, L. (2015), 'Barriers to health care for undocumented immigrants: A literature review', *Risk Management and Healthcare Policy*, Vol. 8, pp. 175–183.

Hanushek, E. A., Piopiunik, M. and Wiederhold, S. (2014), 'The value of smarter teachers: International evidence on teacher cognitive skills and student performance', discussion paper No 2014-51, University of Munich, Department of Economics, Munich, http://epub.ub.uni-muenchen.de/22032/.

Heilala, C., Kalland, M., Lundkvist, M., Forsius, M., Vincze, L. et al. (2022), 'Work demands and work resources: Testing a model of factors predicting turnover intentions in early childhood education', *Early Childhood Education Journal*, Vol. 50, pp. 399–409.

Hernández Guillén, R., Domínguez Aurrecoechea, B. and Sánchez Cordero, N. (2014), 'Condiciones de trabajo de los pediatras de Atención Primaria', *Revista de Pediatría Atención Primaria*, Vol. 16, No 61, pp. e.1–e.18.

Hippe, R., Araújo, L. and Dinis da Costa, P. (2016), *Equity in education in Europe*, Publications Office of the European Union, Luxembourg, JRC104595.

Hoinle, B. and Klosterkamp, S. (2023), 'Food justice in public-catering places: Mapping social-ecological inequalities in the urban food systems', *Frontiers in Sustainable Food Systems*, Vol. 7, e1085494.

ICTU (Irish Congress of Trade Unions) (2016), *Who cares? Report on childcare costs & practices in Ireland*, Trade Union Labour, Dublin.

IN FORM (2023), *DGE-Qualitätsstandard für die Verpflegung in Schulen*, German Nutrition Society, Bonn.

INRS (Institut national de recherche et de sécurité) (2019), *La restauration collective – Aide au repérage des risques professionnels*, Paris.

Joint Committee on Children and Youth Affairs (2017), *Report on the working conditions of the early years education and care sector 2017*, 32 CYA 007, Houses of the Oireachtas, Dublin.

KErn (Kompetenzzentrum für Ernährung) (2021), *Mit praxiserprobten Ideen zum Erfolg*, Freising.

Kesting, I. (2022), *Patientenedukation bei Jugendlichen mit einer Krebserkrankung – die Perspektive von professionell Pflegenden*, master's thesis, Catholic University of North Rhine-Westphalia, Cologne.

Koulierakis, G., Daglas, G., Grudzien, A. and Kosifidis, I. (2019), 'Burnout and quality of life among Greek municipal preschool and kindergarten teaching staff', *Education 3–13*, Vol. 47, No 4, pp. 426–436.

Krow, S. (undated), 'School food service worker facts', Chron website, accessed 29 April 2025.

Lebano, A., Hamed, S., Bradby, H., Gil-Salmerón, A., Durá-Ferrandis, E. et al. (2020), 'Migrants' and refugees' health status and healthcare in Europe: A scoping literature review', *BMC Public Health*, Vol. 20, No 1039.

Lejeune, J., Chevalier, S., Coillot, H., Gillet, N., Michon, J. et al. (2017), 'Déterminants managériaux et organisationnels, santé psychologique au travail des soignants et qualité de prise en charge des enfants en oncologie pédiatrique', *Revue d'Oncologie Hématologie Pédiatrique*, Vol. 5, No 2, pp. 84–93.

León, M., Morabito, C., Pavolini, E. and Vandenbroeck, M. (2023), *Delivering on the Child Guarantee: An assessment of the national plans' responses towards fighting inequalities in access to childcare*, Foundation for European Progressive Studies (FEPS), Brussels.

Lindner, K. (2022), *Gesundheitsversorgung von Asylsuchenden in den Bundesländern – Rahmenbedingungen und Reformbedarfe*, MIDEM-Policy Paper 2022-1, Mercator Forum Migration and Democracy, Dresden, https://forum-midem.de/wp-content/uploads/2023/03/TUD_MIDEM_PolicyPaper_2022-1_RZ_online.pdf (PDF).

Lülfs, F. and Spiller, A. (2006), 'Kunden(un-)zufriedenheit in der Schulverpflegung: Ergebnisse einer vergleichenden Schülerbefragung', discussion paper 0606, University of Göttingen, Göttingen.

Madero, C. (2019), 'Secondary teacher's dissatisfaction with the teaching profession in Latin America: The case of Brazil, Chile, and Mexico', *Teachers and Teaching: Theory and Practice*, Vol. 25, No 3, pp. 358–378.

Maiwald, A. (2020), 'Die "inferiore" Arbeit der Erzieherinnen: zu den verdeckten Dimensionen beruflicher Ungleichheit', *Arbeits- und Industriesoziologische Studie*, Vol. 13, No 2, pp. 98–114.

Manso, J. and Moya, J. (2019), *Profesión y profesionalidad docente – Una acción educativa comprometida con el desarrollo humano*, Network for Educational Dialogue and National Association of Publishers of Books and Teaching Materials, Madrid.

Martínez-Virto, L. and Canals Botas, L. (2022), 'Las escuelas infantiles 0–3 en Navarra: Características, estrategias y retos para promover la equidad', *Papers*, Vol. 107, No 3, e3059.

McDonald, P., Thorpe, K. and Irvine, S. (2018), 'Low pay but still we stay: Retention in early childhood education and care', *Journal of Industrial Relations*, Vol. 60, No 5, pp. 647–668.

Melhuish, E., Ereky-Stevens, K., Petrogiannis, K., Ariescu, A., Penderi, E. et al. (2015), 'A review of research on the effects of early childhood education and care (ECEC) upon child development', project deliverable, No 613318, https://ecec-care.org/fileadmin/careproject/Publications/reports/new_version_CARE_WP4_D4_1_Review_on_the_effects_of_ECEC.pdf (PDF).

Meyer, N. and Alsago, E. (2021), *Alltag pädagogischer Fachkräfte in Kindertageseinrichtungen: Den eigenen professionellen Ansprüchen nicht genügen können*, ver.di, Berlin.

Moloney, M. (2016), 'A vocation or a career: The perspectives of BA. ECEC graduates about accessing employment and working in the early years sector in Ireland', *Irish Educational Studies*, Vol. 34, No 4, pp. 325–339.

Moss, M., Good, V. S., Gozal, D., Kleinpell, R. and Sessler, C. N. (2016), 'An official critical care societies collaborative statement – Burnout syndrome in critical care health care professionals: A call for action', *American Journal of Critical Care*, Vol. 25, No 4, pp. 368–376.

Muñoz-Méndez, T., Gómez-Mármol, A. and Sánchez-Alcaraz Martínez, B. J. (2017), 'Satisfacción laboral en los docentes de educación infantil, primaria y secundaria', *Revista Gestión de la Educación*, Vol. 7, No 1, pp. 161–177.

Mußmann, F., Hardwig, T., Riethmüller, M., Klötzer, S. and Peters, S. T. M. (2020), *Arbeitszeit und Arbeitsbelastung von Lehrkräften an Frankfurter Schulen 2020*, University of Göttingen, Kooperationsstelle Hochschulen und Gewerkschaften, Göttingen.

Musumeci, R. (2018), 'Immigrati e servizi socio-sanitari nell'evento nascita: i risultati di un'indagine empirica a Torino', *La Rivista delle Politiche Sociali*, Vol. 2, pp. 251–268.

NICE (National Institute for Health and Care Excellence) (2021), *Accessing healthcare: Babies, children and young people's experience of healthcare*, London.

O'Brien, D., Harvey, K., Howse, J., Reardon, T. and Creswell, C. (2016), 'Barriers to managing child and adolescent mental health problems: A systematic review of primary care practitioners' perceptions', *British Journal of General Practice*, Vol. 66, No 651, pp. e693–e707.

OECD (Organisation for Economic Co-operation and Development) (2005), *Teachers matter: Attracting, developing and retaining effective teachers*, OECD Publishing, Paris.

OECD (2014), *TALIS 2013 results: An international perspective on teaching and learning*, OECD Publishing, Paris.

OECD (2017), 'Starting Strong 2017: Key OECD indicators on early childhood education and care', Starting Strong series, OECD Publishing, Paris.

OECD (2018a), 'Encouraging quality in early childhood education and care (ECEC)', Research brief: Working conditions matter, Paris, https://web-archive.oecd.org/2012-06-14/93254-48483409.pdf (PDF).

OECD (2018b), *Engaging young children: Lessons from research about quality in early childhood education and care*, OECD Publishing, Paris.

OECD (2018c), *Effective teacher policies: Insights from PISA*, OECD Publishing, Paris.

OECD (2019a), *Providing quality early childhood education and care: Results from the Starting Strong Survey 2018*, OECD Publishing, Paris.

OECD (2019b), *PISA 2018 results (Volume II): Where all students can succeed*, OECD Publishing, Paris.

OECD (2019c), *Working and learning together: Rethinking human resource policies for schools*, OECD Reviews of School Resources, OECD Publishing, Paris.

OECD (2020), *Building a high-quality early childhood education and care workforce: Further results from the Starting Strong Survey 2018*, OECD Publishing, Paris.

OECD (2023), *PISA 2022 results (Volume II): Learning during – and from – disruption*, OECD Publishing, Paris.

Párraga Martínez, I., González Hidalgo, E., Méndez García, T., Villarín Castro, A. and León Martín, A. A. (2018), 'Burnout y su relación con el estrés percibido y la satisfacción laboral en profesionales sanitarios de Atención Primaria de una Comunidad Autónoma', *Revista Clínica de Medicina de Familia*, Vol. 11, No 2, pp. 51–60.

Piirsalu, E., Varov, I., Kaaret, K., Uiboleht, K. and Kuldna, P. (2022), *Mapping the school food system*, SchoolFood4Change, Tallinn.

Pilè, C. (2023), *Stereotipi di genere e lavoro nell'educazione dell'infanzia: un'indagine sulla predominanza femminile*, master's thesis, University of Modena and Reggio Emilia, Modena.

Pozniak, K., King, G., Chambers, E., Martens, R., Earl, S. et al. (2023), 'What do parents want from healthcare services? Reports of parents' experiences with pediatric service delivery for their children with disabilities', *Disability and Rehabilitation*, Vol. 46, No 12, pp. 2670–2683.

Radez, J., Reardon, T., Creswell, C., Lawrence, P. J., Evdoka-Burton, G. et al. (2021), 'Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies', *European Child & Adolescent Psychiatry*, Vol. 30, No 2, pp. 183–211.

Reardon, T., Harvey, K., Baranowska, M., O'Brien, D., Smith, L. et al. (2017), 'What do parents perceive are the barriers and facilitators to accessing psychological treatment for mental health problems in children and adolescents? A systematic review of qualitative and quantitative studies', *European Child & Adolescent Psychiatry*, Vol. 26, pp. 623–647.

Ridremont, D. (2022), *Stress, ajustement et burnout des soignants en pédiatrie, doctoral dissertation*, Paris Cité University, Paris.

Riekstina-Dolge, R., Beitane, I., Iriste, S. and Melbarde, S. (2019), 'Study of food waste at schools in Vidzeme region', conference paper for the 13th Baltic Conference on Food Science and Technology, Latvia.

Robinson, D., Gowers, S. J., Codina, G., Artess, J., Delgado Fuentes, M. A. et al. (2022), *End-of-year three evaluation of the Access and Inclusion Model (AIM): Executive summary*, University of Derby, Derby.

Rodríguez-Esteban, A. and Ferreira, C. (2024), 'Satisfacción laboral de profesionales de la enseñanza en España: factores predictores y comparación con otros profesionales', *Revista Electrónica de Investigación Educativa*, Vol. 26, e07, pp. 1–17.

Satinsky, E., Fuhr, D. C., Woodward, A., Sondorp, E. and Roberts, B. (2019), 'Mental health care utilisation and access among refugees and asylum seekers in Europe: A systematic review', *Health Policy*, Vol. 123, No 9, pp. 851–863.

Save the Children (2024), *Investing in childhood: Charting a path to end child poverty across Europe*, Save the Children Europe, Brussels.

Schleicher, A. (2014), *Equity, excellence and inclusiveness in education: Policy lessons from around the world*, OECD Publishing, Paris.

Scholz, A., Erhard, K., Hahn, S. and Harring, D. (2018), 'Inequalities in access to early childhood education and care in Germany: The equal access study – Expert report', ICEC Working Papers Series – Volume 2, German Youth Institute, Munich.

Schreyer, I., Krause, M., Brandl, M. and Nicko, O. (2014), *AQUA – Arbeitsplatz und Qualität in Kitas: Ergebnisse einer bundesweiten Befragung*, Staatsinstitut für Frühpädagogik, Munich.

Scobie, G. and Scott, E. (2017), *Rapid evidence review: Childcare quality and children's outcomes*, NHS Health Scotland, Edinburgh.

Simmie, G. M. and Murphy, D. (2023), 'Professionalisation of early childhood education and care practitioners: Working conditions in Ireland', *Contemporary Issues in Early Childhood*, Vol. 24, No 3, pp. 239–253.

Sirois, G., Dembélé, M. and Morales-Perlaza, A. (2022), 'Pénuries d'enseignantes et d'enseignants dans la francophonie canadienne et internationale: un état de la recherche', *Éducation et francophonie*, Vol. 50, No 2.

Slow Food Italia (2015), *Pensa che mensa … scolastica!*, Bra.

Søvold, L. E., Naslund, J. A., Kousoulis, A. A., Saxena, S., Qoronfleh, M. W. et al. (2021), 'Prioritizing the mental health and well-being of healthcare workers: An urgent global public health priority', *Frontiers in Public Health*, Vol. 9, e679397.

Stephens, L. and Byker Shanks, C. (2015), 'K-12 school food service staff training interventions: A review of the literature', *Journal of School Healt*h, Vol. 85, No 12, pp. 825–832.

Stevenson, H., Milner, A. and Winchip, E. (2018), *Education trade unions for the teaching profession: Strengthening the capacity of education trade unions to represent teachers' professional needs in social dialogue*, ETUCE, Brussels.

Sulz, S. D. K. (2018), 'Arbeitsbedingungen von Kinderkrippen-Erzieherinnen in Bayern – was Erzieherinnen und Kindern Stress macht', in: Sulz, S. D. K., Walter, A. and Sedlacek, F. (eds), *Schadet die Kinderkrippe meinem Kind?: worauf Eltern und ErzieherInnen achten und was sie tun können*, CIP-Medien, Munich, pp. 169–182.

Tonin, F. (2023), *Formazione, reclutamento e nuove professionalità per la scuola dell'infanzia nell'ultimo ventennio*, master's thesis, University of Padua, Padua.

Toropova, A., Myrberg, E. and Johansson, S. (2021), 'Teacher job satisfaction: The importance of school working conditions and teacher characteristics', *Educational Review*, Vol. 73, No 1, pp. 71–97.

UNICEF (United Nations Children's Fund) (2024), 'Improving staff working conditions for better quality in early childhood education and care in Austria: A brief on the EU technical support project for Austria (2022–2024)'.

Unterreiner, A. (2018), 'Les assistantes maternelles au quotidien: Un travail invisible rythmé par différentes fonctions d'accueil du jeune enfant', *Revue des politiques sociales et familiales*, No 126, pp. 75–82.

Urbanos-Garrido, R. (2016), 'La desigualdad en el acceso a las prestaciones sanitarias: Propuestas para lograr la equidad', *Gaceta Sanitaria*, Vol. 30, No 1, pp. 25–30.

USO (Unión Sindical Obrera) (2019), 'Consejos para evaluación y prevención de riesgos laborales en cocinas y comedores escolares', USO website, 4 November 2019, accessed 29 April 2025.

Vandenbroeck, M., Lazzari, A., Van Lancker, W. and Willems, S. (2013), 'Accessibility of early childhood education and care (ECEC) for children from ethnic minority and low-income families', Transatlantic Forum on Inclusive Early Years conference paper.

Weißflog, M. S. (2023), *Einflussmöglichkeiten von Führungskräften auf die Arbeitsbedingungen in Kindertageseinrichtungen: Eine theoretische Analyse der Arbeitsbedingungen in Kindertageseinrichtungen anhand des JD-R Modells und mögliche Veränderungsansätze*, bachelor's thesis, Mittweida University of Applied Sciences, Mittweida.

WHO (World Health Organization) Regional Office for Europe (2022), *Health and care workforce in Europe: Time to act*, Copenhagen.

Zapata, T., Azzopardi Muscat, N., Falkenbach, M. and Wismar, M. (2023), 'From great attrition to great attraction: Countering the great resignation of health and care workers', *Eurohealth*, Vol. 29, No 1, pp. 6–10.

Getting in touch with the EU

In person

All over the European Union there are hundreds of Europe Direct centres. You can find the address of the centre nearest you online (https://european-union.europa.eu/contact-eu/meet-us_en).

On the phone or in writing

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

– by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),

– at the following standard number: +32 22999696,

– via the following form: https://european-union.europa.eu/contact-eu/write-us_en.

Finding information about the EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website (https://europa.eu).

EU publications

You can view or order EU publications at https://op.europa.eu/en/publications. Multiple copies of free publications can be obtained by contacting Europe Direct or your local documentation centre (https://european-union.europa.eu/contact-eu/meet-us_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex (https://eur-lex.europa.eu).

Open data from the EU

The portal https://data.europa.eu provides access to open datasets from the EU institutions, bodies and agencies. These can be downloaded and reused for free, for both commercial and non-commercial purposes. The portal also provides access to a wealth of datasets from European countries.

TJ-01-25-012-EN-N

Promoting the well-being of children and tackling child poverty are key goals of the new European Commission. This report analyses trends and disparities in the accessibility of services for children that must be addressed to achieve this. Moreover, given that staff play an integral role in determining the quality and accessibility of these services, this report describes the state of play of staff working conditions and training opportunities. Good working conditions and affordable high-quality services, such as early childhood education and care, also play a key role in encouraging labour market participation and increasing productivity.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency established in 1975. Its role is to provide knowledge in the area of social, employment and work-related policies according to Regulation (EU) 2019/127.

Publications Office
of the European Union

ISBN 978-92-897-2488-3
doi:10.2806/3377620