World Health Organization
REGIONAL OFFICE FOR Europe

Situation of child and adolescent health in Europe

ABSTRACT

To promote child health in Europe, the World Health Organization Regional Office for Europe developed the child and adolescent health strategy (2015–2020), which was adopted by all Member States of the WHO European Region. The strategy's implementation was monitored through country profiles compiling existing health data and a survey sent to all 53 European ministries of health. Responses from 48 countries are described graphically, quantitatively and qualitatively. This report helps to review achievements and address gaps in realizing the full potential for the health and well-being of children and adolescents.

Keywords

ADOLESCENT
ADOLESCENT HEALTH
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CHILD
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Foreword

The adoption of the European strategy, Investing in children: the child and adolescent health strategy 2015–2020*, by the WHO Regional Committee for Europe in 2014 was a step toward providing guidance to countries on how to address and prioritize health issues in Europe. Wisely, countries requested to be updated on progress. With this report, the WHO Secretariat provides a first summary of the situation of children and adolescents in Europe, for the information of the interested public and the consideration of Member States.*

Countries provided details on activities in areas important for the health and well-being of children and adolescents that were highlighted in the strategy. This report compiles the information they provided to allow comparisons across the WHO European Region. Several countries that did not have a strategy at the beginning of the process have now developed one, or are in the process of doing so with technical support from WHO. Case studies from Armenia and United Kingdom (Scotland) are included in the report. The advent of the United Nations Sustainable Development Goals (SDGs) in 2015 enabled Member States to orient towards achieving the SDG targets, a process that was facilitated through the European strategy.

All data in this report are made available through the European Health Information Gateway, which promotes access and enables comparisons, allowing users to link the collected data with other data sets. Information is continually being updated: for example, the WHO collaborative study, Health Behaviour in School-aged Children (HBSC), currently has its latest quadrennial survey rounds underway in 42 countries and regions. As new HBSC information becomes available, data will be added to the online repository to support improvements in health and well-being of children and adolescents in countries throughout the Region.

Information is necessary, but not sufficient. It needs to lead to action and improvements. It is hoped that this report will facilitate a process of discussion in countries on what can be done to secure improvements. The specifics of what is needed in countries depends on national dialogue, but the Secretariat can support the process and provide examples from other countries for consideration.

While monitoring the strategy's implementation toward 2020, the Secretariat will initiate consultation with Member States to take this work forward to 2030, the target date of the SDGs and the global strategy for women's, children's and adolescents' health. These strategies promote a process of continuous improvement, and the WHO Secretariat will support Member States in achieving them.

Zsuzsanna Jakab
WHO Regional Director for Europe

Acronyms

AA-HA!	Global Accelerated Action for the Health of Adolescents
ADHD	attention deficit hyperactivity disorder
CIS	Commonwealth of Independent States
COSI	Childhood Obesity Surveillance Initiative (WHO European)
DHS	Demographic and Health Survey
DTP3	diphtheria, pertussis and tetanus vaccine, three doses
ECD	early childhood development
EU	European Union
EU13	Member States that joined the EU since May 2004
EU15	Member States that belonged to the EU before May 2004
GDP	gross domestic product
GHO	Global Health Observatory
GP	general practitioner
HBSC	Health Behaviour in School-aged Children (study/survey)
HFA	European Health for All database
HPV	human papillomavirus
IMCI	Integrated Management of Childhood Illness
ISO	International Organization for Standardization
MDG	(United Nations) Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MOCHA	Models of Child Health Appraised (study)
MVPA	moderate-to-vigorous physical activity
NCD	noncommunicable disease
NHS	National Health Service (United Kingdom)
PCV	pneumococcal conjugate vaccine
SDG	(United Nations) Sustainable Development Goal(s)
SEEHN	South-eastern Europe Health Network
SHE	Schools for Health in Europe network
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNCRC	United Nations Convention on the Rights of the Child
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UN IGME	United Nations Inter-agency Group for Child Mortality Estimation
USAID	United States Agency for International Development

Executive summary

Childhood and adolescence are critical stages of the life-course. To support Member States, the WHO Regional Office for Europe has developed the European strategy for child and adolescent health 2015–2020 (the child and adolescent health strategy), which was adopted by all countries in 2014. The Regional Office was tasked with updating countries on progress in 2018. This report summarizes findings from child and adolescent country profiles and the baseline survey completed by Member States in 2016/2017 on the situation of children's and adolescents' health. It aims to provide evidence that can catalyse action in this area.

Findings

Strategy and governance

Three quarters of the countries have either adopted a national child and adolescent health strategy in the last five years or are in the process of doing so. The strategies of less than half are standalone documents, but a quarter of those preparing a strategy aim to produce standalone national strategies. Nearly half of the countries with a strategy have a budget allocated towards it and monitoring systems in place, but 10 with existing or in-preparation strategies have no systems to monitor implementation against targets or indicators. Nearly half have plans to review their existing strategy before 2020, which provides an important opportunity to influence their national child and adolescent landscape.

Collecting key data

Most countries analyse data on the coverage of major interventions by sex and geographic area. Eight countries report that they do not analyse data by sex and a quarter by geographic area. Analysis of coverage data by migrant status, and ethnic and socioeconomic background is less common, with approximately one third of countries doing so in each group. There are noticeable subregional gaps in collecting data on the status of children at risk of mental and physical suffering, refugee and migrant children, and children in institutional care. While surveys on child maltreatment exist in most countries, children are often not asked to provide information. About a third of countries in the Region undertake nationally representative surveys on sexual/intimate-partner violence or collect data on maternal alcohol consumption.

Health systems and quality of care

Staffing levels in health care for children and adolescents vary markedly between urban and rural settings (half of the countries collect this information). Nearly a quarter report that they do not have a system in place to train health professionals on adolescent health and a third that they do not perform regular perinatal death audits. Essential drugs lists and paediatric formulations for essential drugs are not available in a considerable number of countries across the Region.

Rights and participation

Three quarters of the countries report having an ombudsman who has a mandate for protecting children's and adolescents' right to health. Nearly all report that health has been a consistent part of their reporting under the United Nations Convention on the Rights of the Child. Children and young people are not consulted in the review, development or implementation of the child and adolescent health strategy in around a third of countries, with others having varying degrees of participation. Policies for assent, confidentiality, consent and access to care without parental consent exist in three quarters of the countries (32), but fewer (23) report young people's right to access contraception or abortion without parental consent. Less than half report that they systematically collect information on children's and adolescents' knowledge on sexuality.

Health in schools

Almost all countries report having supporting policies for early childhood development, and two thirds have policies in support of health promotion in schools. A quarter report that their national school policy does not include adolescent mental health. Twenty have no policy that affects the availability of unhealthy foods at school. Half offer sexuality education in both primary and secondary school.

Risk-taking and exploratory behaviours

The Health Behaviour in School-aged Children survey provides insights into the risk-taking behaviours of adolescents. Tobacco and alcohol use is prevalent among adolescents. Cannabis use is more prevalent in European Union countries than in countries of eastern Europe, central Asia and the Balkans. Bullying and fighting are particularly high for 15-year-old boys in countries of the Commonwealth of Independent States. Two in five girls and one in three boys report having unprotected sex.

Mental health and well-being

More than half of the countries report having a mechanism to assess the quality of mental health services for children and adolescents and have guidance in place for facilitating the transition from child to adult mental health services. About one third do not have community services available for providing early intervention for young people with a first episode of a mental health problem. Data on the number of child and adolescent health practitioners and on children treated by a mental health professional for attention deficit hyperactivity disorder or autism is scarce (only available for around a quarter of the countries in the Region).

Infectious diseases and preventing death

Vaccination rates for rotavirus are reported from 15 countries. Treatment rates for pneumonia in children under 5 are reported by a quarter, and free national human papillomavirus vaccines are available in half. Most countries in the Region report that over 90% of their population has access to water supplies and hygienic sanitation facilities.

Nutrition and physical activity

Most countries report having a policy in place to initiate exclusive breastfeeding, but variability across the Region around exclusive and partial breastfeeding rates is wide. Only a quarter of countries report collecting data on marketing of complementary feeding products. Marketing to children is not effectively regulated in many countries across the Region. High childhood obesity and low physical activity rates abound.

Country context of child and adolescent health and well-being

The rates of child mortality and adolescent pregnancy vary widely, and are associated with parameters describing the social and political environment in which children live. There is a strong relationship between under-5 mortality, adolescent birth rates and several economic and governance indicators, such as the Corruption Perceptions Index and the gross domestic product of a country.

Conclusion

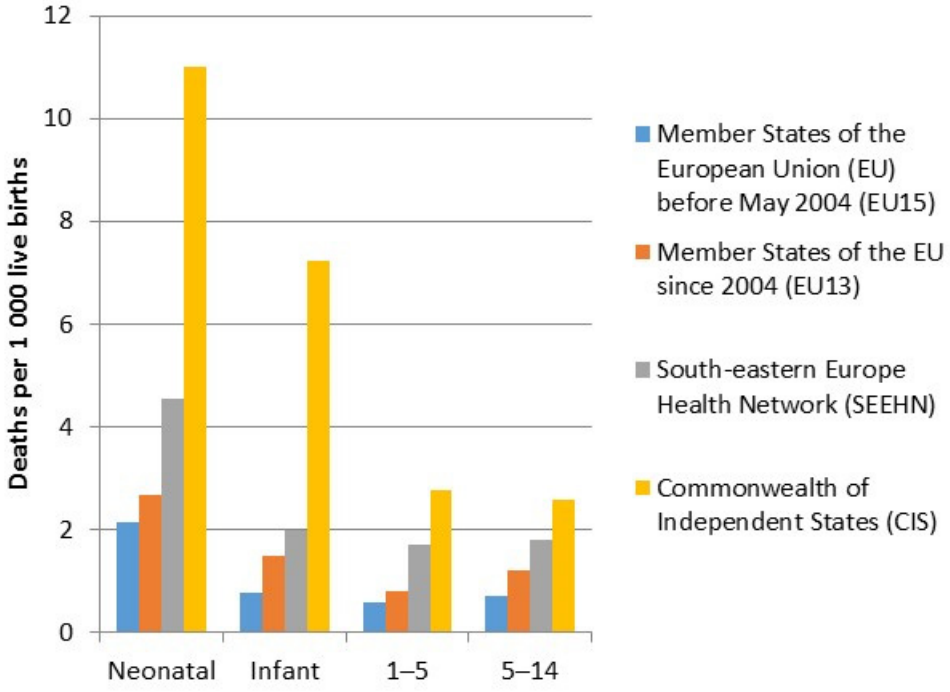
This report provides detailed information on the state of child and adolescent health in the European Region and related policies. It can support Member States to review and compare their achievements, and address gaps. Further surveys will document progress towards the strategy's end date (2020) and will help develop follow-up strategies and action plans at national and regional levels to further support children and young people in the Region to achieve their full potential.

1. Introduction

Most children in the WHO European Region have a happy, healthy childhood and adolescence. These life stages are critical within the life-course because many behavioural patterns that determine future health status and outcomes are established in these stages *(1)*. Investment in children and adolescents yields economic and social benefits beyond improved health outcomes, but inequality between and within Member States of the WHO European Region, lack of access to quality services, maltreatment and unhealthy diets are negatively affecting health among this vulnerable group *(1)*.

Much of the morbidity and mortality among children and adolescents is preventable, yet children still die due to preventable causes such as pneumonia and diarrhoea. Mortality rates for children under 5 years vary across the Region, ranging from two deaths per 1000 live births in Iceland to over 50 in Turkmenistan *(2)*. The probability of dying decreases with age, but differences between countries persist (Fig. 1.1 and 1.2). Country data below are presented by country groupings: Member States of the European Union (EU) before May 2004 (EU15), Member States of the EU since 2004 (EU13), the Commonwealth of Independent States (CIS) and the South-eastern Europe Health Network (SEEHN), which are being used by WHO (the countries in each grouping are defined in Annex 1, Table A1.2).

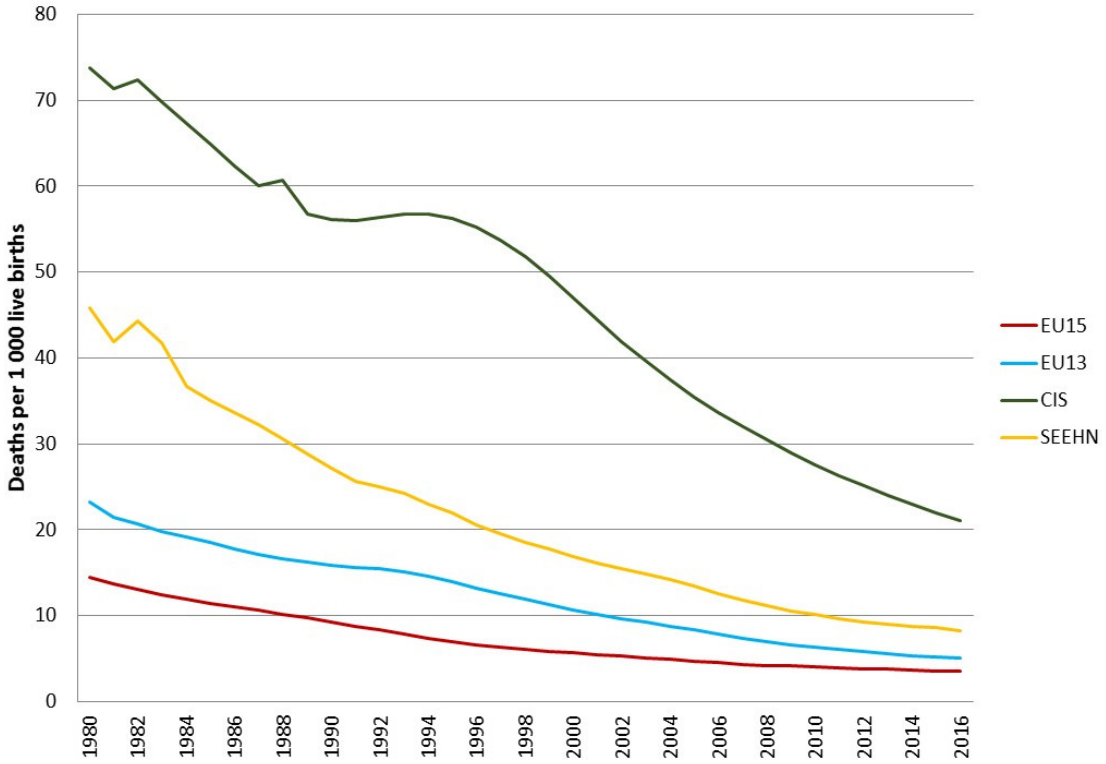
Fig. 1.1. Mortality of children and adolescents in the European Region in 2017, by age group and country grouping



Source: data from United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) 2017.

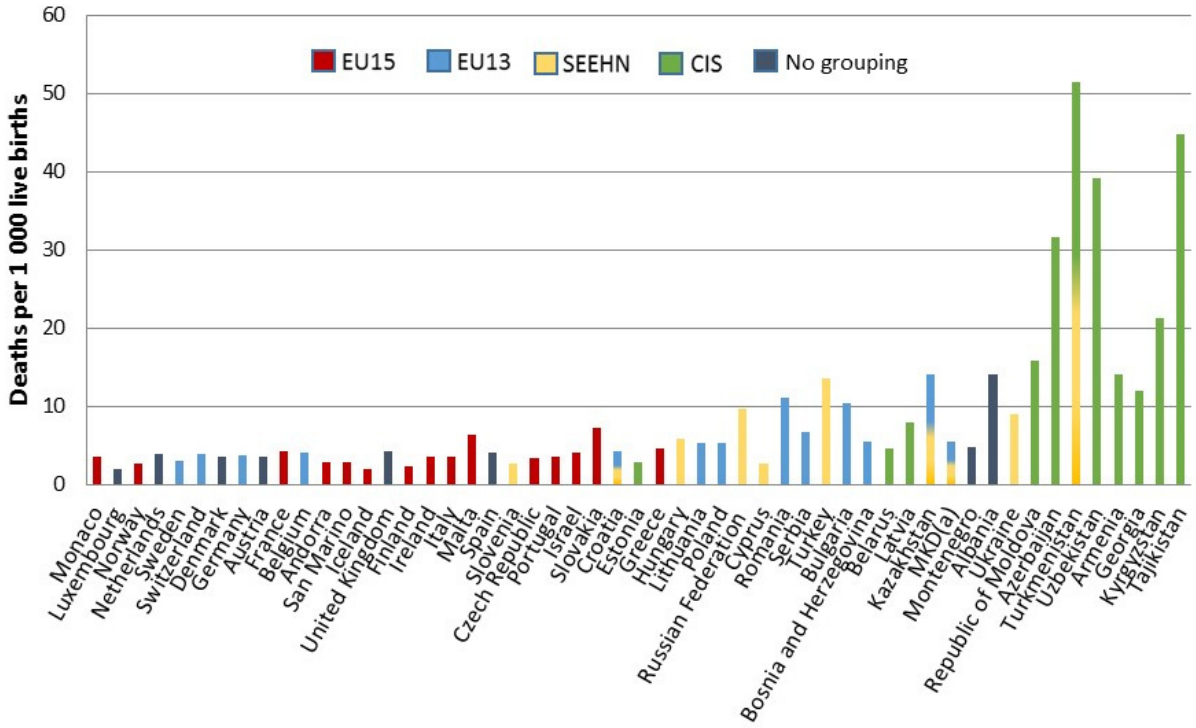
The WHO Regional Office for Europe supports Member States working towards achieving the United Nations Sustainable Development Goals (SDGs), particularly SDG target 3.2, which aims to reduce neonatal deaths and deaths of children under 5 years *(3)*. The target seeks to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births. Most of the countries of the European Region have reached the target, but several in central Asia and the Caucasus still have work to do (see Chapter 11) (Fig. 1.3) *(2)*.

Fig. 1.2. Under-5 child mortality in the WHO European Region since 1980, by country grouping



Source: data from UN IGME 2017.

Fig. 1.3. Under-5 child mortality, by country grouping

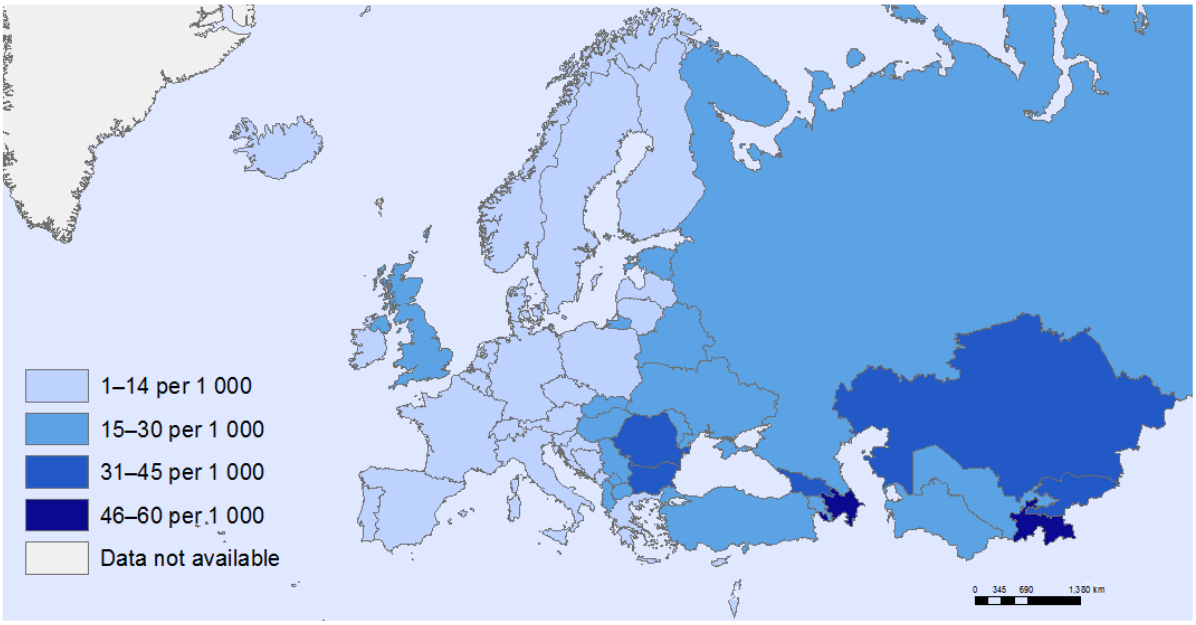


[a] MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the International Organization for Standardization (ISO)).

Source: data from UN IGME 2017.

SDG target 3.7, which seeks to ensure universal access to sexual and reproductive health-care services and the integration of reproductive health into national strategies and programmes, is also relevant *(3)*. Adolescent pregnancy rates have been identified as one of the indicators to measure progress towards this goal. Fig. 1.4 shows pregnancy rates for the European Region, with clear geographic differences apparent (an explanation of how the maps are presented is provided in Annex 1 (see also Fig. A1.2)).

Fig.1.4. Adolescent pregnancy rates



Source: data from Global Health Observatory (GHO), 2015.

In the light of the significant vulnerability of children and the importance of early childhood and adolescence as critical stages of the life-course, the WHO Regional Office for Europe provides policy advice for improving children's and adolescents' health and well-being. The WHO Regional Committee for Europe approved the first European strategy for child and adolescent health and development (2005–2008) in 2005 *(4)*. The strategy was designed to: help Member States develop evidence-based frameworks for review and improvement of child and adolescent health and development policies, programmes and action plans from a life-course perspective; promote multisectoral action; and identify the health sector's role in developing and coordinating policies and delivering services that meet children's and adolescents' health needs. WHO support was provided directly to 15 countries and several others used the regional strategy as a framework to develop national child and adolescent health strategies and action plans.

Building on the successes and lessons learnt from the first iteration, and to ensure that every child has the opportunity to live a healthy and meaningful life, the European Region Member States adopted a new strategy, *Investing in children: the European child and adolescent health strategy 2015–2020*, in 2014 *(1)*. It aimed to secure steady improvements in the lives of children and adolescents in the European Region and expanded on the evidence base for action and practice, particularly in relation to early development, rights-based approaches, social determinants of health and health inequalities in childhood and adolescence.

As part of the implementation process, the Regional Committee asked the WHO Secretariat to provide progress reports, the first of which is presented at length here, accompanying the version formally included in the Committee's proceedings *(5)*. Several products have been developed and made available to Member States (and to the general public) for their consideration and action.

Data sources

Accessibility to, and transparency of, the data gathered and collected have been paramount to monitoring the strategy. The process builds on cross-nationally comparable data from studies such as Health Behaviour in School-aged Children (HBSC) surveys *(6)*, conducted every four years since 1983, and the Childhood Obesity Surveillance Initiative (COSI), which began in 2007 *(7)*. These, and other publicly available data in the European Health Information Gateway, informed the child and adolescent health country profiles published in 2016 *(8)* (also available on the Gateway).

A complementary survey that captured aspects of child and adolescent health and related policies was sent to Member States. It closed in 2017 with responses from 48. As part of the strategy's monitoring process, the Regional Office compiled survey data to assess the state of child and adolescent health in the Member States *(9)*. The Secretariat summarized these data in country feedback reports for ministries of health to encourage dialogue about areas of strength and weakness.

Country profile and survey data are displayed in summary tables at the end of each chapter; individual analyses and summary statistics in the chapter build upon them. For some comparisons, countries are grouped as in the European Health Information Gateway *(10)*. Details on the survey methodology are included in Annex 1. All report data are also available through the European Health Information Gateway.

How to read this report and find information

This report is structured according to the child and adolescent health strategy, with a discussion of overarching issues in a final concluding chapter. Each of the 10 main chapters (Chapters 2–11) has a **summary table** that includes all indicators used in it, bringing together data from the country profiles and the survey displayed by country with summary statistics. **Key findings** are shown prominently at the beginning of the chapters followed by a detailed description of indicators, with a brief section discussing findings within their respective thematic and policy landscape to put the **findings into perspective**. Annex 1 provides details of the **methodology**. Annex 2 links the indicators used to monitor the European strategy to other global strategies like the SDGs *(3)* and the global women's, children's and adolescents' health strategy *(11)*. Annex 3 consists of a list of all indicators in this report with their data sources.

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2. Child and adolescent health governance and strategy

Introduction

This chapter summarizes the indicators included in the country profiles and the baseline survey related to governance and strategy implementation. The content relates to the European strategy's overall priority of "Making children's lives visible" and its second priority, transforming the governance of child and adolescent health. The chapter aims to assess political commitment towards the development of a national child and adolescent health strategy and the mechanisms in place for its implementation and evaluation. Unless otherwise noted, references to the survey in this chapter relate to the 2016/2017 survey.

Key findings

- Three quarters of the countries have adopted, or are in the process of adopting, a child and adolescent health strategy. One in four does not have such a strategy in place.
- Less than half of those with an existing strategy have a standalone child and adolescent health strategy, but 12 countries currently preparing strategies aim to ensure they are standalone documents.
- Nearly half of the countries with a strategy have a budget allocated towards it and have monitoring systems in place.
- Twenty-one countries have plans to review their existing strategy before 2020.

Findings

Countries having a child and adolescent health strategy

Twenty-six countries (54%) reported having a national strategy for children and adolescents that had been adopted within the previous five years; 10 (21%) reported having one that was in the process of being adopted, six of which were in the CIS; and 12 countries (25%) reported having none (Fig. 2.1) (an explanation of how the bar charts are presented is provided in Annex 1 (see also Fig. A1.3)).

Fig. 2.1. Countries having a strategy in 2017

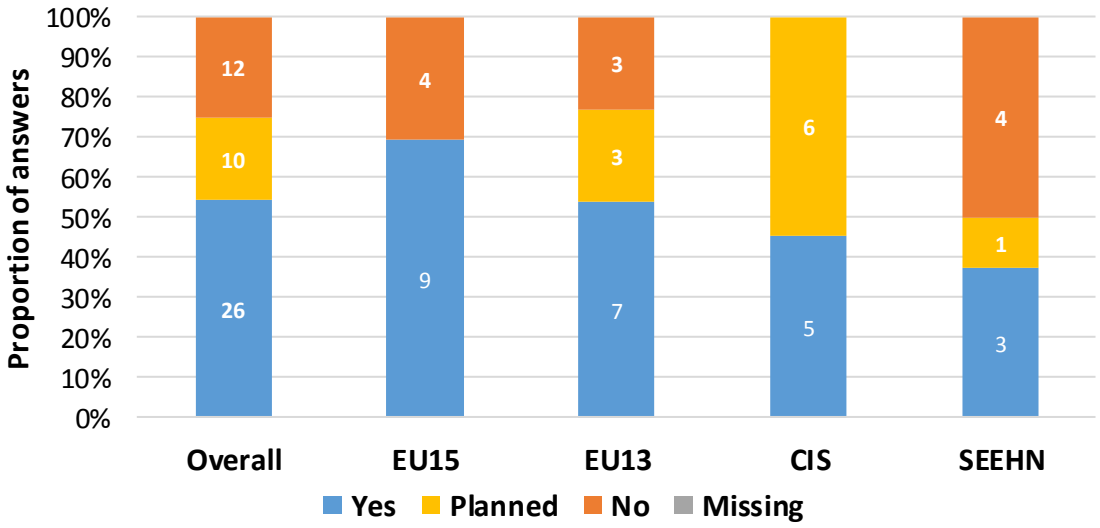
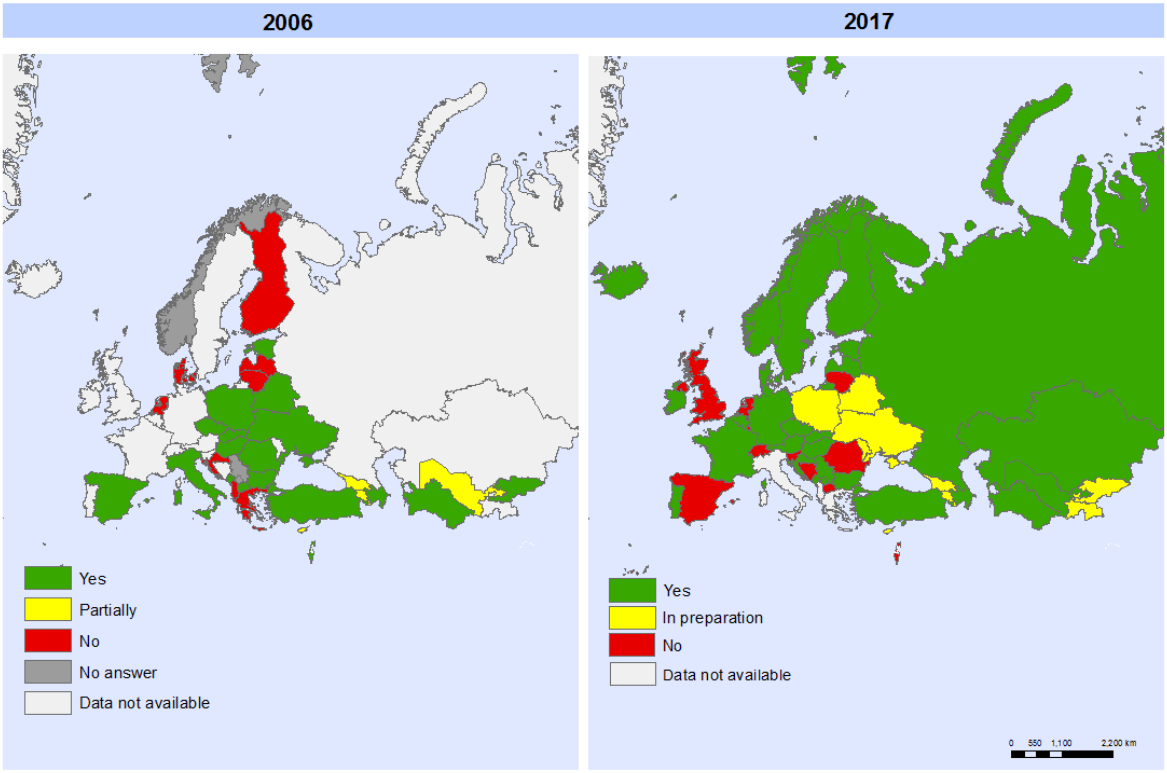


Fig. 2.2 shows the 2017 data and that of a similar question included in a survey carried out in 2006 *(1)*. In 2006, 18 countries (60%) claimed to have a child and adolescent health strategy, four (13%) partially had a strategy, and eight (27%) did not have a strategy.

Fig. 2.2. Countries having a strategy in 2006 and 2017



Comparing the surveys shows that:

- nine countries reported having a child and adolescent health strategy in both years;
- one moved from partially having a strategy in 2006 to having one adopted in 2017;
- 12 that had not participated or provided an answer in the 2006 survey reported having a strategy in 2017;
- three were still preparing their strategy; and
- four that reported having a strategy in 2006 did not report having one in 2017.

Strategy with a budget allocated

Twenty-six countries (54%) reported having a national strategy with a budget allocated by parliament or government, while nine (19%) reported not having one with a budget allocation. Disaggregating this by those that reported having a national strategy, 20 countries reported having a budget allocated and six reported not having a budget allocation. Of the 10 countries that reported having a strategy in preparation, six had a budget allocation for it while three did not. Fig. 2.3 and 2.4 show the geographic spread of these data, highlighting that countries in the CIS had the highest number of strategies with a budget allocation.

Fig. 2.3. Having a budget allocated (countries)

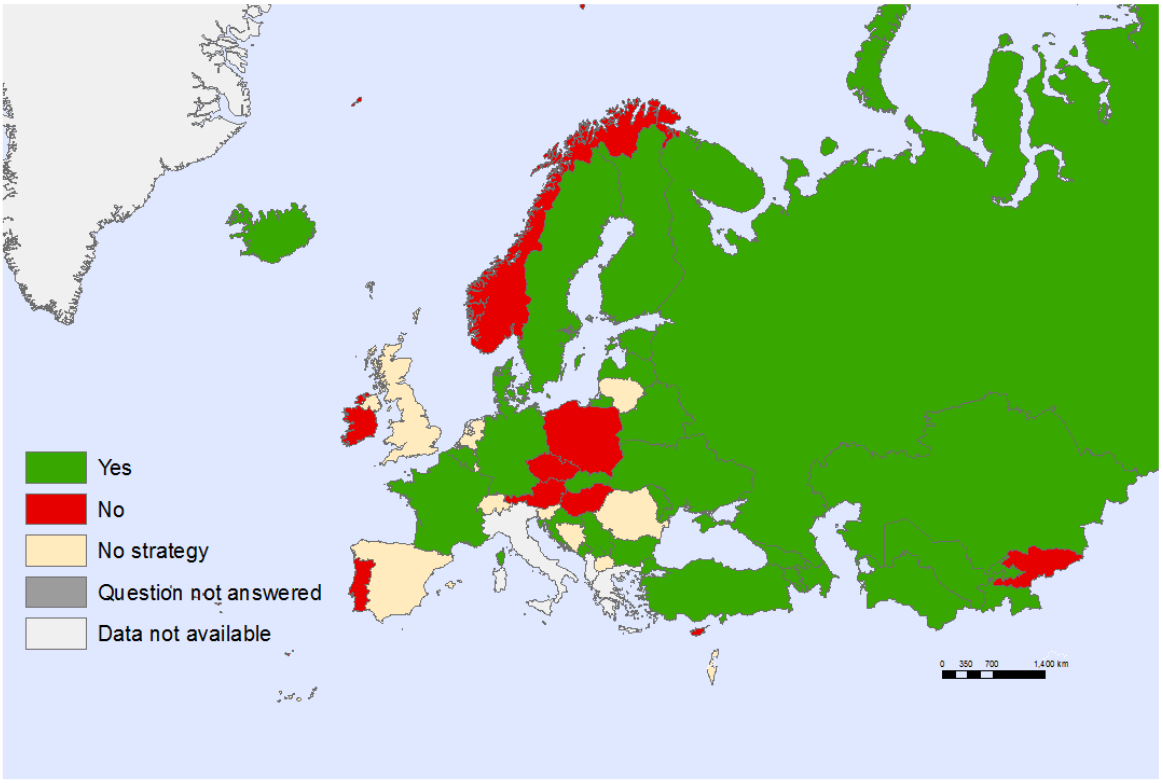
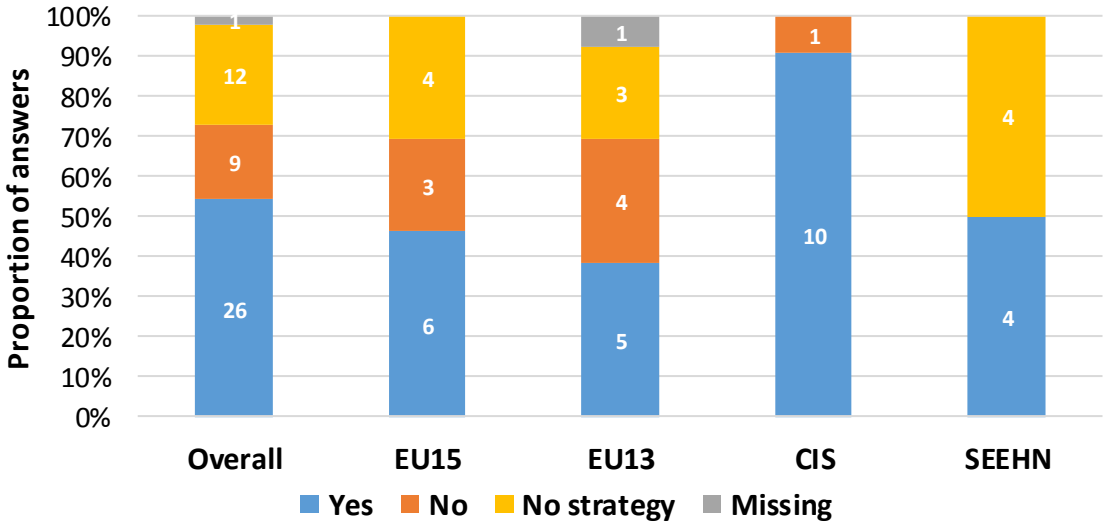


Fig. 2.4. Having a budget allocated (country grouping)



Type of strategy

Nineteen countries (40%) had a standalone child and adolescent health strategy, while 17 (35%) reported that the strategy was part of another strategy. Disaggregating these data by those with a strategy in place and those with a strategy in preparation, 12 of the countries with a strategy in place reported having a standalone child and adolescent health strategy, while 14 reported that it was part of another strategy. Of the 10 countries with a strategy in preparation, seven reported preparing a standalone child and adolescent health strategy, and three reported that the strategy in preparation was

part of another strategy. Fig. 2.5 and 2.6 show that the Region is split in its approach to these strategies, with EU15 and EU13 countries taking different approaches.

Fig. 2.5. Type of strategy (countries)

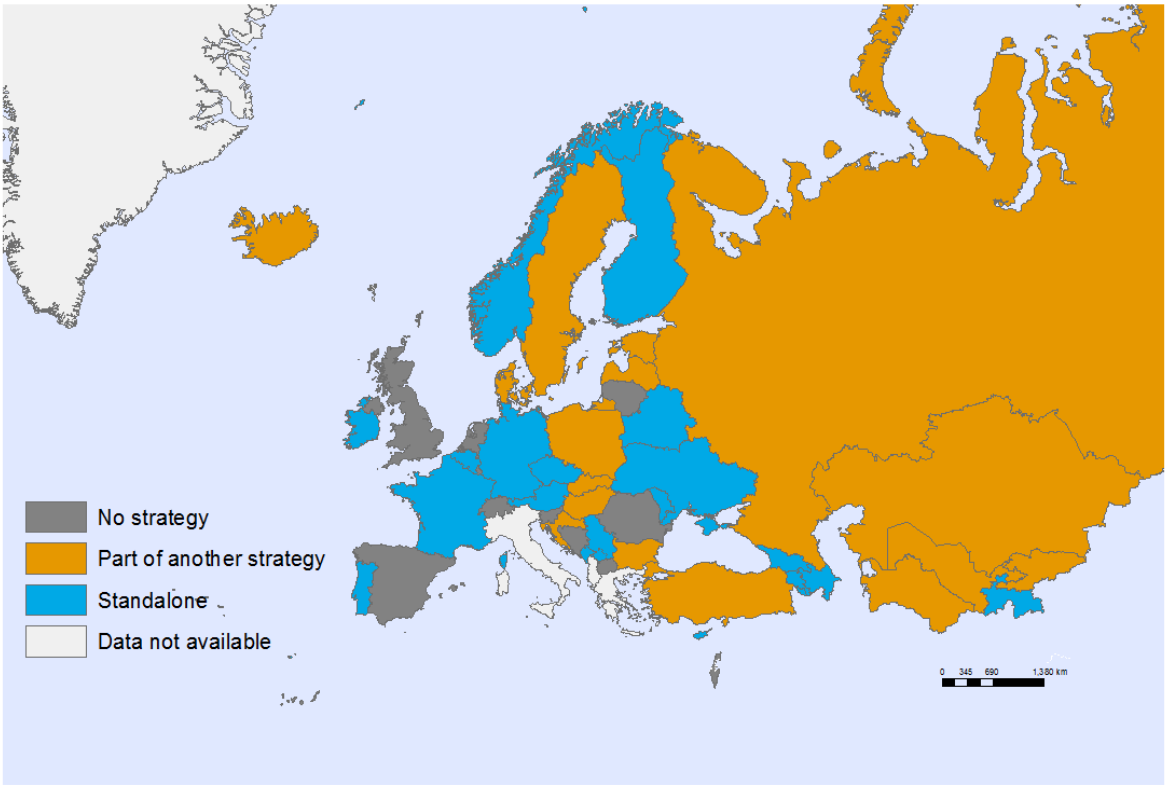
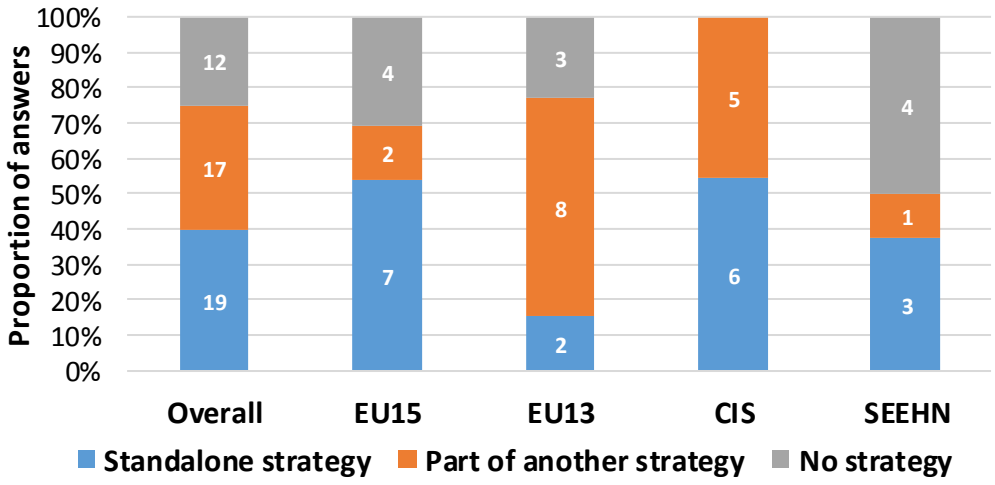


Fig. 2.6. Type of strategy (country grouping)



Review plans before 2020

Twenty-nine countries (60%) have plans to review the existing strategy before 2020, while five (10%) report no plans to do so. Of the countries that reported having a strategy in place, 21 have plans to review the existing strategy before 2020, while four reported having no such plans. Of those with a strategy in preparation, eight reported having plans to review it before 2020, while one does not have

any plans to do so. Fig. 2.7 and 2.8 show that most countries of the CIS have a plan to review their child and adolescent health strategies before 2020.

Fig. 2.7. Strategy review (countries)

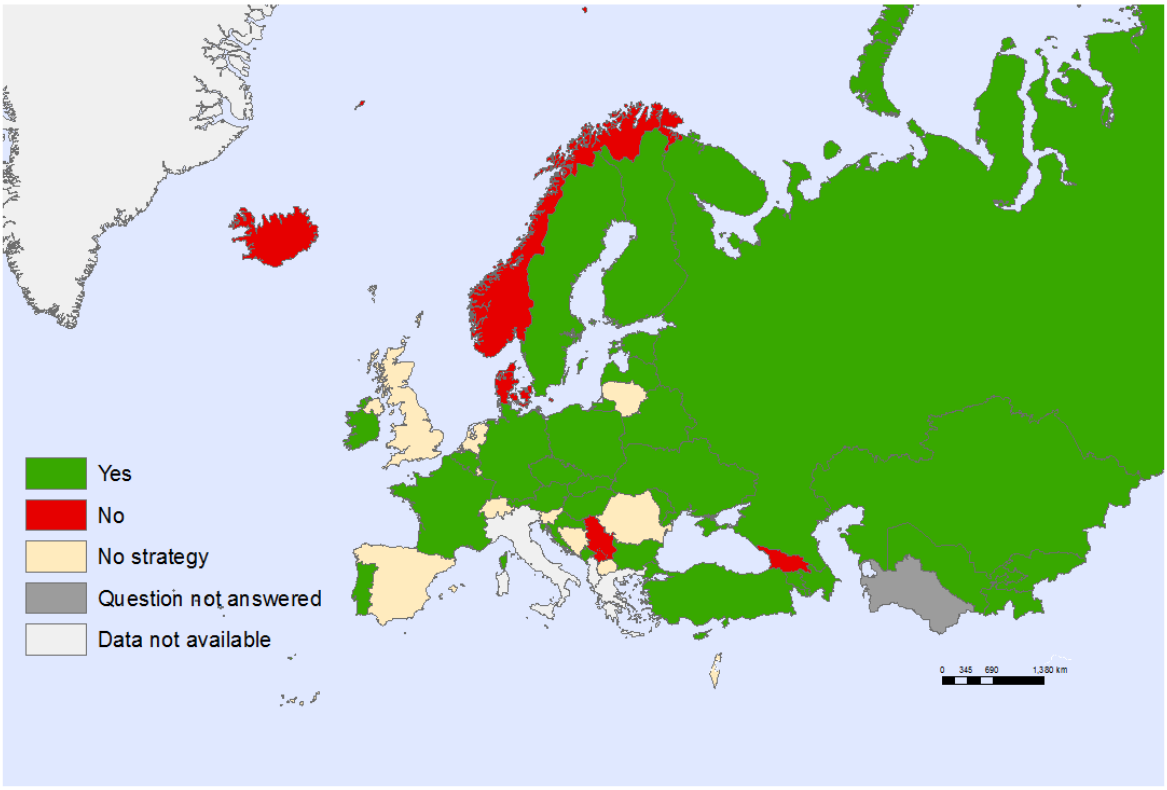
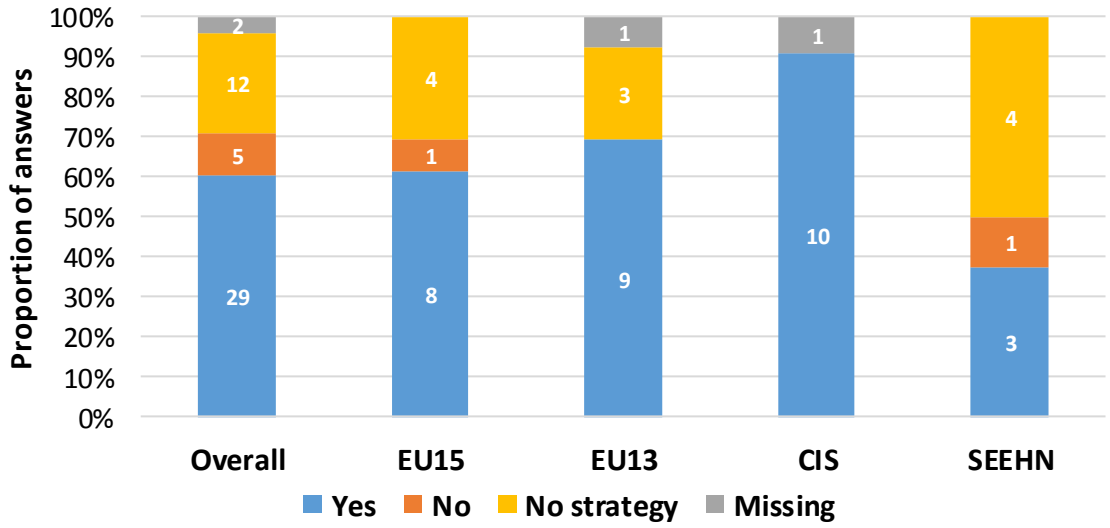


Fig. 2.8. Strategy review (country grouping)



Monitoring systems

Thirty countries (63%) reported having systems in place to monitor strategy implementation against targets/indicators, while five (10%) did not have such mechanisms in place. Of the countries that reported having a strategy, 21 have systems in place, while five do not. Of those that reported having a strategy in preparation, none have systems in place to monitor implementation against

targets/indicators. Fig. 2.9 and 2.10 show the situation by country and country grouping; all countries of the CIS that have a strategy also have systems in place to monitor them.

Fig. 2.9. Systems to monitor strategy (countries)

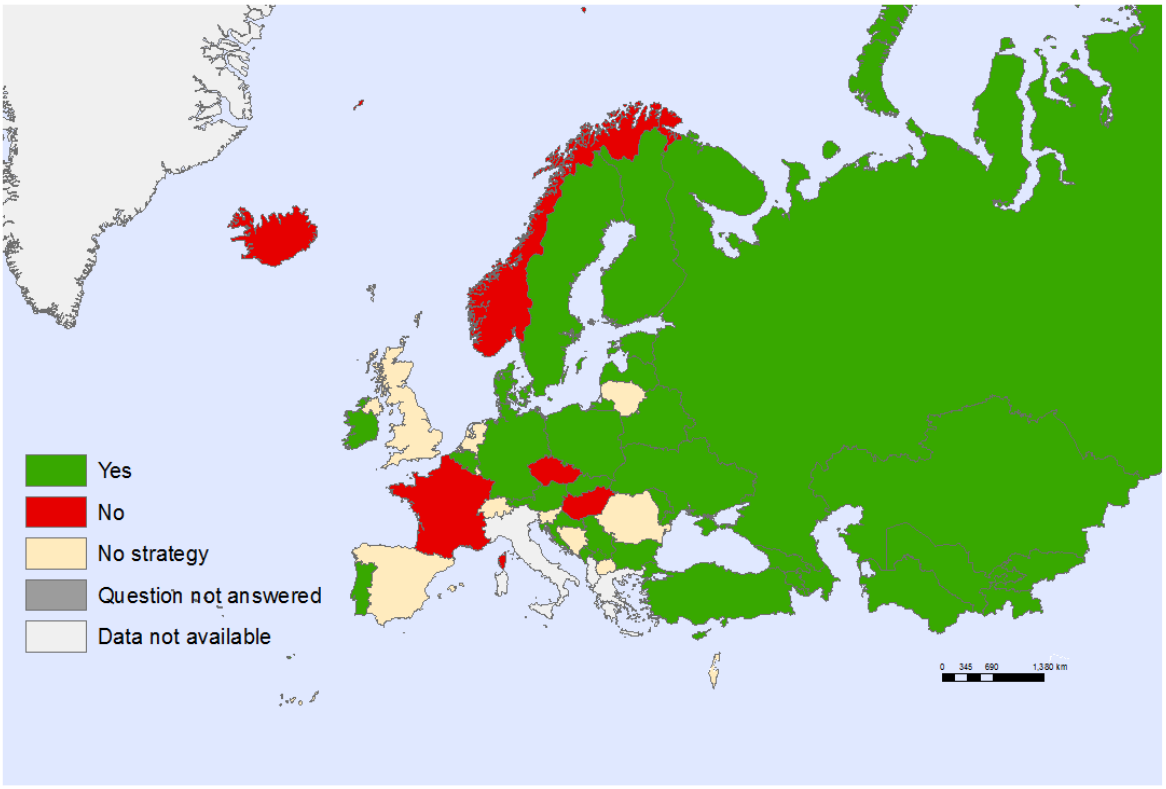
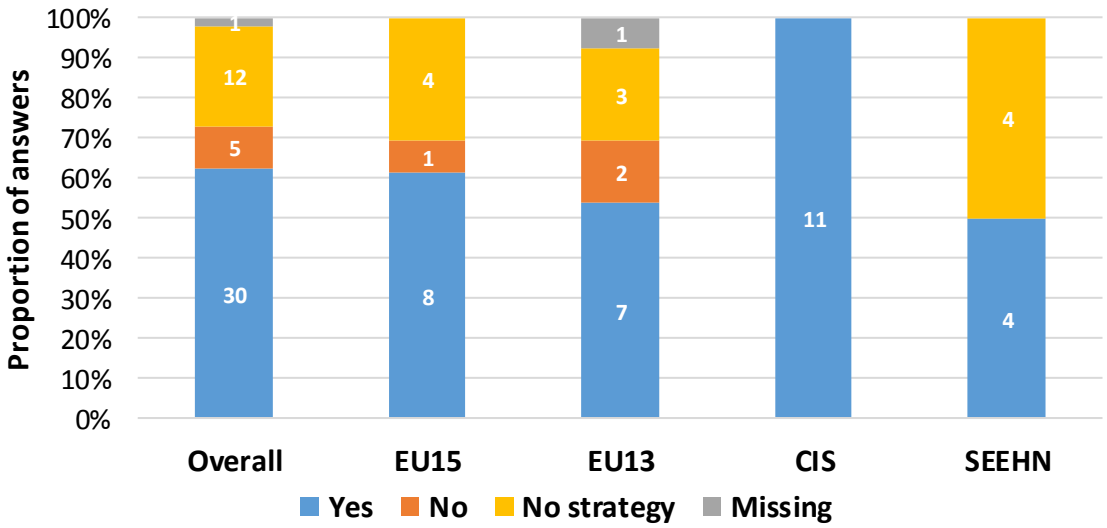


Fig. 2.10. Systems to monitor strategy (country grouping)



Intersectoral collaboration

Thirty-five countries (73%) said they have mechanisms in place for intersectoral planning, while 13 (27%) reported that they do not have such systems in place. Fig. 2.11 and 2.12 show the situation by country and country grouping.

Fig. 2.11. Mechanism for intersectoral planning (countries)

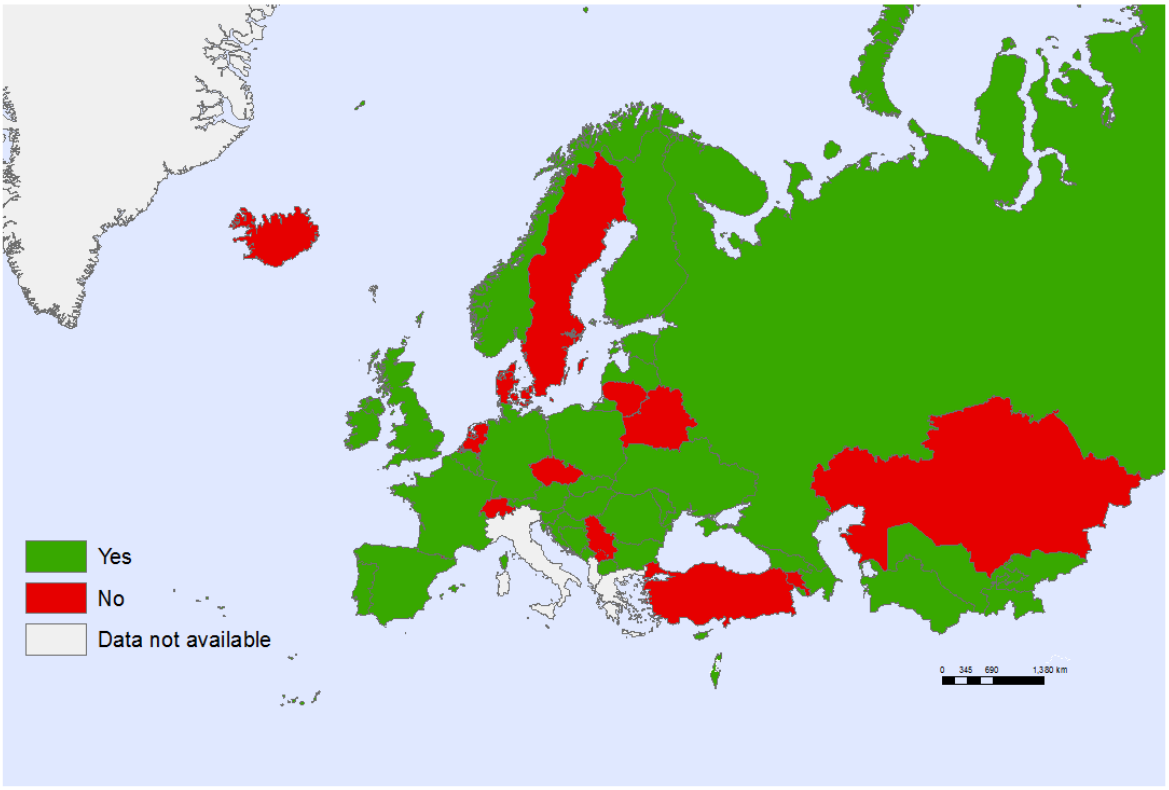
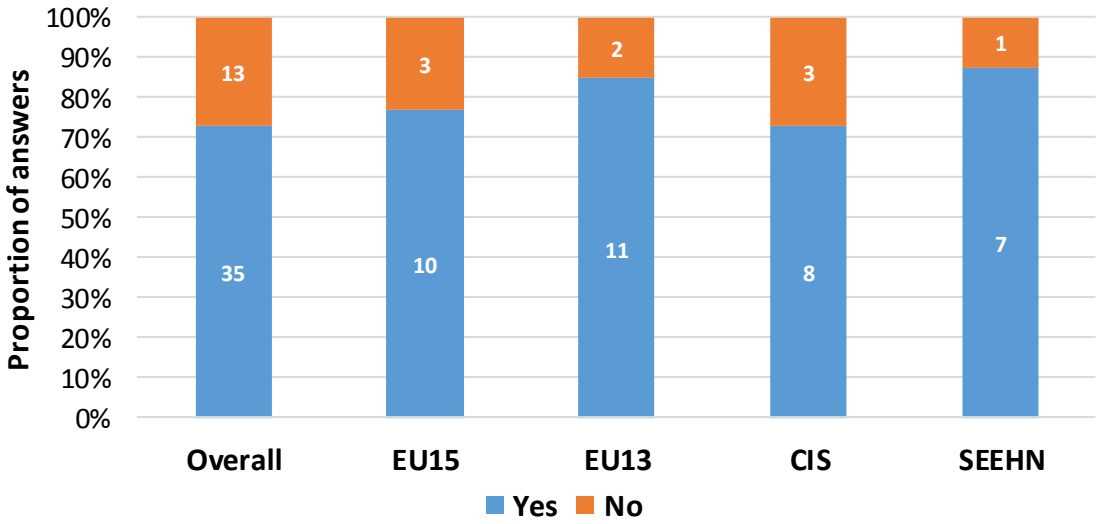


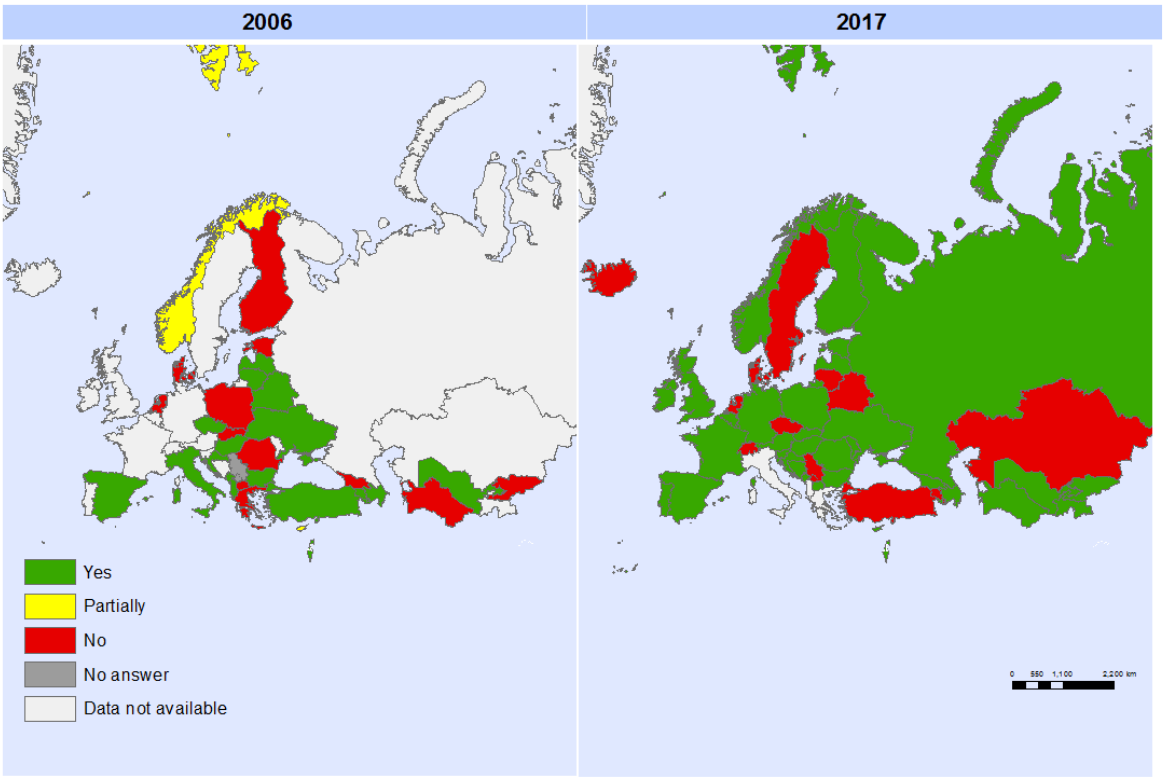
Fig. 2.12. Mechanism for intersectoral planning (country grouping)



In a similar question in the 2006 survey,[2] 18 countries (55%) reported having a mechanism, two (6%) reported having a partial mechanism, and 12 (38%) reported not having a mechanism. Fig. 2.13 shows the situation for both surveys.

[2] The question from the 2006 survey was: 1.3. Does a multisectoral taskforce/workgroup/committee exist on child and adolescent health and development?

Fig. 2.13. Mechanism for intersectoral planning, 2006 and 2017 (countries)



When these data are compared, they show that:

- 11 countries had such a mechanism for both years
- nine that reported not having a mechanism in 2006 reported having one in 2017
- two that reported having a partial mechanism in 2006 had one in 2017
- five that reported having a mechanism in 2006 reported not having one in 2017
- two reported not having a mechanism for both years.

Evaluating policies for their impact on the health of young people

In 2017, 39 countries provided examples of the government policies considered for their impact on child and adolescent health. Of those, two (Poland and Sweden) stated that all their policies needed to consider their impact on child and adolescent health. The remainder listed policies in two or more categories (61%) or within one category (33%). Policy categories identified included justice (33%), education (26%), physical health (26%), economic/financial/socioeconomic (15%), family/maternity (15%), nutrition (15%) and sexual/reproductive health (15%).

Annual report

Thirty-five countries (73%) reported producing an annual national report on the status of children and adolescents, while 12 (25%) did not. Fig. 2.14 and 2.15 show the situation by country and country grouping. This highlights that EU15 countries are split in terms of their publication policy for such reports, and that more EU13 countries publish an annual report.

Fig. 2.14. Annual report on children and adolescents (countries)

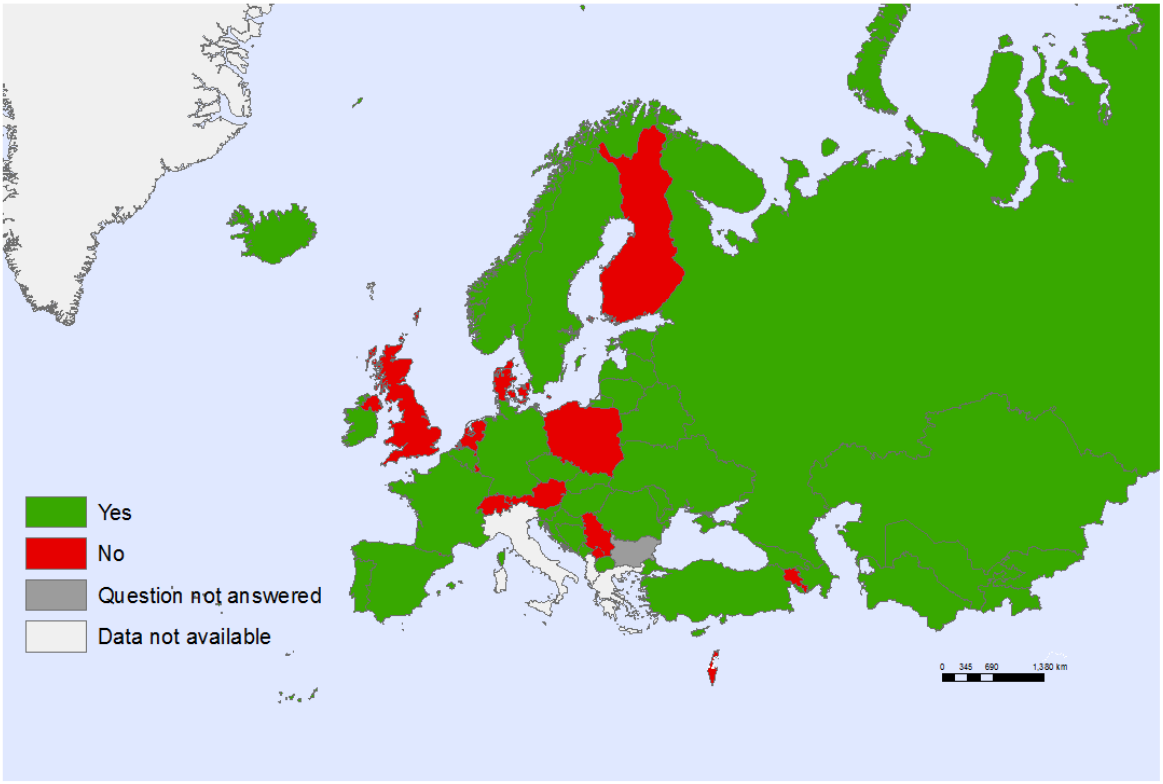
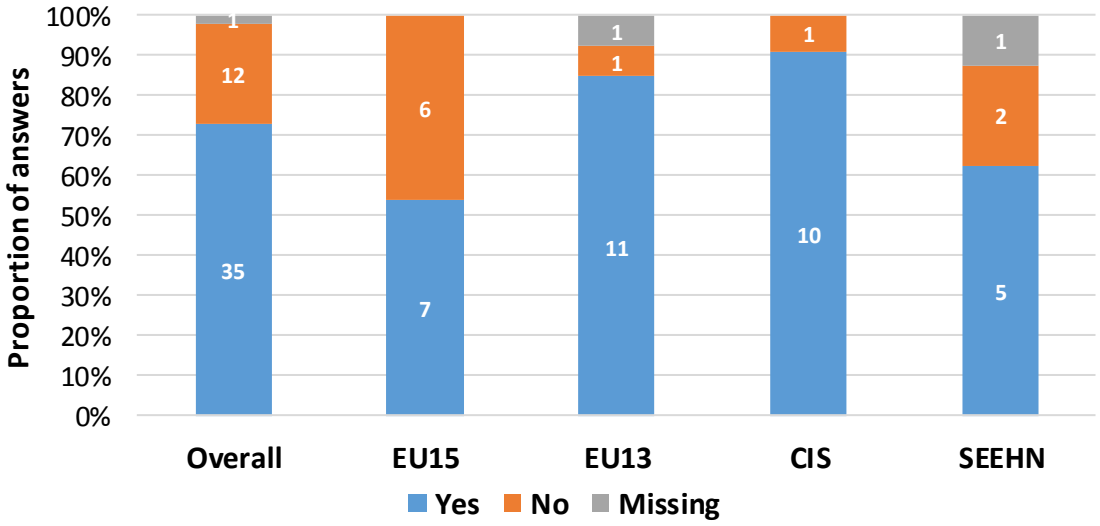


Fig. 2.15. Annual report on children and adolescents (country grouping)



Case studies

Two case studies – from Armenia (Box 2.1 and Fig. 2.16) and United Kingdom (Scotland) (Box 2.2 and Fig. 2.17) were undertaken to illustrate the process of country development of a child and adolescent health strategy. Armenia and United Kingdom (Scotland), along with several others, have taken up the challenge of the European child and adolescent health strategy and converted it to a national approach. They were chosen as they represent variety within the European Region, with different epidemiological, economic and government situations. The processes they have followed have nevertheless been quite similar; they have been abstracted and are being used as a strategy development tool.

Box 2.1. Case study: Armenia

Background information

Armenia is a lower middle-income country in the Caucasus. In 2013, the National Statistical Service estimated that 574 176 children aged 0–14 years lived in the country. Armenia's under-5 mortality rate in 2016 was 13.4 per 1000 live births. This means that Armenia managed to cut its under-5 mortality by half (from 25.9 deaths per 1000 live births in 2003 *(2)*), thereby achieving the Millennium Development Goal (MDG) target 4. The gross domestic product (GDP) of US$ 3606 per capita in 2016 lies substantially below the European average (US$ 22 214). Private out-of-pocket expenditure for health is estimated to be 53.5% of total health expenditure. Armenia has participated in the HBSC survey *(3)* for nearly 10 years. It is one of the few countries that includes 17-year-old adolescents in the survey. The HBSC survey in Armenia discovered relatively low prevalences of smoking, alcohol use and sexual experience, but high rates of multiple health complaints, fighting among boys and bullying, and passive smoke exposure among adolescents *(4)*.

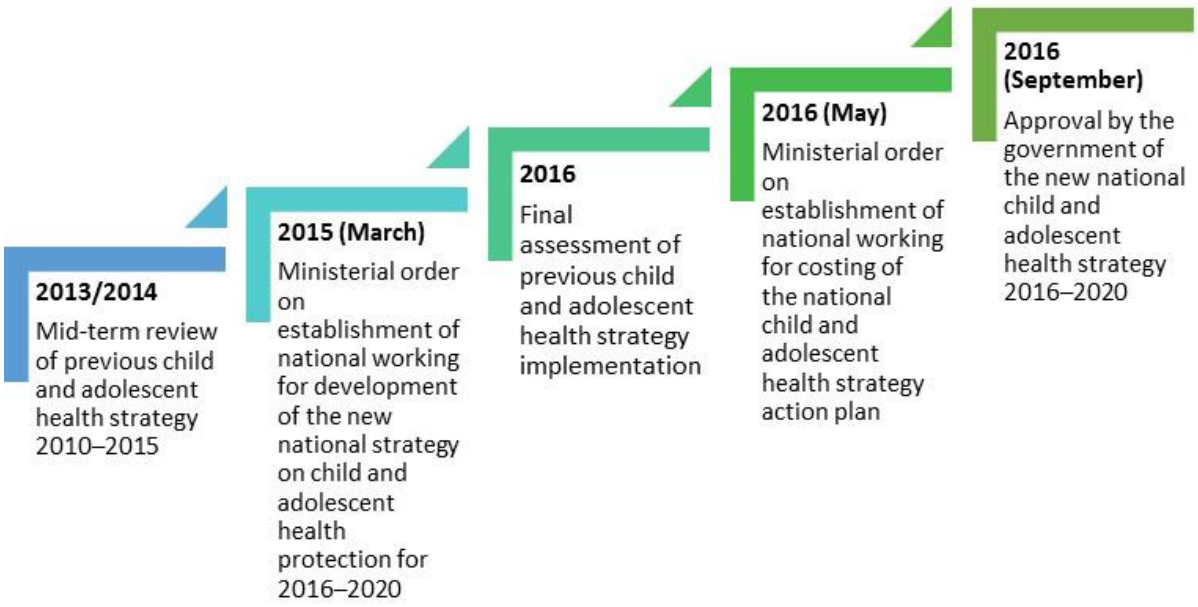
Strategy development process

The timeline for the strategy development process is shown in Fig. 2.16.

Previous national strategy

Emerging health threats prompted the development of a first national child and adolescent health strategy in 2006. The process was initiated by the Ministry of Health and followed the MDG targets, with an emphasis on reducing infant and child mortality. The national child and adolescent health strategy and action plan 2010–2015 was endorsed by the government in 2009 *(5)*. Later, the government adopted the national child hospital care improvement strategy (2013–2015) and children's rights protection strategic plan (2013–2016). Armenia introduced free access to hospital care for children between 0 and 7 years of age. This was associated with a further decrease in child mortality, and an increase in admissions and workload in paediatric hospitals.

Fig. 2.16. Timeline for the strategy development process



Catalytic moment for a new child and adolescent health strategy in Armenia

The WHO European strategy for child and adolescent health 2015–2020 was adopted in 2014. The national strategy followed the main principles of the European strategy, reflected other international initiatives such as the SDGs and Health 2020 and took experiences from other countries into account, but was adapted to the Armenian context. Armenia used the European strategy as a framework and developed a new national strategy before termination of its predecessor. Additionally, changes and experiences over the previous decade revealed areas of improvement and further actions for the current Armenian child and adolescent health strategy 2016–2020.

Box 2.1. contd

National experiences of the development process

Lessons learnt from the previous strategy

Low allocation of resources to the health sector led to an inability to address many of the identified priorities in child and adolescent health: more precise priority setting, a realistic process and budget allocation. Experiences in intersectoral collaboration highlighted the importance and benefits of intersectoral work and the need for stronger collaboration between different sectors, such as ministries (health and education) and international organizations. Financial support was scarce and preventive and healthy lifestyle promotion programmes were underfinanced in the former strategy. Participation of young people, promoting prevention over treatment, and advocating for healthy lifestyles and adolescent health were not prioritized.

Situational analysis

The Cabinet of Ministers requested an analysis of the situation before approval of the new strategy to evaluate the processes and identify target areas. Meetings were held in 2016, desk reviews conducted and working groups developed between partners working in child and adolescent health. This process followed the example of the constant evaluation process of the former strategy through high-level meetings, continuous analyses of the work, synthesizing of processes and assessment of goal attainment.

The situational analysis detected major problems and set new priorities with related targets, as manifested in the new Armenian strategy: 1) neonatal health; 2) early childhood health and development, including nutrition, prevention of infectious diseases and vaccination; 3) child development disorders and child disability; 4) health and development of school-aged children and adolescents; 5) mental health; 6) chronic and somatic diseases; 7) palliative care; and 8) injuries and abuse.

Obstacles in the development of a new child and adolescent health strategy

Armenia's scope of work in the development of a new child and adolescent health strategy was reduced in the budget. The ramifications of the world economic crisis in 2008/2009 continued, affecting the budget for child and adolescent health. State reimbursement for medical services was insufficient to cover costs, and preventive and health promotion programmes were underfinanced. This resulted in insufficient coverage of the entire scope of paediatric services. Armenia also faced obstacles such a lack of technical capacity, lack of staff, and uncertainty about political developments and reforms.

Overcoming obstacles

The response to the decreasing budget for child and adolescent health was to reach out to international organizations, such as WHO, the United Nations Children's Fund (UNICEF), the United States Agency for International Development (USAID) and World Vision, and national funds. Only medical services are covered by the government, but developmental services depend on other resources.

Lack of staff and technical skills were mitigated by a redistribution of staff competences and training. For example, a shortage of physiotherapists was filled by nurses with special training in this area. Difficulties in intersectoral collaboration remained and show room for improvement, as does the evaluation of implementation (such as Integrated Management of Childhood Illness (IMCI)).

Main stakeholders

The leading actors included the Ministry of Health, Institute for Child and Adolescent Health, the Association of Paediatricians, and international organizations such as WHO, UNICEF and USAID. Partners also included other ministries, the private sector, universities, clinics, and national and international experts and advisers.

Participation of young people

In line with the European child and adolescent health strategy, a guiding principle of the Armenian approach is rights-based, which includes the involvement of children and adolescents. Interviewees had different perspectives on degrees of youth participation. It was reported that young people were involved in every process that relates to their health. They are seen as the real experts and were involved through meetings and discussions in an established mechanism. Other resources reported that young people had not been included much in the implementation and development process of the new strategy. Stated reasons for this were that the government does not have a mechanism to involve young people, and the public draft of the strategy was not taken by young citizens for discussion, maybe because the draft was public only on the Ministry of Justice website.

Future actions

Armenia is at the stage of putting the strategy's targets into action. Future actions are set out in the strategy and include continuous monitoring and supportive supervision of strategy implementation. The process included integration of global reforms into the national strategy. An intermediate assessment of the strategy is planned for 2018.

Box 2.2. Case study: United Kingdom (Scotland)

Background information

Scotland is one of four countries that make up the United Kingdom. Its population was estimated to be 5 424 800 in 2017, with 1 030 055 under the age of 18. In 2018, the average life expectancy across Scotland was 81 years for females and 77 for males. The death rate among Scottish children and young people has gradually declined in the past decade, with a rate of 0.82 per 1000 in 2016, compared to 1.0 per 1000 in 2008. Scotland has seen clear success in the declining rate of suicide among 15–24-year-olds and an increase in the self-reported well-being of 11-year-olds. Between 2012 and 2016, the suicide rate among 15–24-year-olds was around 14 per 100 000, down from 28 per 100 000 between 1992 and 1996 *(6)*.

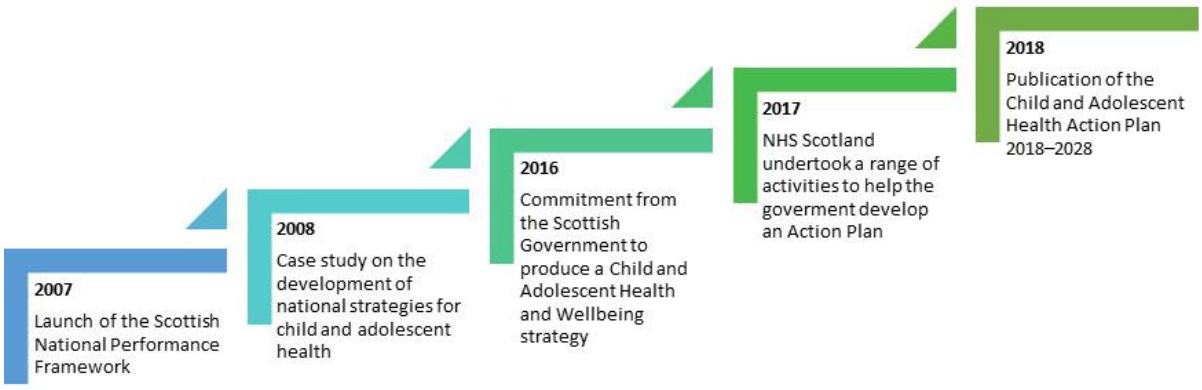
The gap between rich and poor in Scotland tends to be wider than in other European countries. Among 11–15-year-olds, the differences are marked for daily fruit and sugar-sweetened beverage consumption, sedentary behaviour, early initiation of smoking and cannabis use (males) and mental well-being (females) *(7)*. Around a quarter of Scotland's children are currently living in poverty *(8)*. The Child Poverty (Scotland) Act 2017 sets a statutory obligation for less than 10% of children to be living in poverty by 2030. The National Health Service (NHS) in Scotland was founded 70 years ago and provides health care free at the point of delivery, as well as public health services funded through taxation.

Strategy development process

Initiatives addressing children and young people

Since the previous case study in 2008, the ambition of the Scottish Government has been to make Scotland the best place for children and young people to grow up. In 2007, the first national performance framework was launched. The framework comprised 16 national outcomes, and children and young people were represented in several, which applied across the life-course. After a public review, a revised national performance framework was announced in June 2018. In 2008, Scotland did not have a separate child and adolescent health strategy but used the European strategy action tool to create a framework for children. There has been no singular child and adolescent health strategy in the intervening 10 years, but many policy documents affecting children, their families and the professionals with whom they have contact have been published. The timeline signalling these initiatives is shown in Fig. 2.17.

Fig. 2.17. Timeline for relevant initiatives



- **In 2013/2014** mid-term review of previous child and adolescent health strategy 2010–2015 was conducted.
- **In 2016** final assessment of previous child and adolescent health strategy implementation was performed.
- **March 2015**: Ministerial order (Decree N 481-A) on establishment of the national working for development of the new National Strategy on Child and Adolescent Health protection for 2016–2020.
- **May 2016:** Ministerial order (Decree N 1347-A) on establishment of the national working for costing of the national child and adolescent health strategy action plan.
- **September 2016**: new national child and adolescent health strategy 2016–2020 was approved by the government.

Scotland has focused on improving children's lives and reducing inequality through addressing the broader social determinants of health. This focus means that no single government directorate has overall responsibility for policy development related to children's and young people's health and well-being.

Box 2.2. contd

Catalytic moment for a new child and adolescent health action plan in Scotland

In 2016, the Government committed to producing a child and adolescent health and well-being strategy that would set the direction for the next 10 years *(9)*. The focus subsequently has shifted to the development of a child and adolescent health and well-being action plan. In the context of a complex policy environment and significant public-sector reform, this action plan and accompanying framework are intended to provide a cross-policy, rights-based focus on improving the physical, mental and emotional health and well-being of children and young people.

National experiences of the development process

Lessons learnt from the prior development and implementation process

The complexity of the policy landscape around child and adolescent health in Scotland has produced challenges to implementation and evaluation. This has provided an impetus for streamlining policy to maximize resource usage, and improve cross-sectoral collaboration and overall policy impact.

Situational analysis

In 2017, NHS Health Scotland undertook a range of activities to assist the Scottish Government in the action plan's development. This activity included mapping and analysis of relevant policy, analysis of consultation and engagement with children and young people, a Scotland-specific baseline strategy and evidence reviews. The policy-mapping exercise considered the alignment of government policies to the strategic priorities of the WHO European child and adolescent health strategy 2015–2020.

The findings from 18 consultation and engagement activities that had been carried out by various organizations over the five years up to 2017 revealed that for children and young people, relationships with peers, parents, teachers and health professionals were key. In addition, children and young people talked about the importance of mental health and well-being, whether it was a specific topic for discussion or not. All the consultation and engagement activities were carried out with a specific focus (such as mental health, teenage pregnancy and young carers) so may not represent children's and young people's more general health and well-being priorities. Further work on this synthesis is planned to incorporate consultation and engagement activities carried out in 2017/2018.

There has also been an extensive period of engagement during 2017/2018 with those in public and non-public sectors whose work impacts on child and adolescent health across Scotland. This has involved public events, stakeholder meetings and a survey for professionals to elicit views about the focus and priorities of the action plan.

Overcoming obstacles in the development of a new child and adolescent health action plan

It is challenging to coordinate broad multisectoral action to address child and adolescent health across the social determinants of health in one policy. Situational analysis and cross-policy, cross-sectoral engagement in the context of such a large number of existing policies takes time. This has meant that progress to a consensus on the specific priorities of the action plan has been slow. While such broad consultation has delayed the process of producing a concrete action plan, existing political commitment and engagement with high-level decision-makers across civil society increases the potential for the cross-sectoral collaboration needed to address the social determinants of health and maximize child and adolescent health and well-being.

Country support and defined processes for developing child and adolescent health policy, like the short programme review tool developed for Member States by the Regional Office (with support from experts from Scotland), can accelerate the process of undertaking situational analysis and priority-setting, providing parameters for stakeholder engagement and consultation.

Future actions

The action plan and accompanying framework remain in development and are expected to be published during 2018, covering the period from 2019 to 2028.

Findings in perspective

National strategies

The number of countries reporting having a child and adolescent health strategy has risen since the 2006 survey, which represents a positive trend in the Region. In the intervening 11 years, however, a number of European countries have not attempted, to craft a strategy. National strategies can catalyse

change within countries, especially when they have a budget allocated and an approach to their evaluation that supports the link between vision and action. Working with countries that have adopted a strategy (or are in the process of doing so) but have not allocated a budget can support a shift in resource commitment and ensure the strategy's sustainability.

A child and adolescent health action plan in a country may also support national efforts in this area by identifying explicitly the different financial contributions being used throughout government to provide policies, programmes and services for children and adolescents, such as monitoring health status, school services or criminal justice services. An action plan can also prompt governments to re-evaluate and re-assign resources to better address national priorities related to child and adolescent health.

Monitoring systems

The survey also shows countries in the EU15 and EU13 groups that do not have monitoring systems in place for their strategies. This is despite global and regional efforts in support of better monitoring and accountability *(3,10)* and increasing data collection on children and adolescents through regional cross-national surveys like HBSC *(12)*. Similarly, 13 countries spread throughout the Region do not have an intersectoral planning mechanism in place, even though intersectoral action has been a prominent feature of regional strategies and part of the global health agenda (for example, the SDGs *(11)* and the global strategy for women's, children's and adolescents' health (2016–2030) *(3)*).

Evaluating policies' impact on child and adolescent health

The degree to which countries evaluate all policies' impact on the health of children and adolescents can reveal the country's path towards implementation of the health-in-all-policies principle *(13,14)* and improved intersectoral collaboration. Successful health programmes are rarely implemented in isolation *(15)*; four out of five countries consider government policies for their impact on child and adolescent health, but only two in 2017 stated that all their policies needed to consider their impact on child and adolescent health. Health 2020 *(13)*, adopted by European countries in 2012, urges all countries to have health-in-all-policies. The survey, however, points to the fact that this might not be fully realized for child health if this observed trend continues.

Strategic and operational planning with sectors such as education, family and social affairs, recreation and sports, transport, and food and agriculture ensures policies in those sectors are formulated and implemented with attention to the inclusion of evidence-based policies and interventions that will improve adolescent health *(15)*. The Global Accelerated Action for the Health of Adolescents (AA-HA!) *(15)* provides some practical considerations in planning and managing intersectoral programmes (see AA-HA! Box 5.4.). Addressing this identified gap in the Region provides an additional opportunity to exchange best practices or provide technical assistance that can support a whole-of-government approach to child and adolescent health investment that can better link sectors across government.

Conclusion

Opportunities now exist for change. The 2017 survey revealed that countries are planning around child and adolescent health, and national strategies can support these regional efforts. Investments in health and education for children and adolescents can "generate high economic and social returns" *(16)*. With three out of five countries planning to review strategies before the end of the current regional framework, there is an opportunity to shape the regional landscape in support of fulfilling the potential of children and adolescents in Europe.

Table 2.1 includes all indicators used in this chapter, and data from the country profiles and the survey displayed by country with summary statistics (an explanation of how the summary tables are presented is provided in Annex 1 (see also Fig. A1.6)).

Table 2.1. Child and adolescent health governance and strategy: summary table

Country	Development of child and adolescent health strategy based on European strategy (2006)	Having a child and adolescent health strategy (2017)	Having a budget allocated to the strategy	Plans to review the strategy before 2020	Systems to monitor implementation of the strategy	Multisectoral taskforce for child and adolescent health and development (2006)	Mechanism for intersectoral planning (2017)	Having an annual report on children and adolescents
Albania	No	–	–	–	–	Yes	–	–
Andorra	–	No	NS	NS	NS	–	No	No
Armenia	PT	Prep	Yes	Yes	Yes	Yes	No	No
Austria	–	Yes	No	Yes	Yes	–	Yes	No
Azerbaijan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Belarus	Yes	Prep	Yes	Yes	Yes	Yes	No	Yes
Belgium	–	Yes	Yes	Yes	Yes	–	Yes	Yes
Bosnia and Herzegovina	–	No	NS	NS	NS	–	Yes	Yes
Bulgaria	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Croatia	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cyprus	PT	Prep	No	Yes	Yes	P	Yes	Yes
Czechia	Yes	Yes	No	Yes	No	Yes	No	Yes
Denmark	No	Yes	Yes	No	Yes	No	No	No
Estonia	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Finland	No	Yes	Yes	Yes	Yes	No	Yes	No
France	–	Yes	Yes	Yes	No	–	Yes	Yes
Georgia	PT	Prep	Yes	No	Yes	No	Yes	Yes
Germany	–	Yes	Yes	Yes	Yes	–	Yes	Yes
Greece	No	–	–	–	–	No	–	–
Hungary	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Iceland	–	Yes	Yes	No	No	–	No	Yes
Ireland	–	Yes	No	Yes	Yes	–	Yes	Yes
Israel	Yes	No	NS	NS	NS	Yes	Yes	No
Italy	Yes	–	–	–	–	Yes	–	–
Kazakhstan	–	Yes	Yes	Yes	Yes	–	No	Yes
Kyrgyzstan	Yes	Prep	No	Yes	Yes	No	Yes	Yes
Latvia	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lithuania	No	No	NS	NS	NS	Yes	No	Yes
Luxembourg	–	No	NS	NS	NS	–	Yes	No
Malta	–	Prep	–	–	–	Yes	Yes	Yes
MKD[a]	Yes	No	NS	NS	NS	No	Yes	Yes
Monaco	–	–	–	–	–	–	–	–
Montenegro	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Netherlands	No	No	NS	NS	NS	No	No	No
Norway	–	Yes	No	No	Yes	PT	Yes	Yes
Poland	Yes	Prep	No	Yes	Yes	No	Yes	No
Portugal	–	Yes	No	Yes	Yes	–	Yes	Yes
Republic of Moldova	–	Prep	Yes	Yes	Yes	–	Yes	Yes
Romania	Yes	No	NS	NS	NS	No	Yes	Yes
Russian Federation	–	Yes	Yes	Yes	Yes	–	Yes	Yes
San Marino	–	–	–	–	–	–	–	–
Serbia	–	Yes	Yes	No	Yes	–	No	No
Slovakia	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Slovenia	–	No	NS	NS	NS	–	Yes	Yes
Spain	Yes	No	NS	NS	NS	Yes	Yes	Yes
Sweden	–	Yes	Yes	Yes	Yes	–	No	Yes
Switzerland	–	No	NS	NS	NS	–	No	No
Tajikistan	–	Prep	Yes	Yes	Yes	–	Yes	Yes
Turkey	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Turkmenistan	Yes	Yes	Yes	–	Yes	No	Yes	Yes
Ukraine	Yes	Prep	Yes	Yes	Yes	Yes	Yes	Yes
United Kingdom	–	No	NS	NS	NS	–	Yes	No
Uzbekistan	PT	Yes	Yes	Yes	Yes	Yes	Yes	Yes

% Overall	Yes, (PT), (Prep), No, (NS)	55	13	24	54	21	25	54	19	25	60	10	25	63	10	25	55	6	36	73	27	73	25
% EU15	Yes, (PT), (Prep), No, (NS)	33	0	67	69	0	31	46	23	31	62	8	31	62	8	31	33	0	67	77	23	54	46
% EU13	Yes, (PT), (Prep), No, (NS)	58	8	25	54	23	23	38	31	23	69	0	23	54	15	23	58	8	33	85	15	85	8
% CIS	Yes, (PT), (Prep), No, (NS)	71	29	0	45	55	0	91	9	0	91	0	0	100	0	0	71	0	29	73	27	91	9
% SEEHN	Yes, (PT), (Prep), No, (NS)	71	0	14	38	13	50	50	0	50	38	13	50	50	0	50	57	0	29	88	13	63	25

NS: no strategy. P: planned. PT: partially. Prep: in preparation.

[a] MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

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3. Collecting key data on all children

Introduction

This chapter summarizes the indicators included in the baseline survey that relate to countries collecting data to identify potentially neglected groups of children, reflecting the European child and adolescent health strategy's overall priority of "Making children's lives visible" *(1)*. The priority underscores the importance of collecting systematic, high-quality data on all children, through which the groups for whom action is needed can be identified. The United Nations Convention on the Rights of the Child (UNCRC) *(2)* states that each child has the right to health and protection without discrimination. Access to the highest attainable standard of health is a right that countries have a duty to ensure, which cannot be fulfilled without collecting relevant information.

Key findings

- Most countries report collecting and analysing data on the coverage of major interventions for children in terms of sex and geographic area.
- Analysing coverage data by migrant status, ethnic and socioeconomic background is less common, with approximately one third of countries doing so for each group.
- There are noticeable subregional gaps in collecting data on the status of children who are at risk of mental or physical health issues, refugee and migrant children, and children in institutional care.
- Surveys on child maltreatment exist in most countries, but children tend not to be asked to provide information.
- Only a third of countries undertake nationally representative surveys on sexual/intimate-partner violence or collect data on maternal alcohol consumption.

Findings

Coverage of major interventions

Analysing data by sex

Thirty-five countries (73%) reported that they analyse coverage data of major interventions by sex, while eight (17%) do not. Fig. 3.1 shows this by country, and Fig. 3.2 by country grouping.

Fig. 3.1. Coverage analysed by sex (countries)

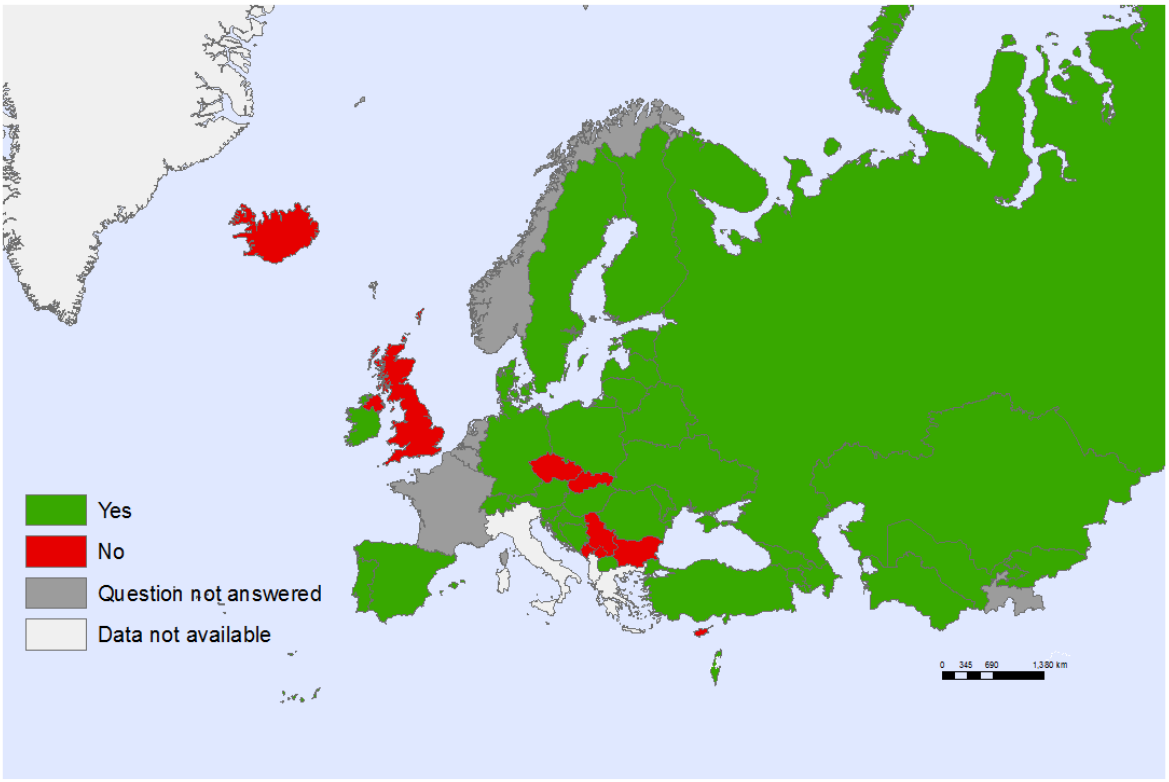
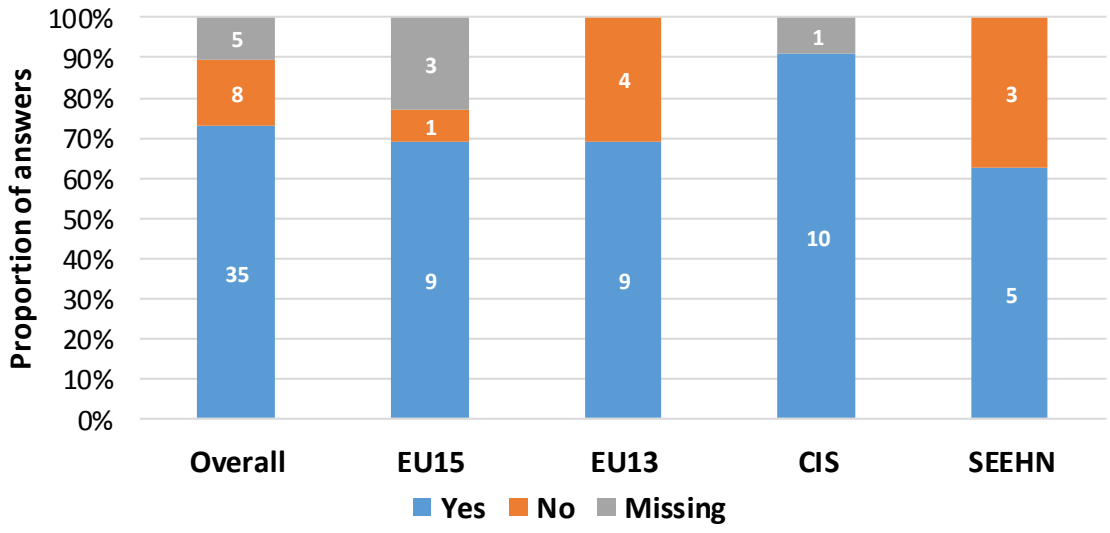


Fig. 3.2. Coverage analysed by sex (country grouping)



Analysing data in terms of geographic differences

Thirty countries reported that they analyse coverage data by rural, suburban and specific urban areas (63%), with 12 (25%) reporting that they do not disaggregate data in terms of these geographic areas. Fig. 3.3 shows this by country, and Fig. 3.4 by country grouping.

Fig. 3.3. Coverage analysed by rural, suburban and specific urban areas (countries)

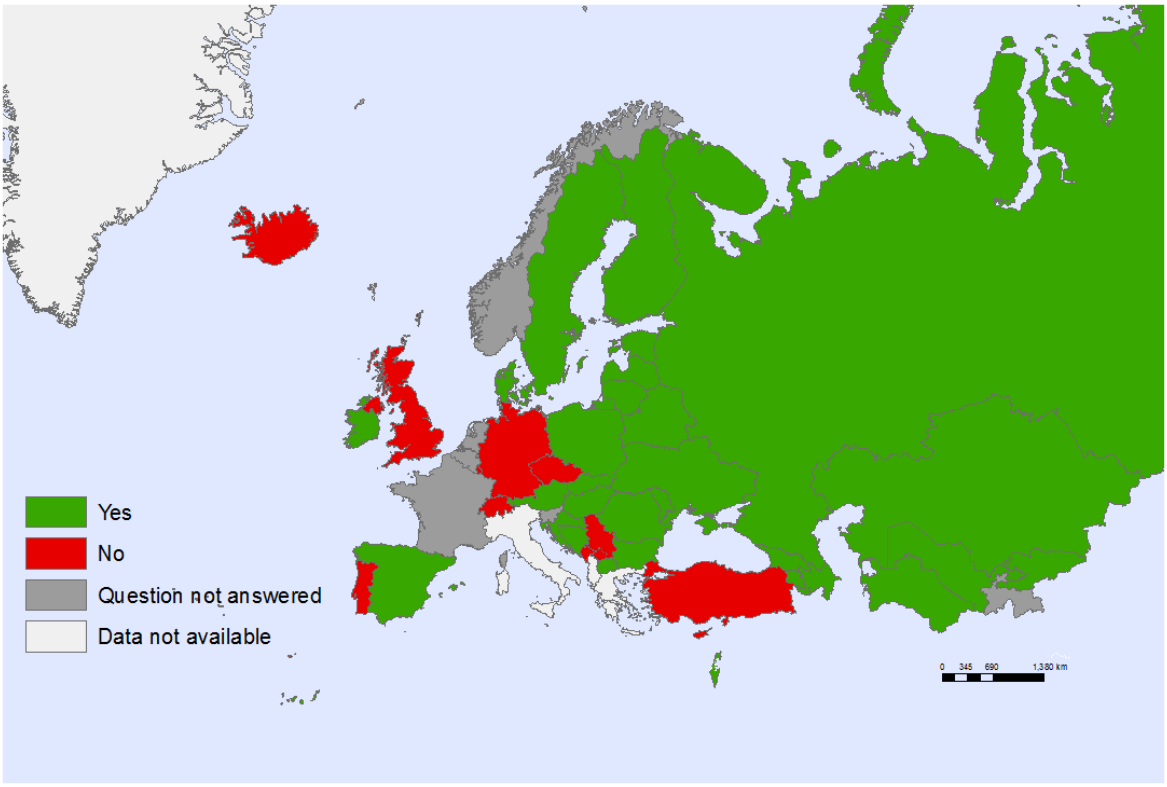
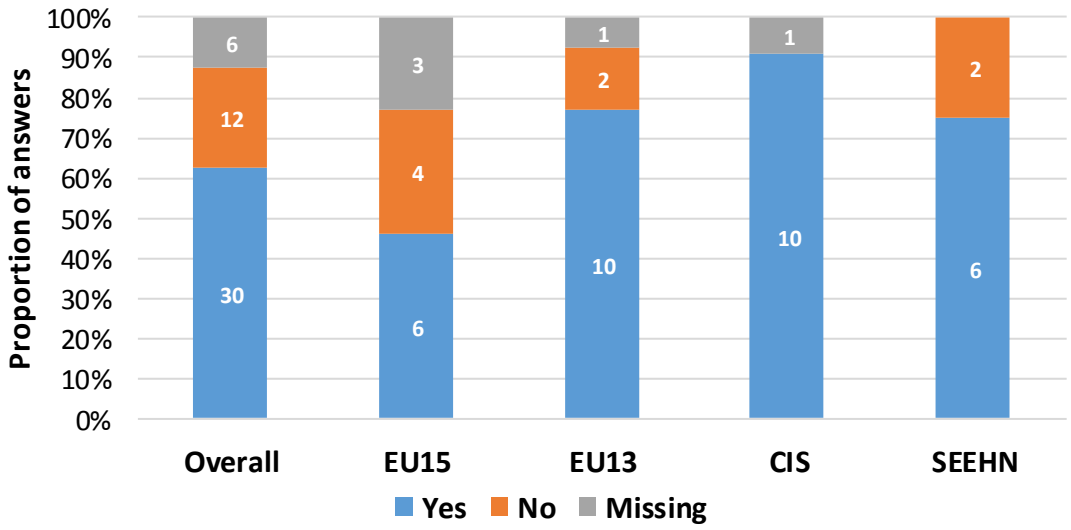


Fig. 3.4. Coverage analysed by rural, suburban and specific urban areas (country grouping)



Analysing data in terms of socioeconomic background

Less than half of the countries (42%) reported analysing data in terms of the socioeconomic background of children. By comparison of country groupings, EU13 and SEEHN countries reported relatively lower rates. Fig. 3.5 shows this by country, and Fig. 3.6 by country grouping.

Fig. 3.5. Coverage analysed by socioeconomic background (countries)

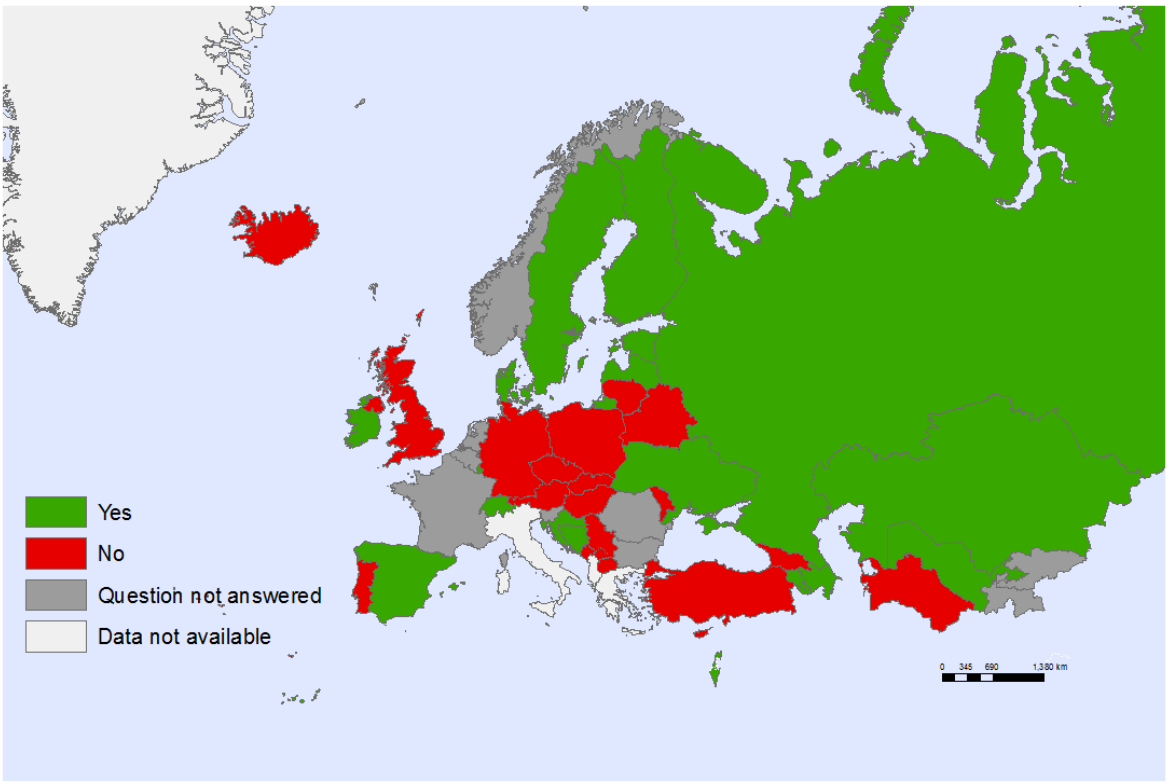
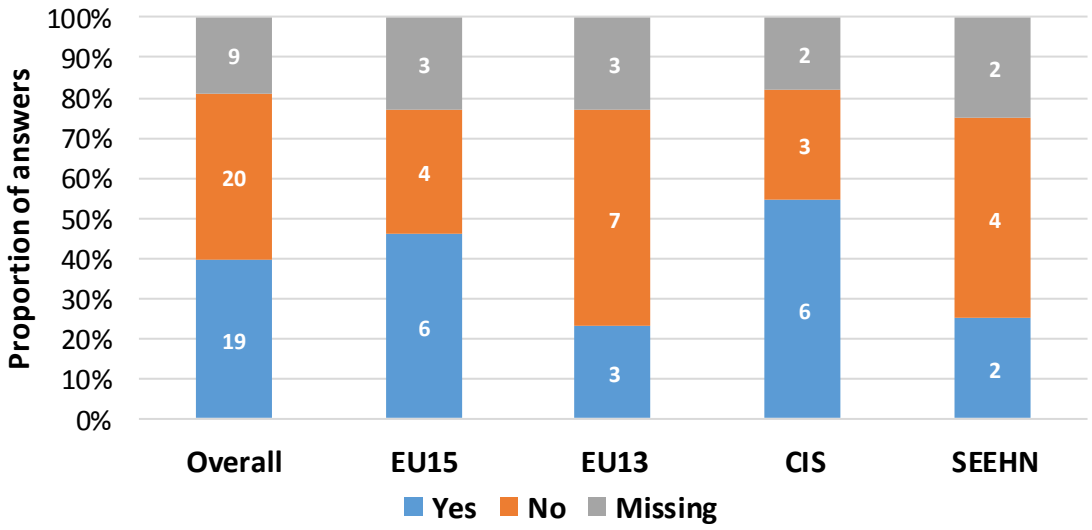


Fig. 3.6. Coverage analysed by socioeconomic background (country grouping)



Analysing data in terms of ethnic background

Eleven countries (23%) said they analyse coverage data in terms of the ethnic background of children, while 28 (58%) answered the question in the negative. Fig. 3.7 shows this by country, and Fig. 3.8 by country grouping.

Fig. 3.7. Coverage analysed by ethnic background (countries)

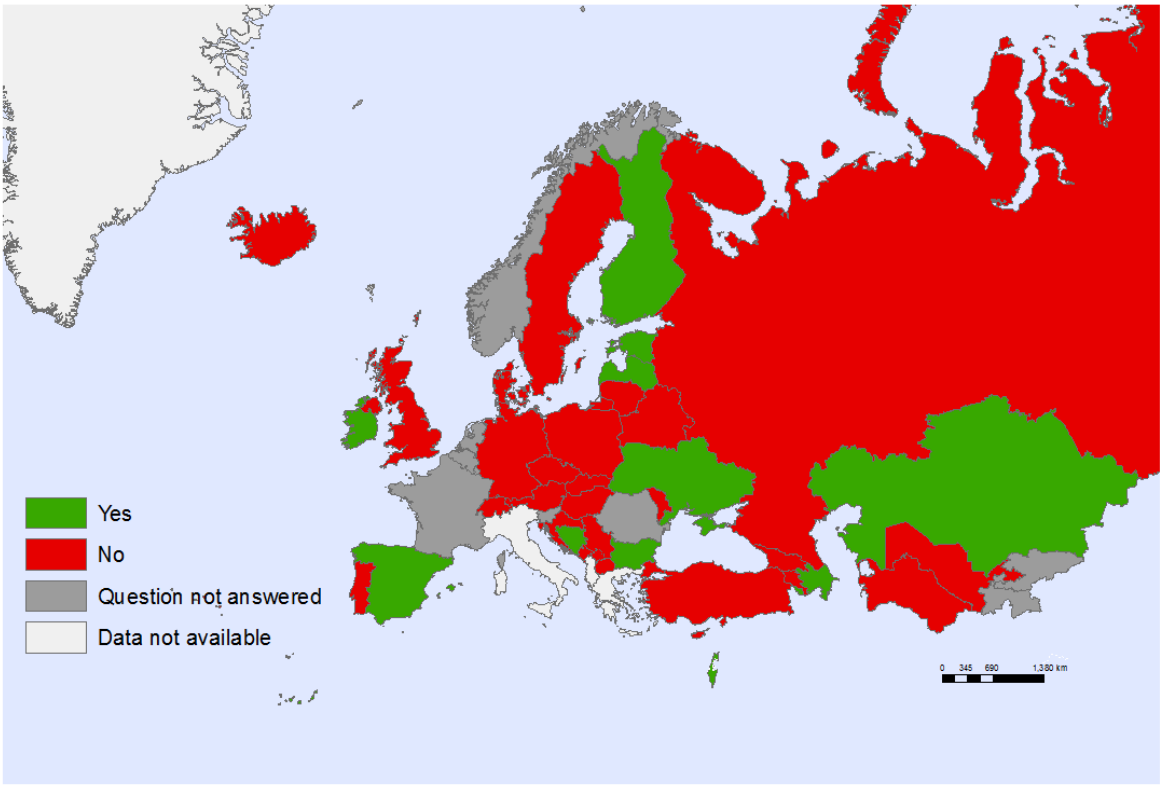
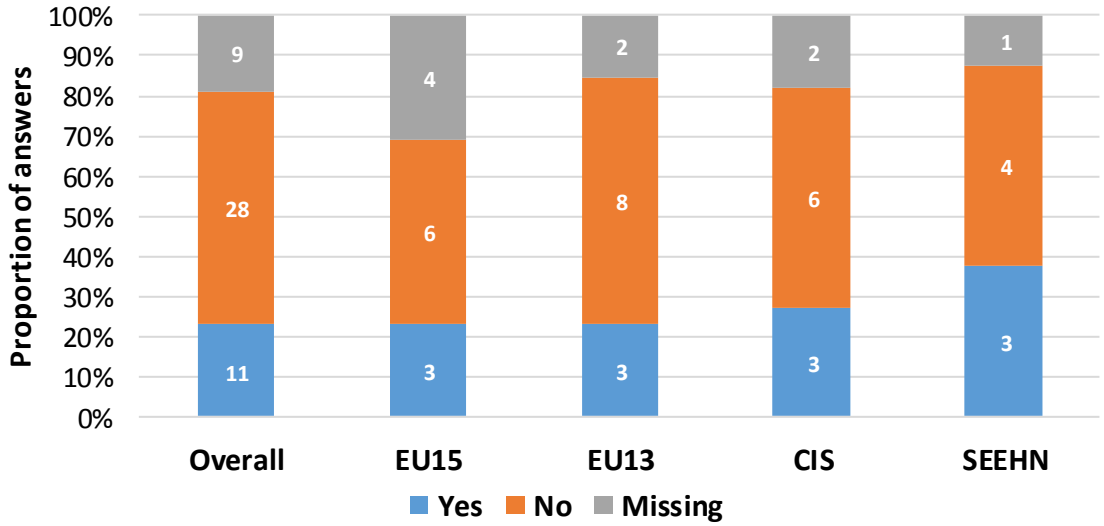


Fig. 3.8. Coverage analysed by ethnic background (country grouping)



Analysing data in terms of migrant status

More than half of the countries (54%) reported that coverage data for major interventions are not analysed by migrant status. Only 13 (27%) stated that migrant status is being considered in analyses of the coverage for major interventions. Fig. 3.9 shows this by country, and Fig. 3.10 by country grouping.

Fig. 3.9. Coverage analysed by migrant status (countries)

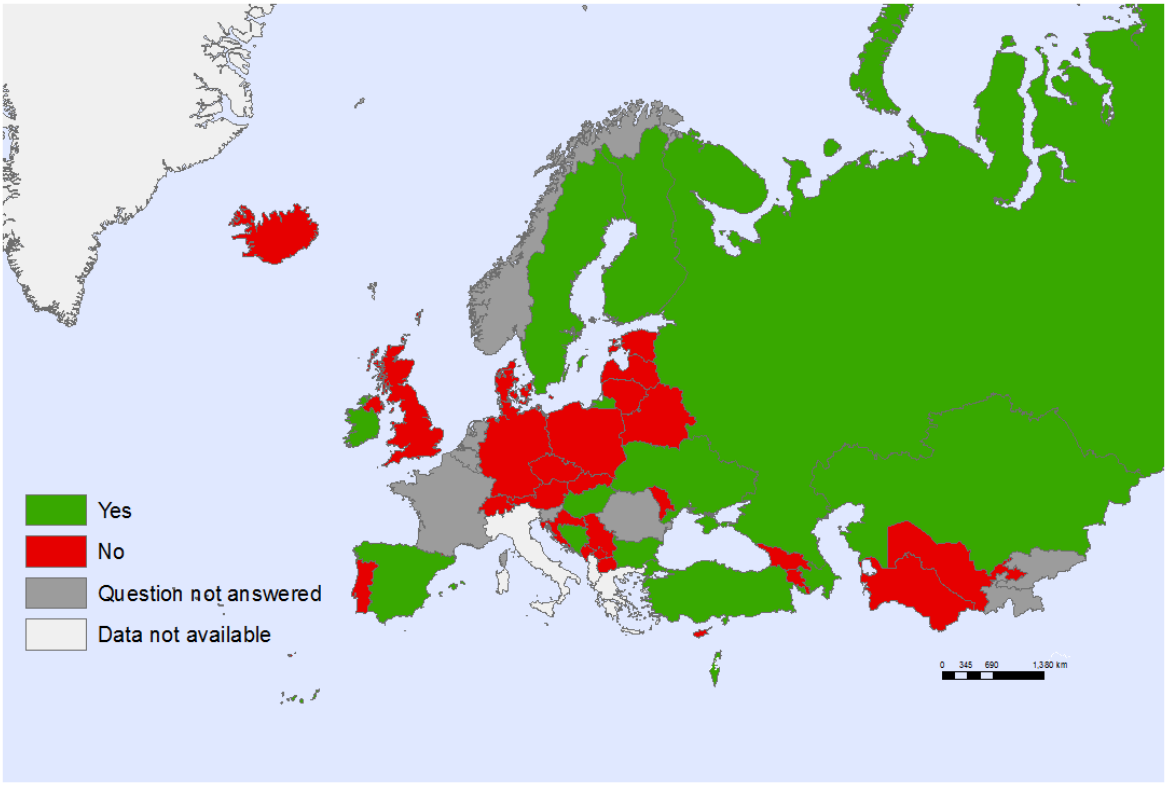
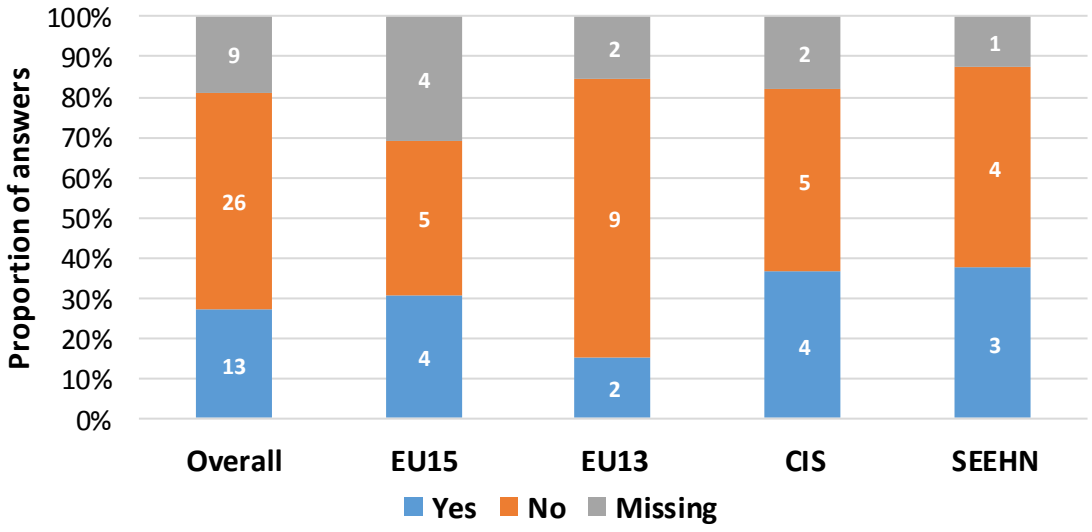


Fig. 3.10. Coverage analysed by migrant status (country grouping)



Migrant and refugee children

Data on health status of, and services provided to, migrant or refugee children

Less than one third (31%) of the countries reported collecting information systematically on the health of migrant and refugee children, and 29 (60%) did not. Fig. 3.11 shows this by country, and Fig. 3.12 by country grouping.

Fig. 3.11. Collect systematic information on the health of migrant and refugee children (countries)

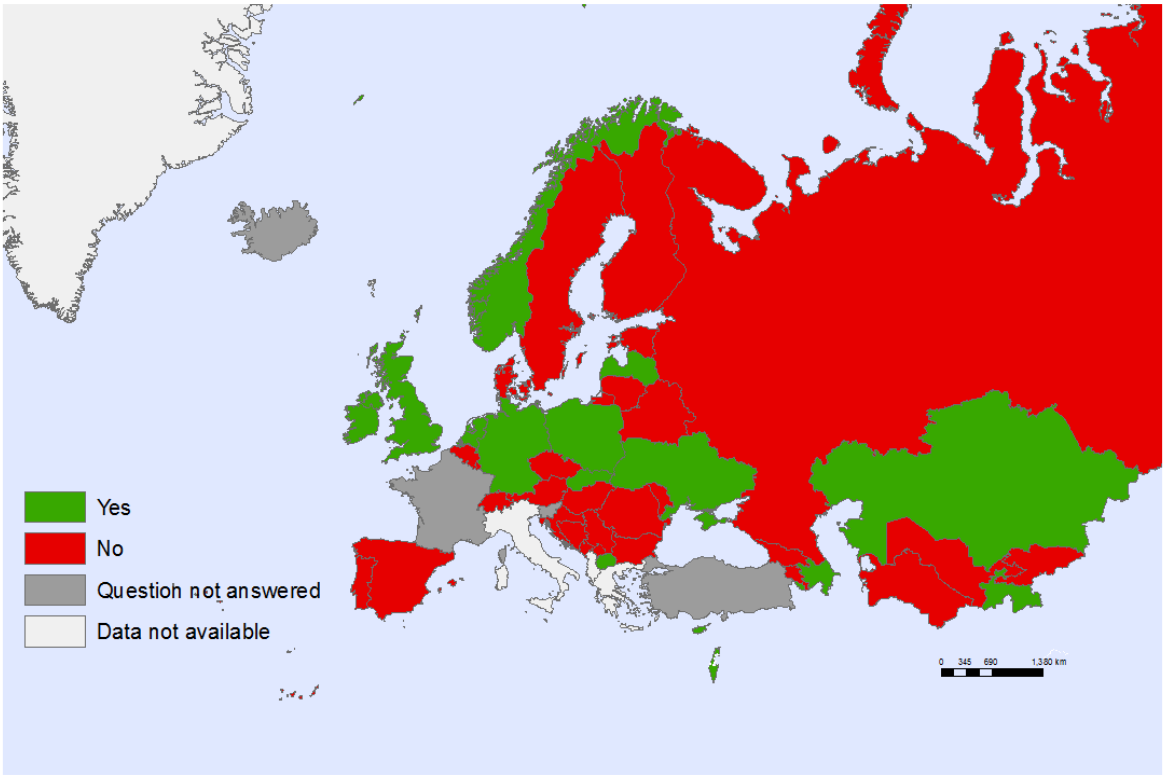
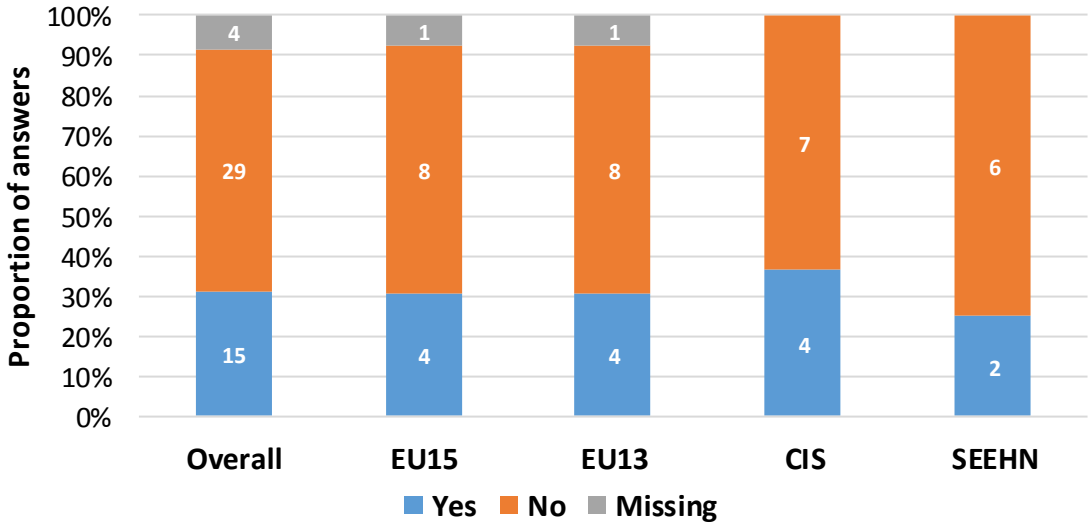


Fig. 3.12. Collect systematic information on the health of migrant and refugee children (country grouping)



Health statistics on the health services provided to at-risk groups (such as Roma or aboriginal children) are kept by 19% of the countries. Only one of the EU13 countries collects health statistics on services provided to these children. Fig. 3.13 shows this by country, and Fig. 3.14 by country grouping.

Fig. 3.13. Health statistics on the health services to at-risk groups (countries)

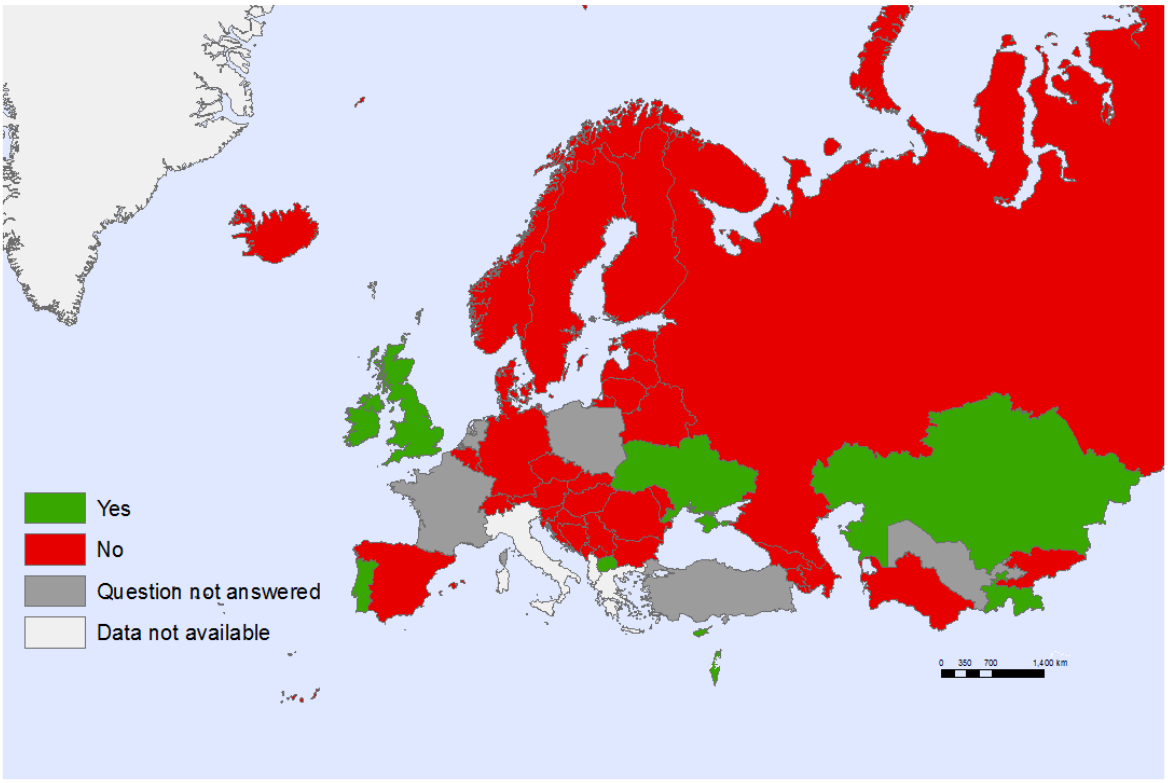
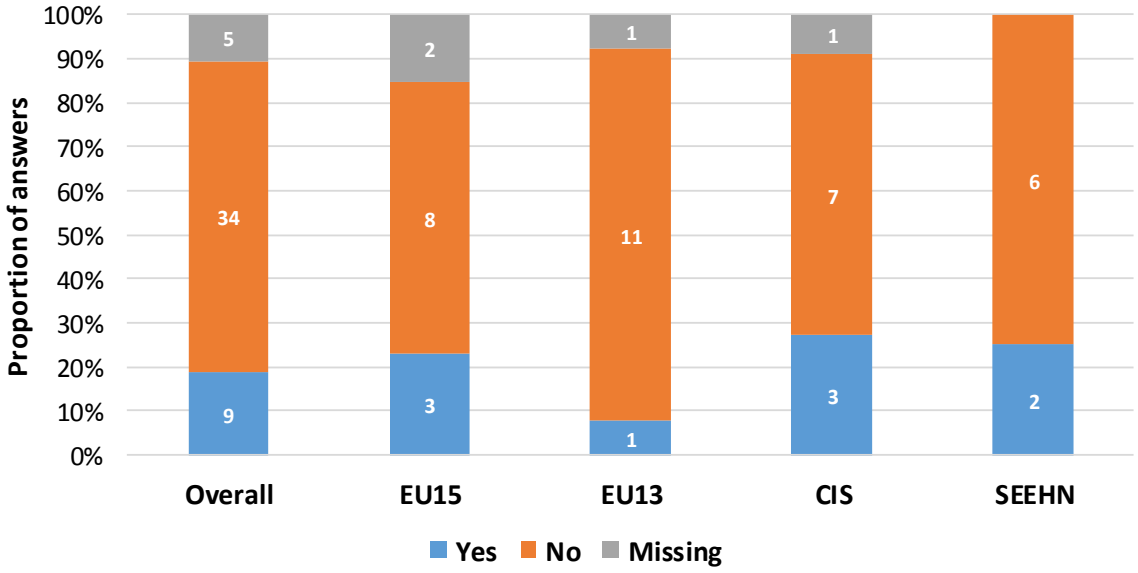


Fig. 3.14. Health statistics on the health services to at-risk groups (country grouping)



Data on migrant and refugee children in social services

More countries (23, 48%) reported that they collect statistics on the number of single underage migrant or refugee children who are in the care of social services. Fig. 3.15 shows this by country, and Fig. 3.16 by country grouping.

Fig. 3.15. Statistics on the number of single, underage migrant or refugee children in care of social services (countries)

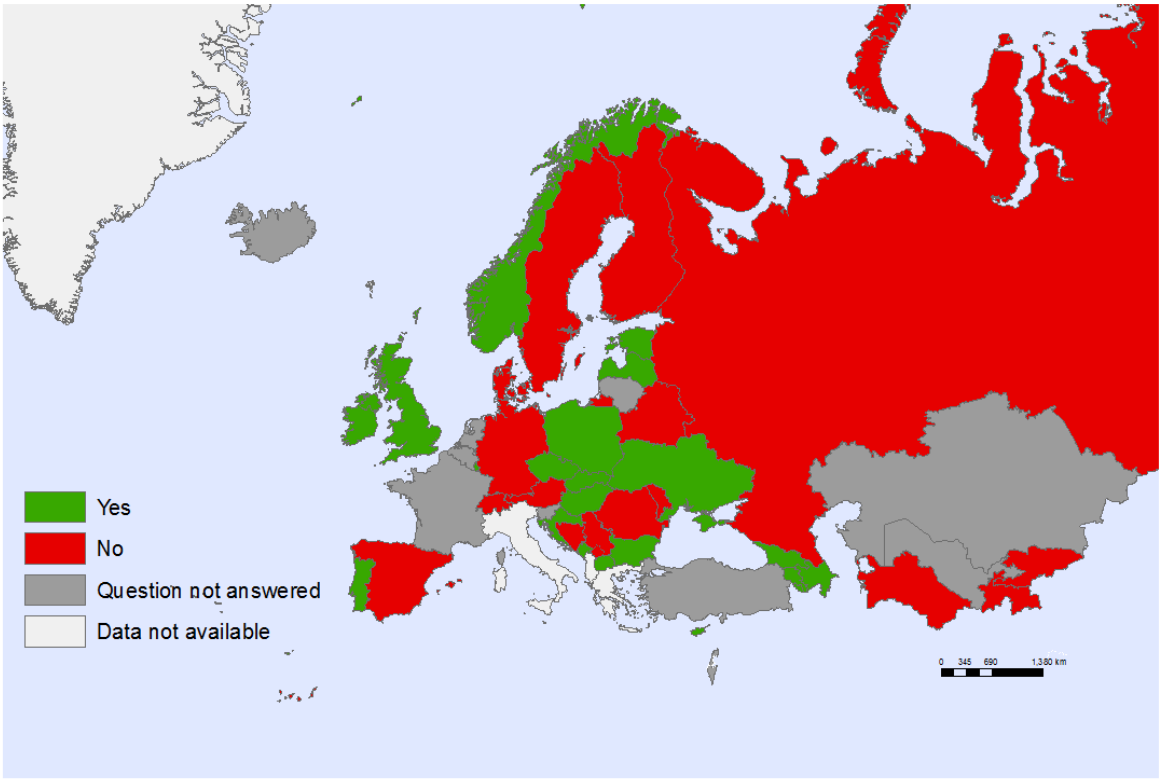
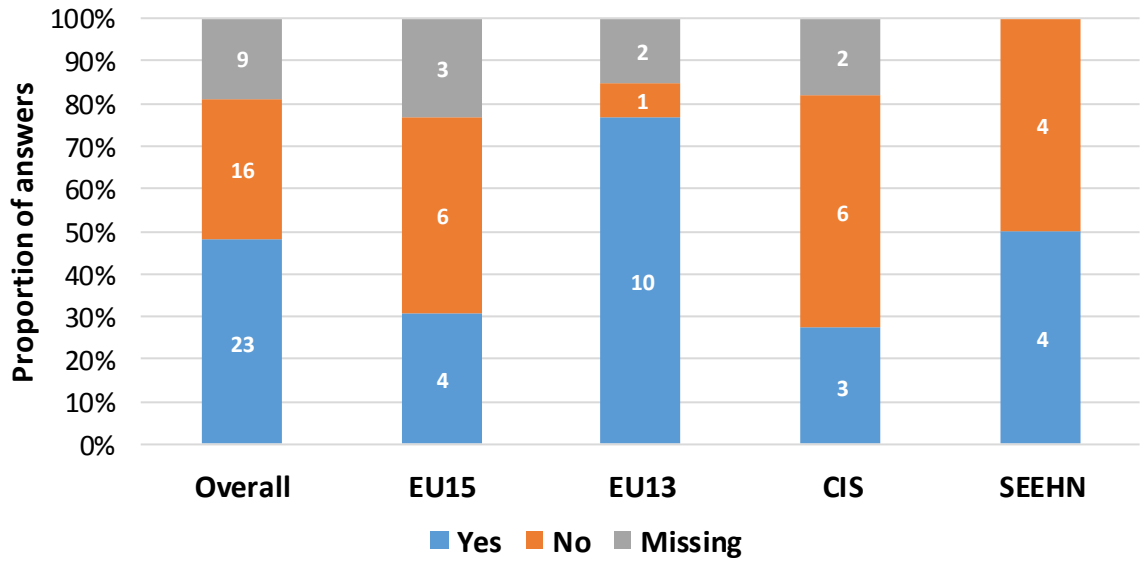


Fig. 3.16. Statistics on the number of single, underage migrant or refugee children in care of social services (country grouping)



Service provision to migrant or refugee children

Twenty-six countries (54%) reported that they provide all types of health care free of charge for migrant children. Twenty-seven (56%) stated that all types of health care are provided to refugee children free of charge. Some countries stated that they provide only emergency services for free for migrant or refugee children. Czechia and Switzerland reported that they do not provide any health care

services free of charge for migrant children. Fig. 3.17 and Fig. 3.18 show this for migrant children by country, and Fig. 3.19 and Fig. 3.20 show the situation for refugee children. Fig. 3.21 shows selective services for migrant and refugee children.

Fig. 3.17. Free care for migrant children (countries)

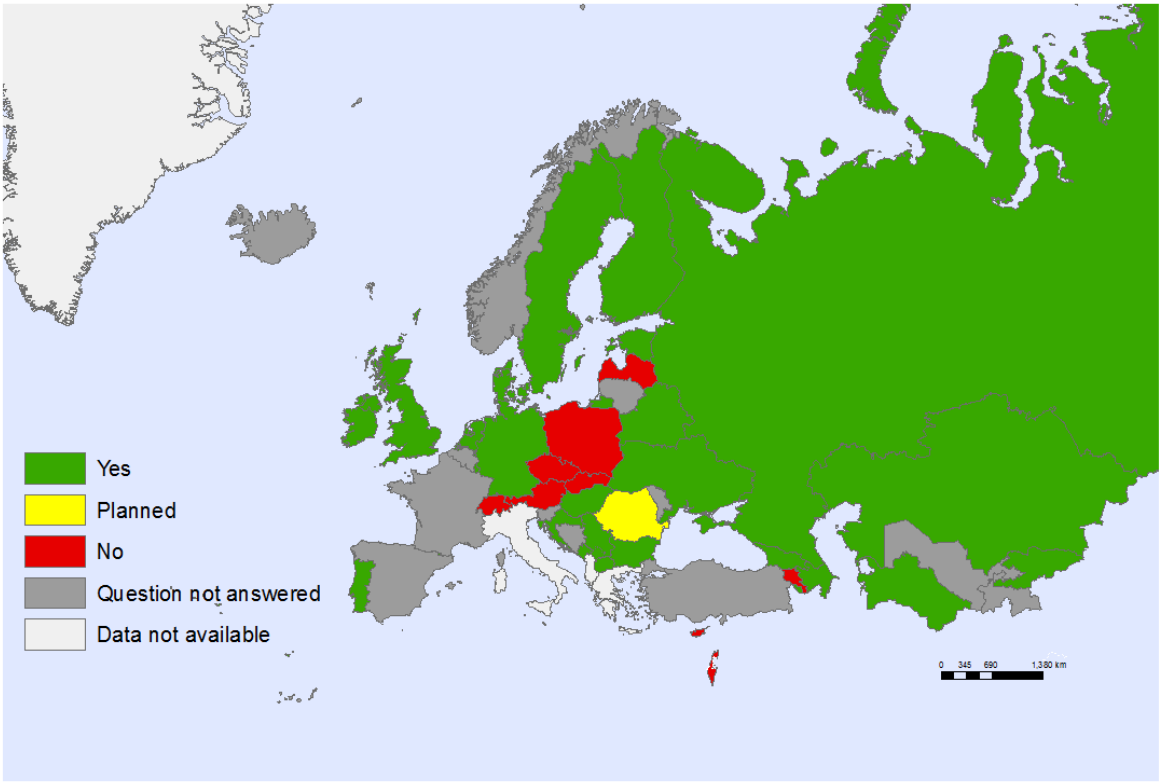


Fig. 3.18. Free care for migrant children (country grouping)

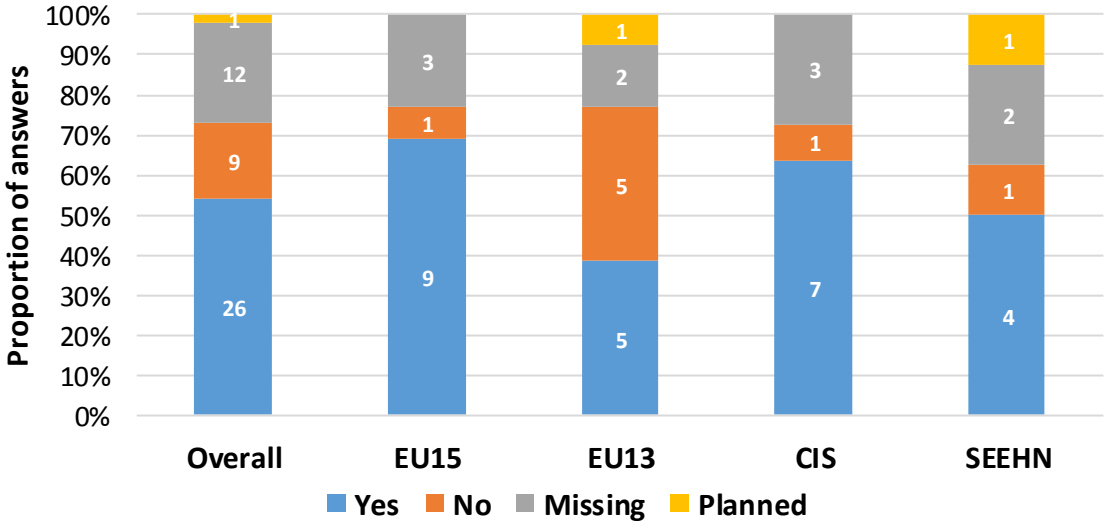


Fig. 3.19. Free care for refugee children (countries)

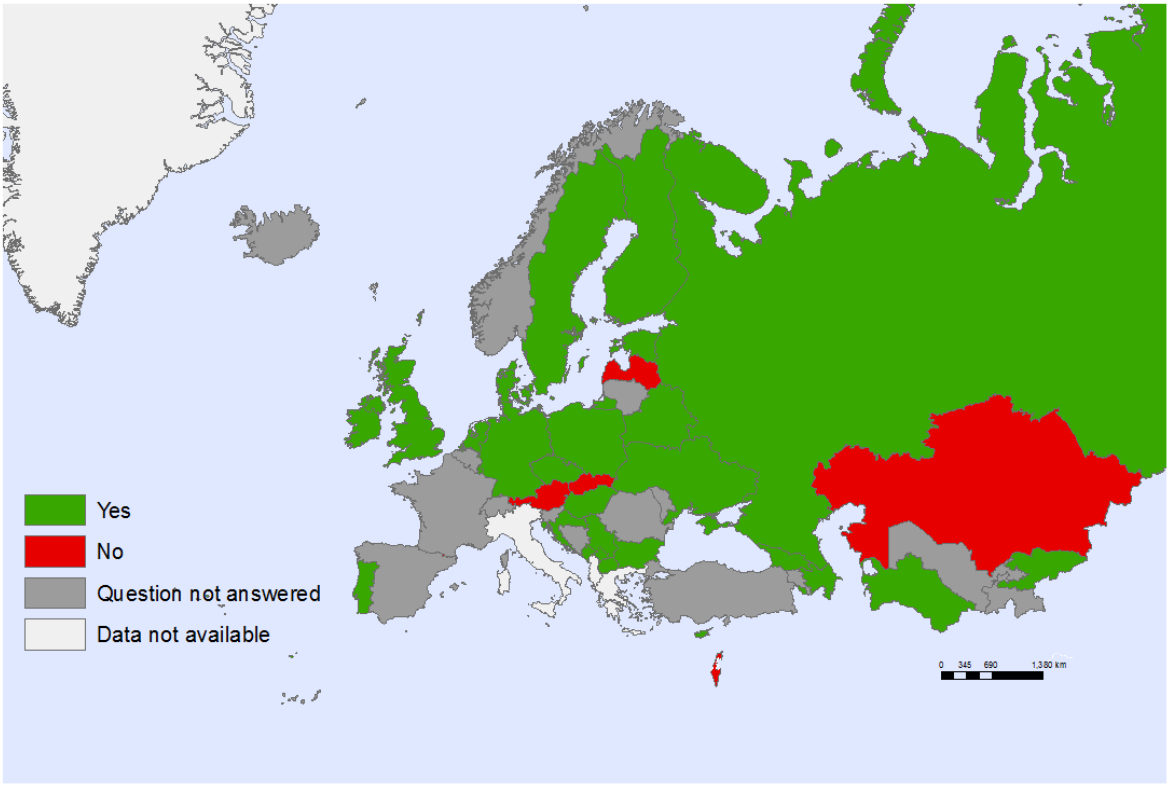


Fig. 3.20. Free care for refugee children (country grouping)

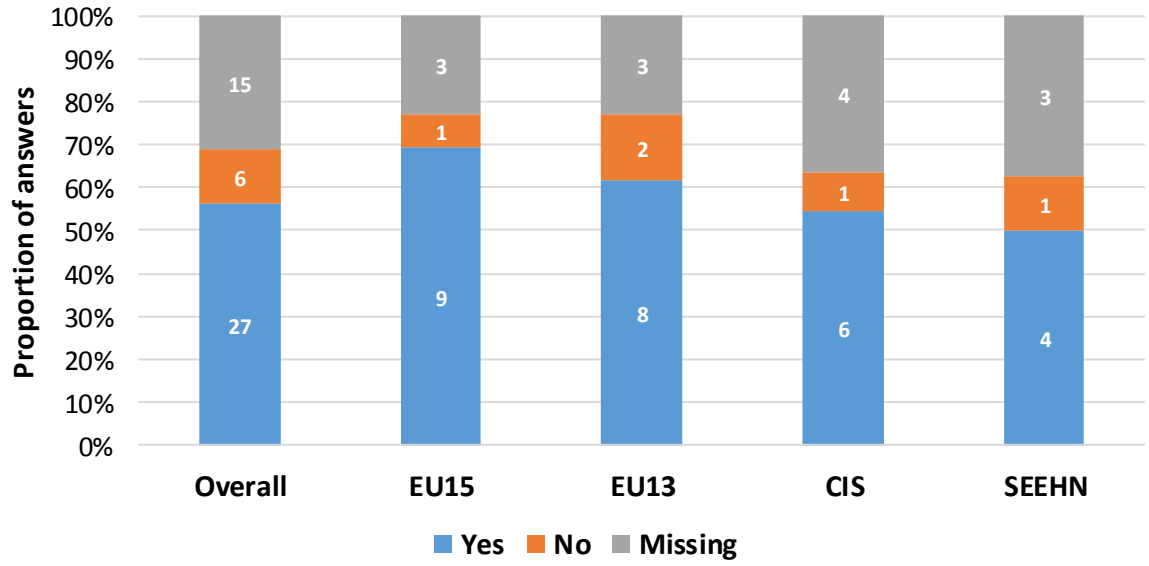
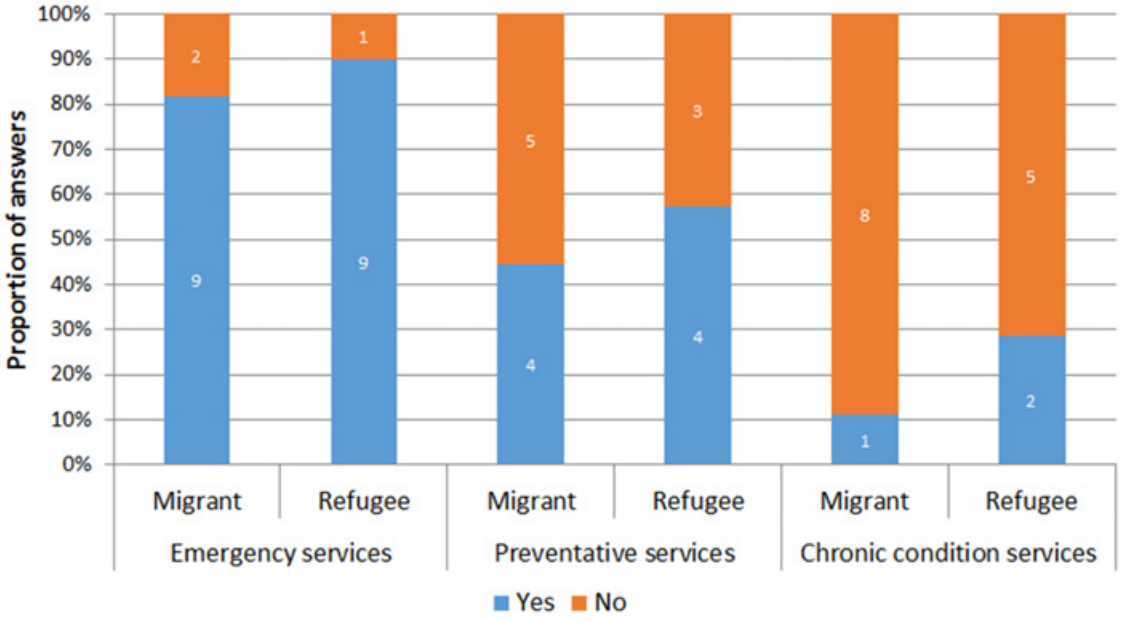


Fig. 3.21. Type of services free for migrant and refugee children



Institutionalized children

Children in institutional care

Thirty-four countries (71%) provided data on the number of children in institutional care (see Fig. 3.22). Rates vary widely (Fig. 3.23): some countries' rates could not be calculated due to missing information on population size, and 14 countries (29%) did not provide any data.

Fig. 3.22. Countries that provided data on the number of children in institutional care, 0–17 years

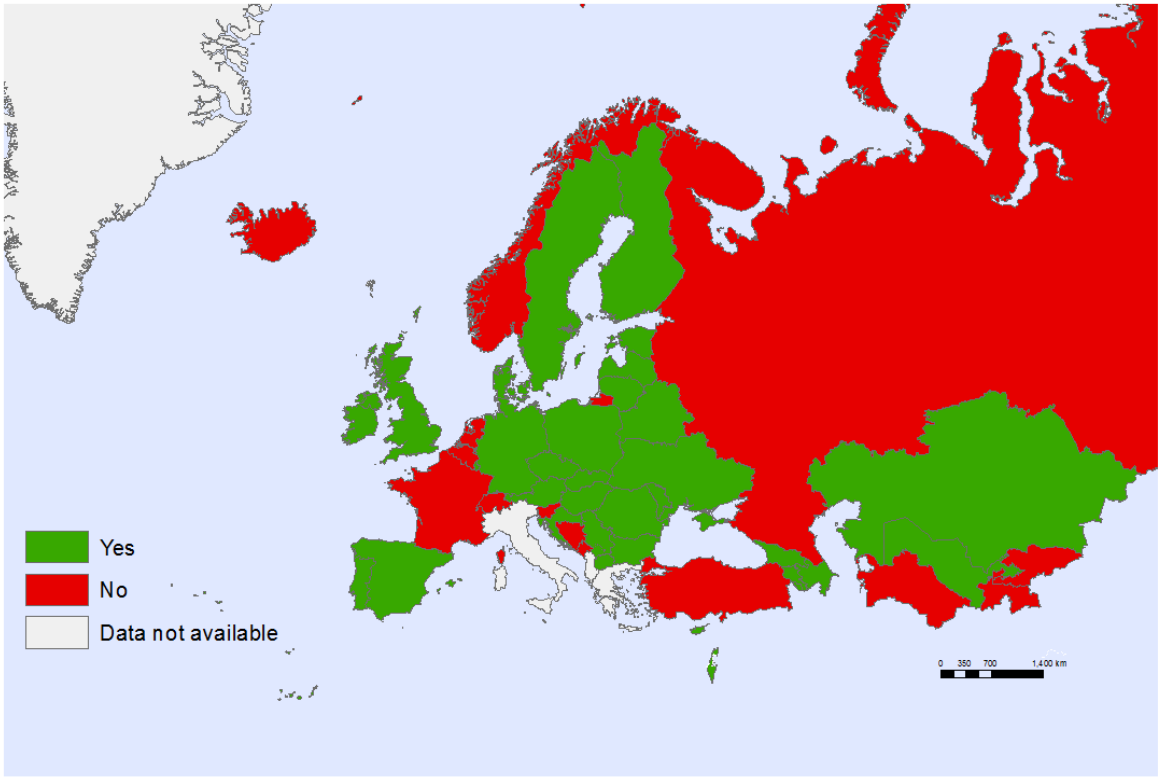
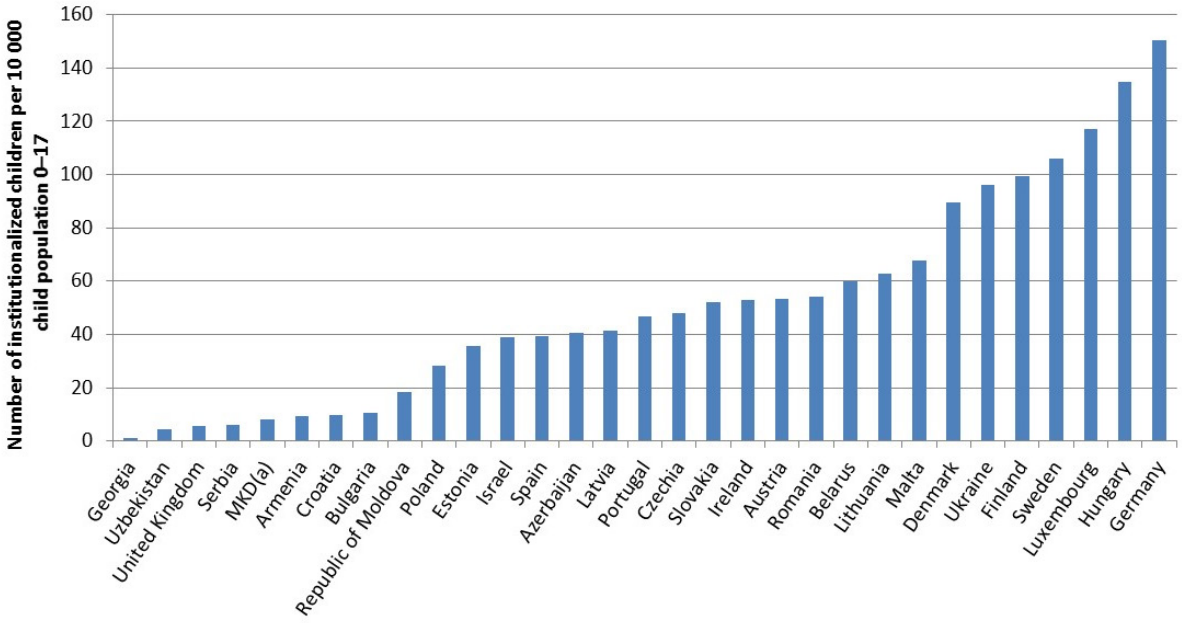


Fig. 3.23. Rates of children in institutional care aged 0–17 years, per 10 000



[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

Institutionalized children under 3 years

Data on children under 3 who are in institutional care were provided by 28 countries (58%) (Fig. 3.24). The rates calculated from these numbers varied widely between countries (Fig. 3.25).

Fig. 3.24. Countries that provided numbers of children in institutional care, 0–2 years

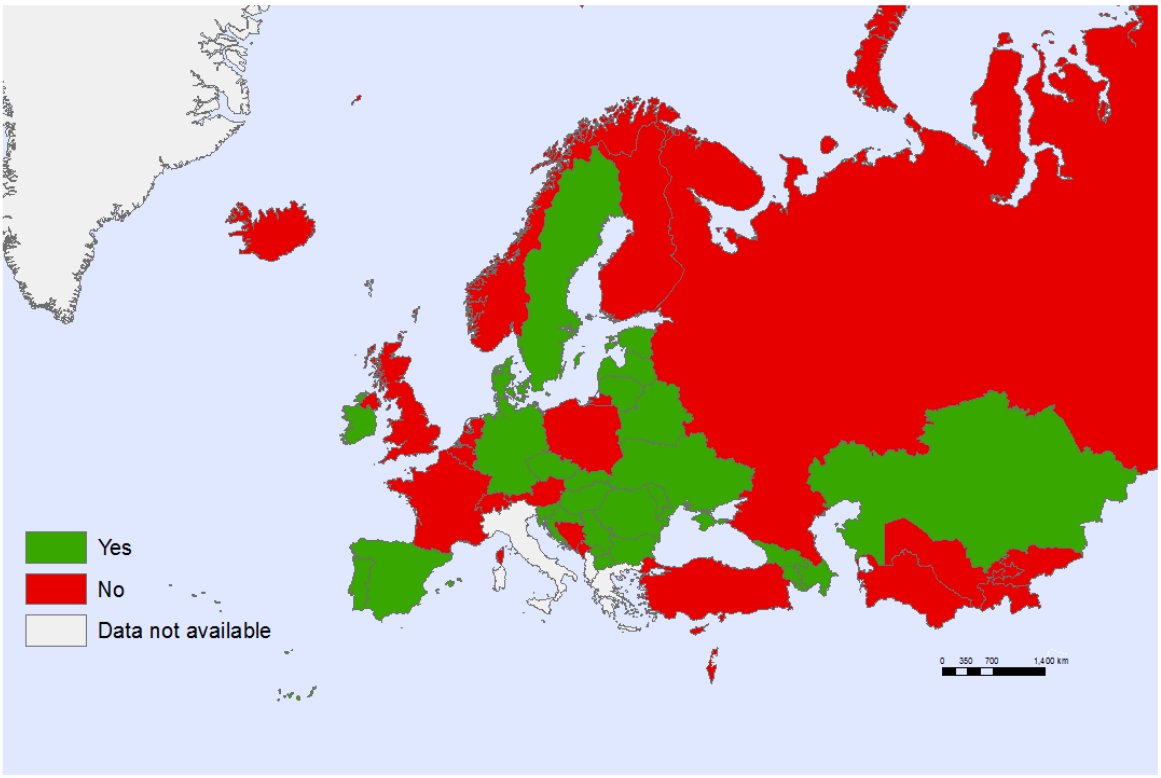
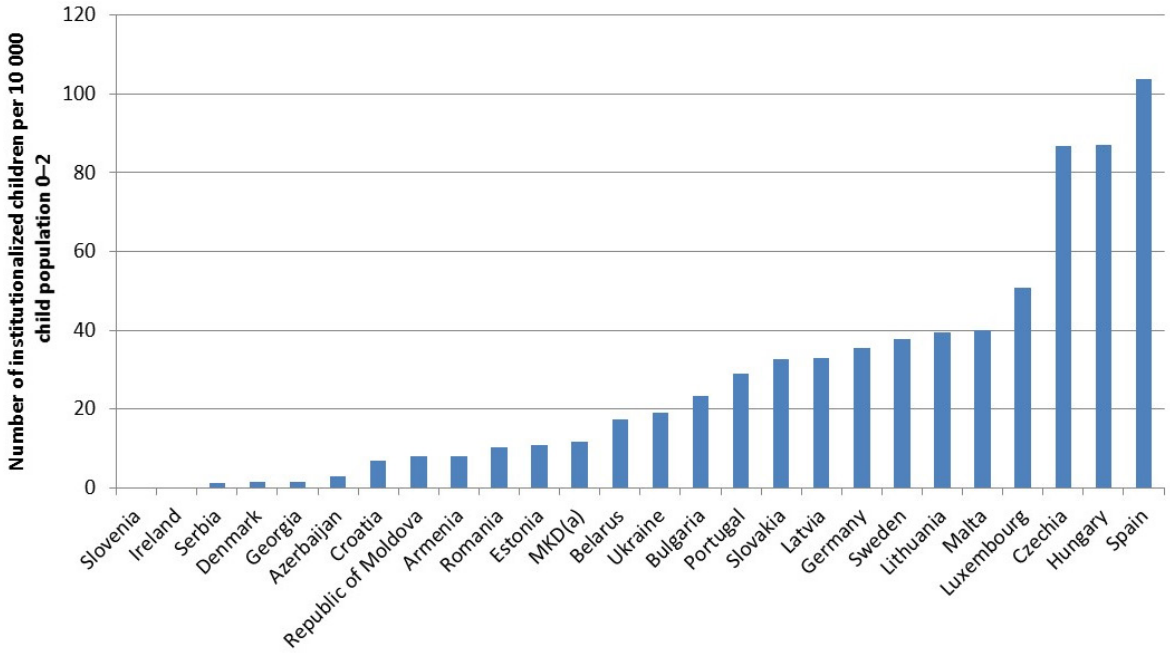


Fig. 3.25. Rates of children in institutional care aged 0–2 years, per 10 000



[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

Child maltreatment

When asked about the frequency of nationally representative population-based surveys on child maltreatment, 13 countries (39%) reported that they conduct such a survey every 1–3 years, six (18%) every 4–6 years, and one (3%) every 7–10 years. Ten (24%) reported that they conduct them with a different frequency and five that they never conduct such a survey (Fig. 3.26). Thirteen reported that the survey was completed by the children themselves (number: three; missing: 32) (Fig. 3.27).

Fig. 3.26. Frequency of nationally representative population-based surveys on child maltreatment (including abuse and neglect)

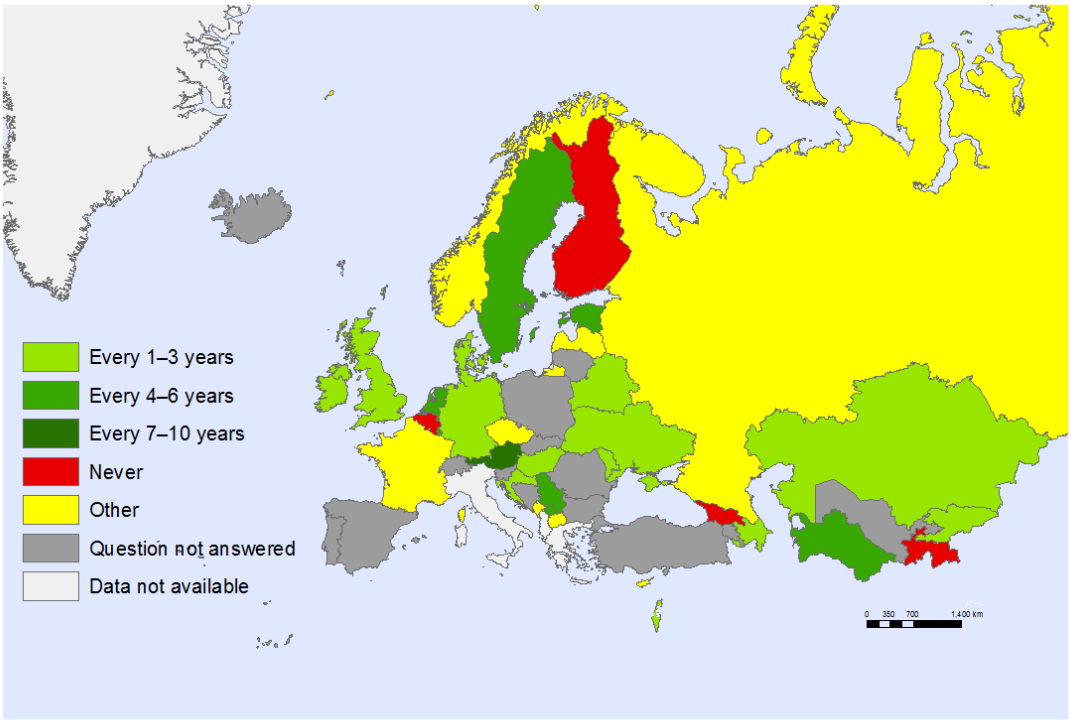
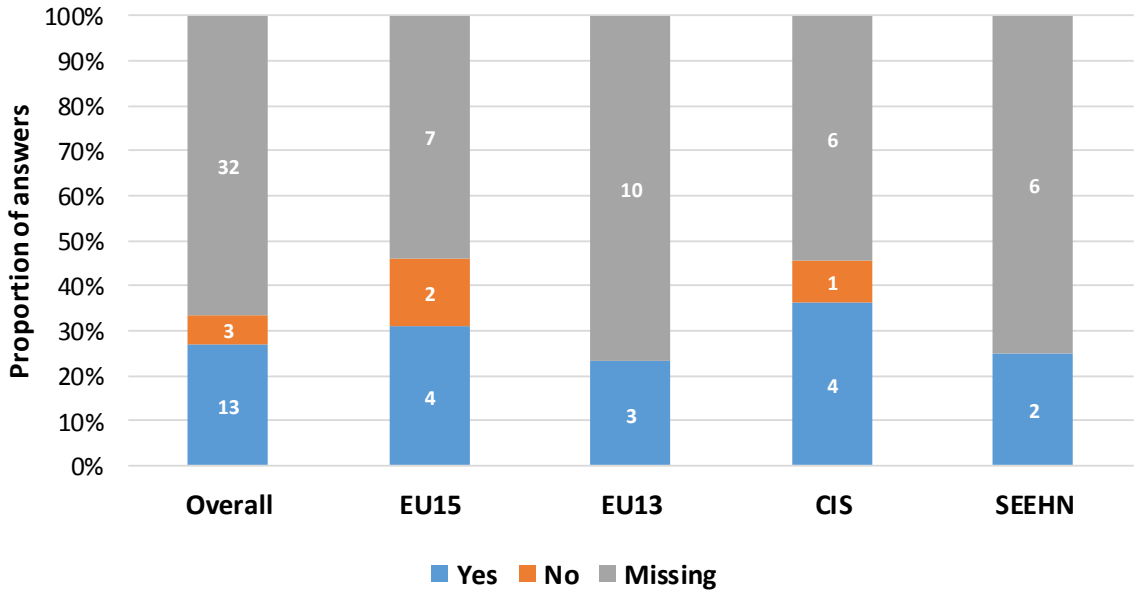


Fig. 3.27. Countries where children are asked to complete the child maltreatment population-based surveys



Sexual/intimate-partner violence

Only 17 countries (36%) undertake nationally representative surveys on sexual/intimate-partner violence that include young people under 18 (Fig. 3.28). More EU15 countries conduct such a survey in comparison to countries in the EU13, CIS and SEEHN groups (Fig. 3.29).

Fig. 3.28. Nationally representative surveys on sexual/intimate-partner violence that include information on young people under 18 (countries)

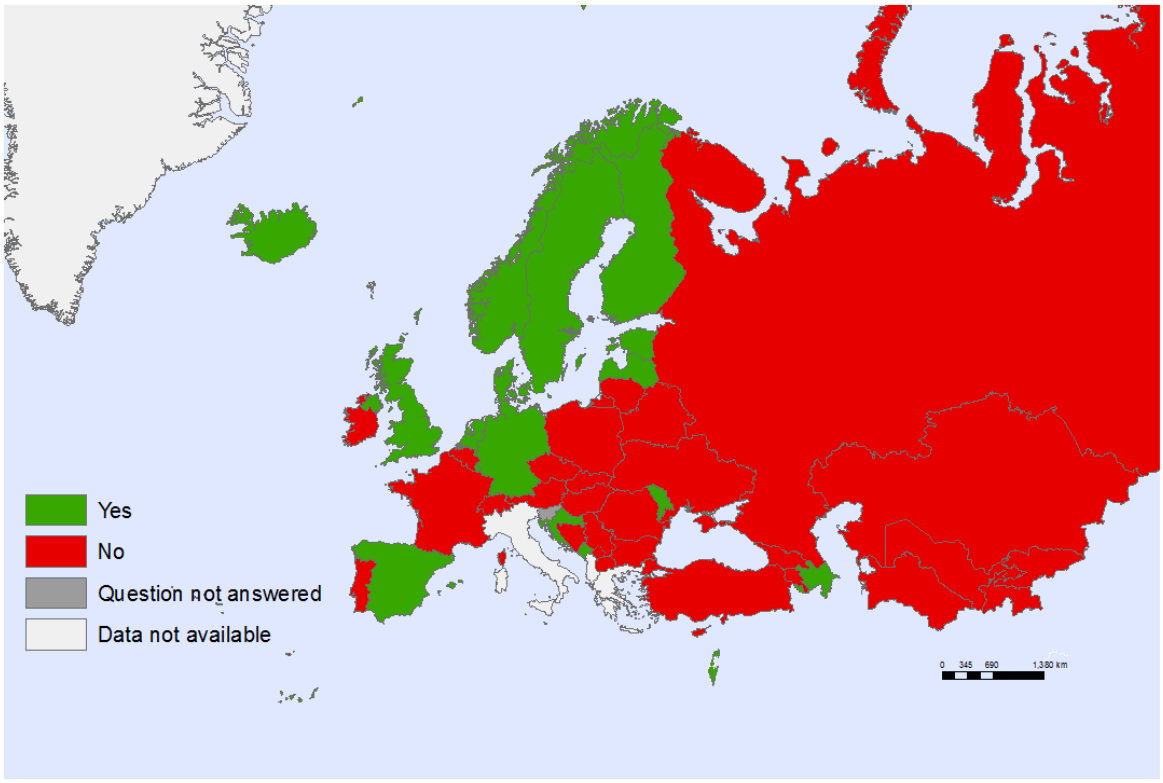
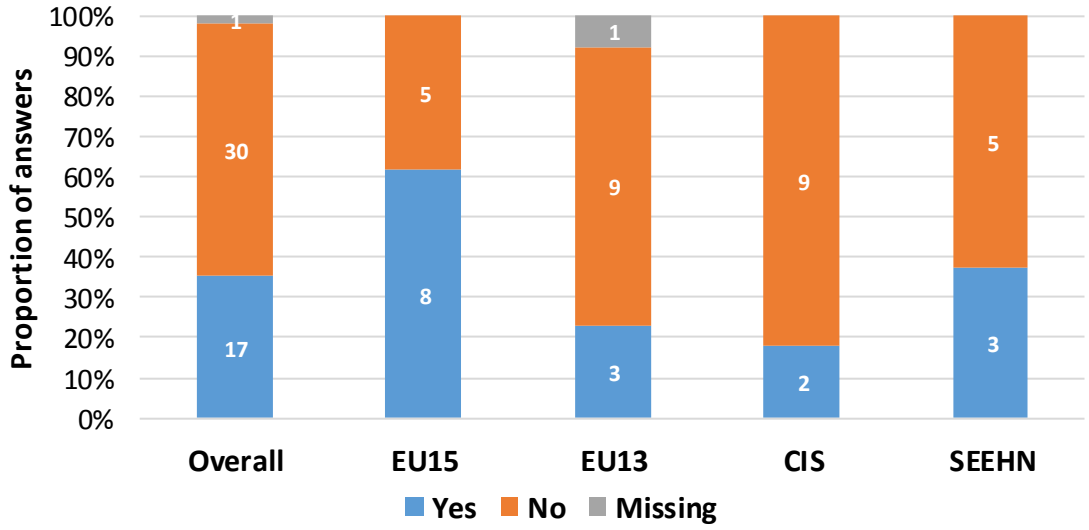


Fig. 3.29. Nationally representative surveys on sexual/intimate-partner violence that include information on young people under 18 (country grouping)



Collecting information on separating out services for children and young people

Most countries (69%) reported that they have information systems in place that allow them to separate out the level of service provision related to children (Fig. 3.30). Slightly lower numbers (56%) were reported regarding information systems that allow service provision for adolescents to be separated out (Fig. 3.31).

Eight countries (17%) reported that they have an information system in place that separates out service provision only to children. Three countries (6%) do not have an information system for service provision segregated for children under 18 (Fig. 3.32).

Fig. 3.30. Information systems that allow separation of service provision related to children

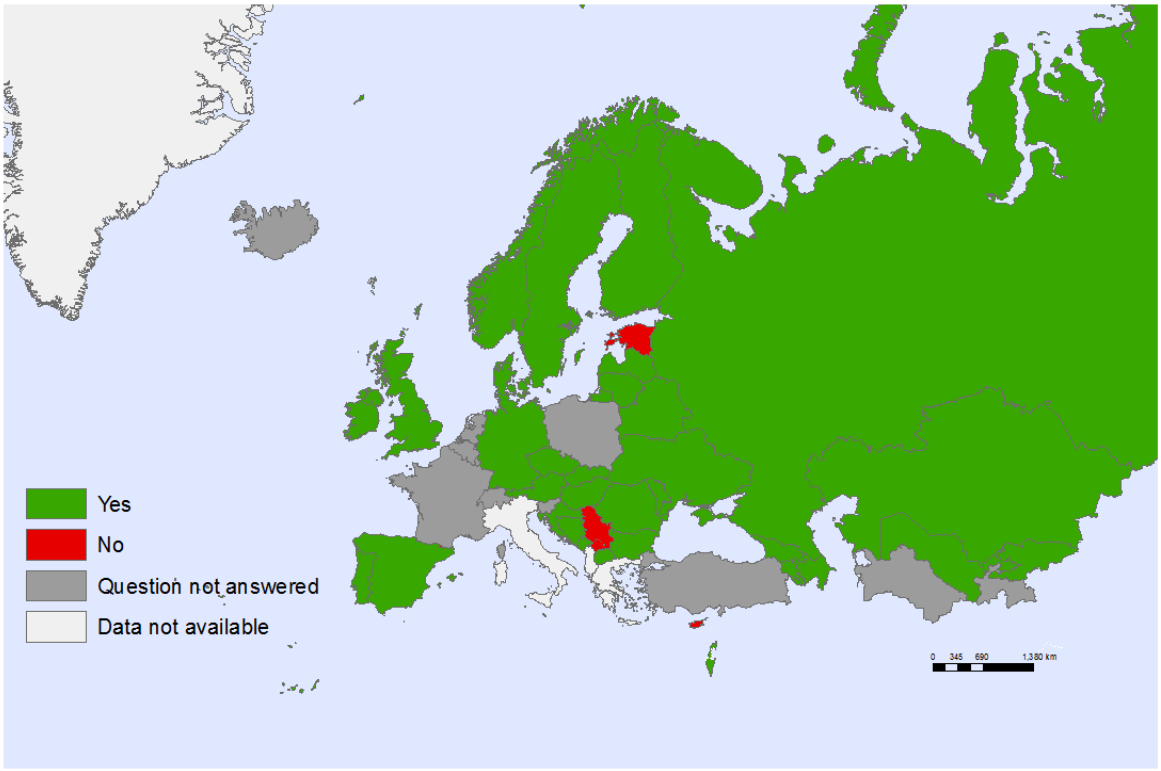


Fig. 3.31. Information systems that allow separation of service provision related to adolescents

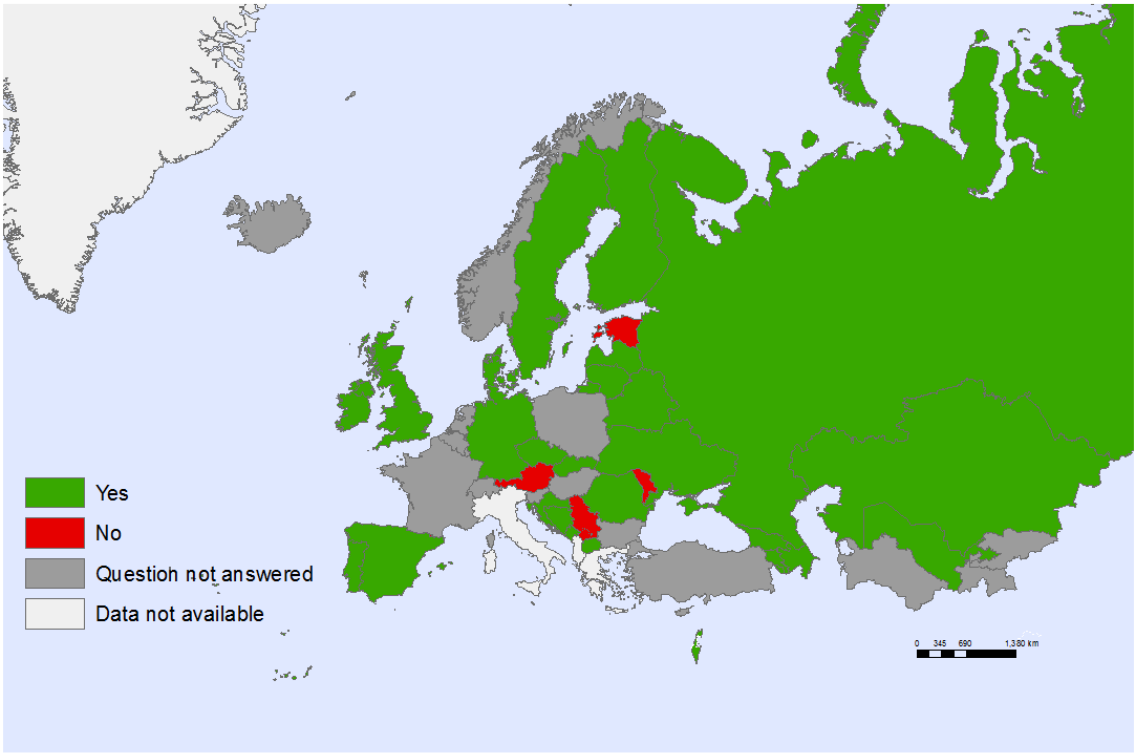
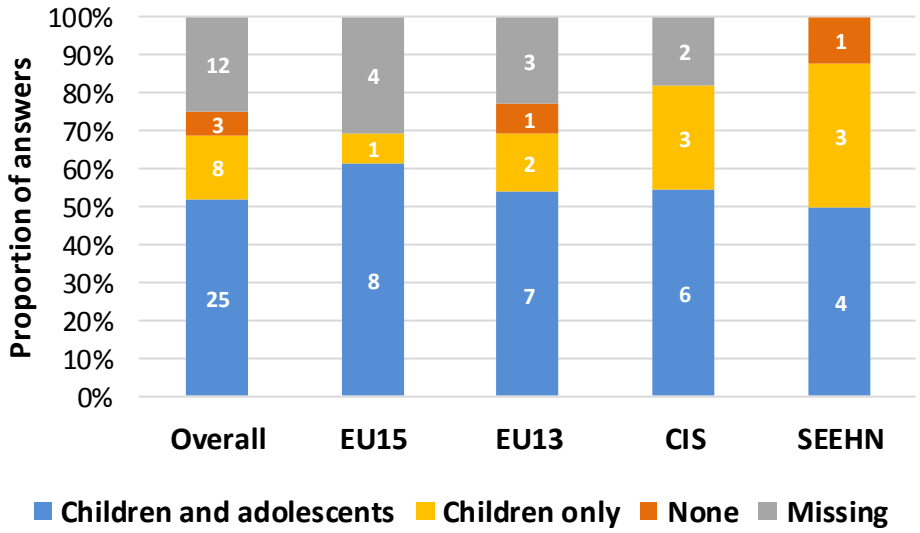


Fig. 3.32. Information systems that allow separation of service provision related to children and/or adolescents



Data collection on maternal alcohol consumption

Maternal alcohol consumption was considered an area in need of attention. The survey confirmed that collection of systematic information on maternal alcohol consumption is not common in the Region. Eighteen countries (38%) reported that they collect information systematically on maternal alcohol intake (Fig. 3.33). Numbers across the Region vary: 46% of EU15 countries reported a systematic collection, but no countries in the SEEHN subregion did so (Fig. 3.34). Further information on the alcohol consumption of adolescents is provided in Chapter 7.

Fig. 3.33. Collect systematic information on maternal alcohol consumption (countries)

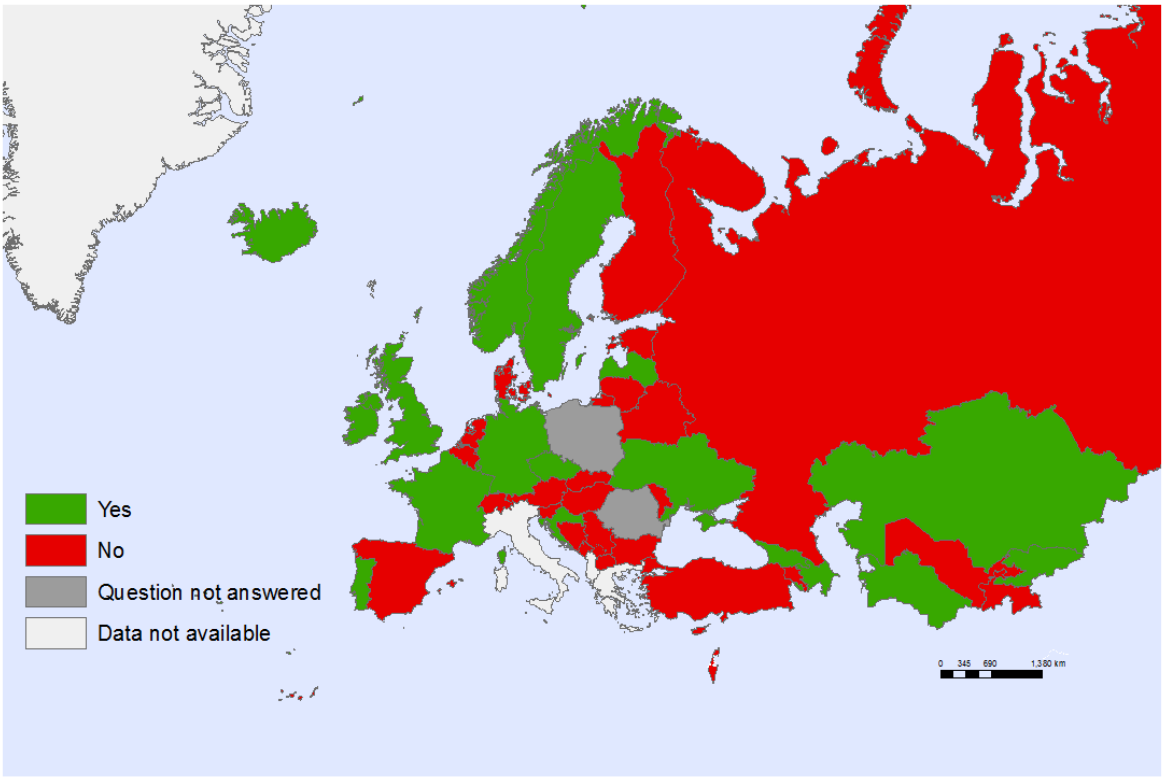
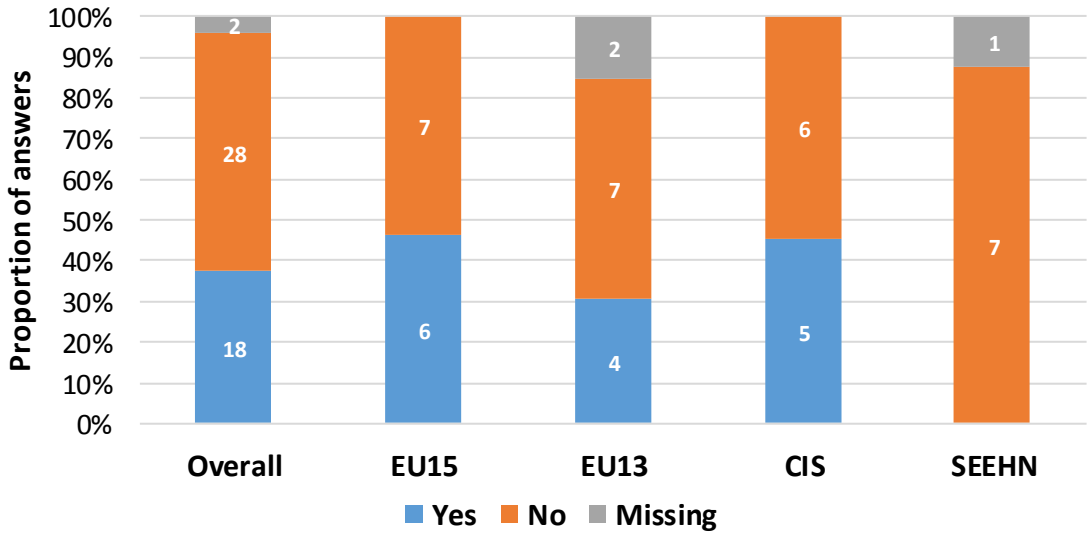


Fig. 3.34. Collect systematic information on maternal alcohol consumption (country grouping)



Data collection on children and adolescents treated by a mental health professional

Seventy-three per cent of countries reported that they have a system in place to collect information on the number of children and adolescents under 18 treated by a mental health professional (Fig. 3.35 and 3.36). When asked about the number of prescriptions for children with mental and behavioural problems, most countries could not answer, or indicated that no data were collected. Twenty-five countries (52%) reported that no data were available, and five (10%) stated that data can be disaggregated from information systems or health insurance providers. Seven countries (15%) provided a number (Fig. 3.37). More information on mental health can be found in Chapter 8.

Fig. 3.35. System in place to collect information on the number of children under 18 treated by a mental health professional (countries)

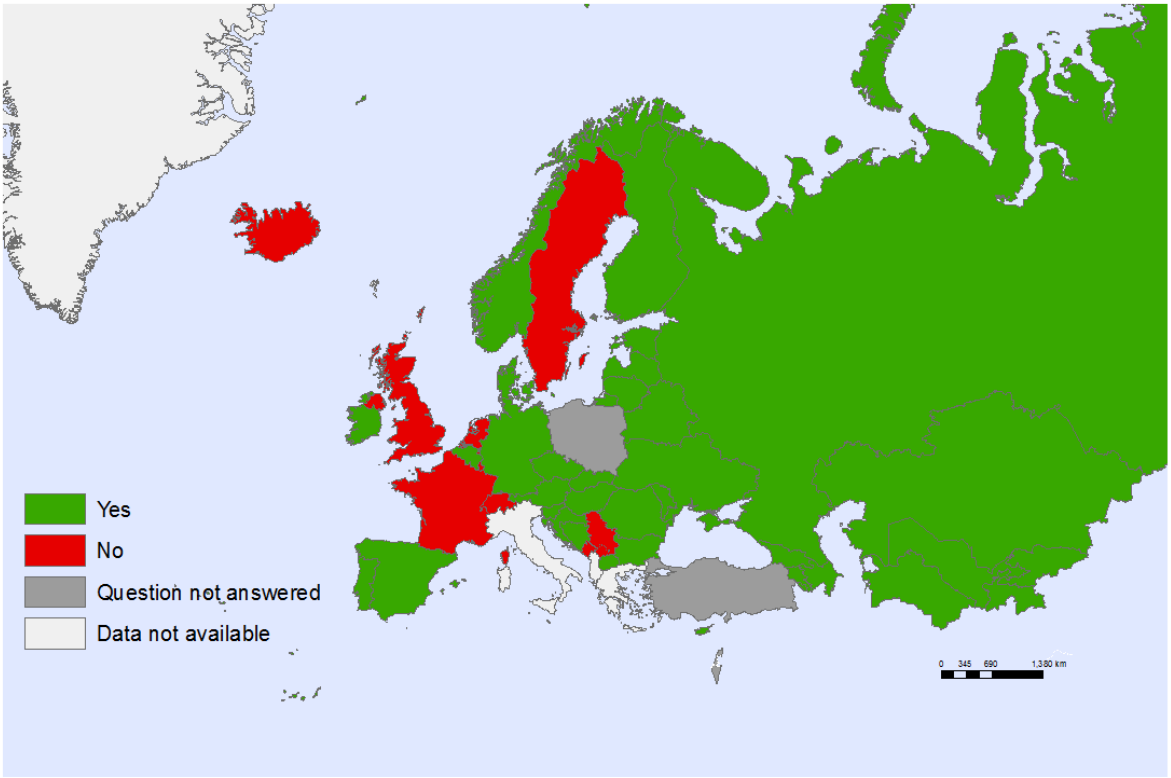


Fig 3.36. System in place to collect information on the number of children under 18 treated by a mental health professional (country grouping)

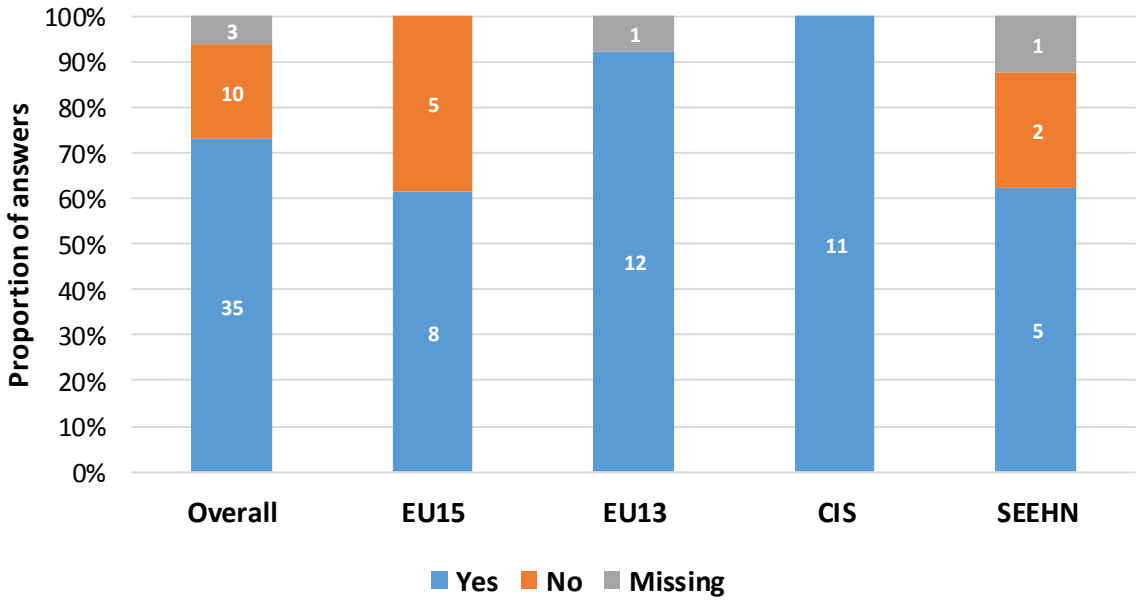
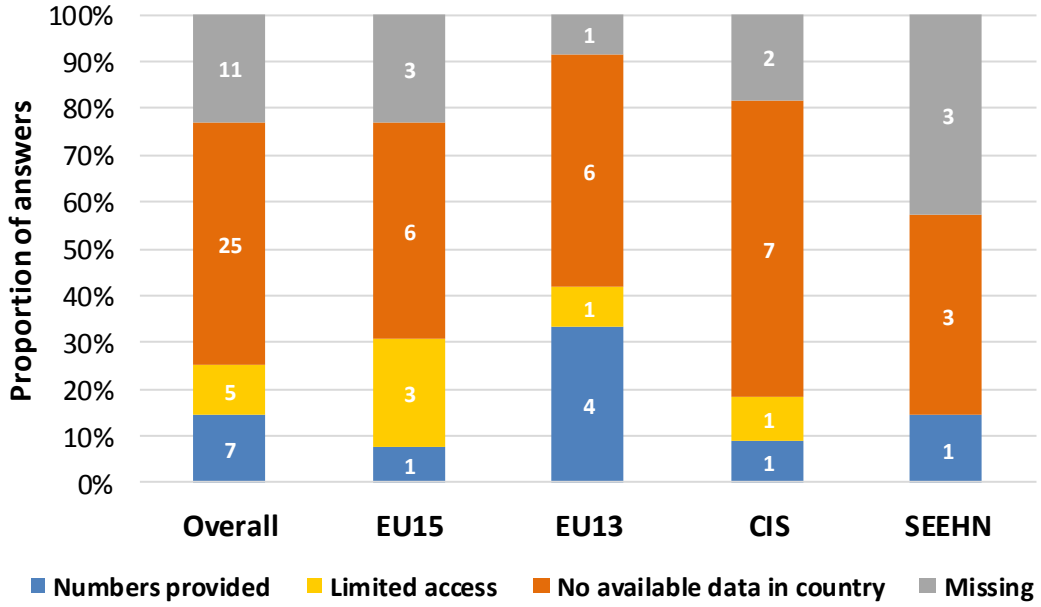


Fig. 3.37. Number of prescriptions for mental and behavioural disorders for children and adolescents under 18



Findings in perspective

Making children's lives visible

Disaggregation of data is an essential component of the European child and adolescent health strategy and of important global commitments around universal health coverage *(3)*, the SDGs *(4)* and the global strategy for women's, children's and adolescents' health 2016–2030 *(5)*. This means that to make "children's lives visible" in Europe and to support the global aim to "leave no one behind", countries will need to collect indicators disaggregated by income, sex, age, race, ethnicity, disability, location and migratory status, wherever data allow *(3)*.

Information collection is essential in order to target actions where they are needed, but national health management and information systems rarely capture data specific to adolescents; in addition, data are often compiled in ways that obscure adolescents' particular experiences through the use, for example, of 5–14 and 15–49 age bands *(6)*. Data about specific groups or issues help countries move towards implementing programmes that can create an improved reality for all children and adolescents. Member States of the WHO European Region have committed to doing this through the UNCRC, the SDGs and, particularly, through the regional child and adolescent health strategy.

Most of the Region's countries have areas in which data collection can be improved. By disaggregating data, countries can highlight the needs of neglected children in society and address inequality through actions such as preventive measures and targeted services or interventions. The 2017 data showed that disaggregation is happening for some areas (sex, for instance) more consistently than for others (such as migrant status). Tailored data collection or surveys and reporting for minority and at-risk groups, and disaggregating consistently in terms of sex, geographic location, and ethnic, socioeconomic or family background are important to improving the lives of all children.

Vulnerable children

Migrant and refugee children are particularly vulnerable groups for whom the survey showed insufficient data collection; the same affects data on children at risk for mental and physical suffering. Prominent areas in which data are missing include routine collection of health statistics on service provision to migrant and refugee children and evidence about institutionalized children: there is room for improvement for these

groups. The Models of Child Health Appraised (MOCHA) study *(7)* noted also that health services are often not provided for free to refugee and migrant children, which limits their access.

Children in institutional care represent another neglected population. Institutional care endangers children in terms of their overall well-being, with a higher risk of mortality, developmental delay *(8)* and insecure attachment *(9)*. The aspiration therefore has to be to minimize institutional care, and couple younger children (in particular) with foster families. At least 20 countries in the Region could not provide numbers of children under 3 in institutional care and there is a large variance in rates for the other countries, indicating either inconsistent documentation or different definitions. Most European countries also do not collect the number of underage migrant or refugee children in care of social services. Standardization and regular reporting are therefore regional priorities to be implemented in this area.

Documenting violence against children

Violence against children is a leading cause of health inequality and social injustice that is socioeconomically patterned *(11)*. While most of the Region's countries collect data on child maltreatment about every 1–6 years, such data often lack information about emotional abuse and neglect and, importantly, regularly do not include children as the main providers of information. There is also a need to increase knowledge about children's and adolescents' sexual/intimate-partner violence experience. Only a third of countries undertake nationally representative surveys on sexual/intimate-partner violence for children and adolescents, yet younger age is a consistent risk factor for experiencing intimate-partner violence, leading to subsequent violence *(10)*.

Eliminating violence against children is an important aspect of the subregional actions required to reduce inequity in Europe. In 2014, in parallel with the child and adolescent health strategy, Member States unanimously endorsed *Investing in children: the European child maltreatment prevention action plan 2015–2020 (11)*, which calls for Member States to develop comprehensive prevention action plans in line with key priorities of the SDGs. A handbook to support Member States in this area has been developed by the Regional Office *(12)*.

Collecting key data

The 2017 survey revealed a number of areas linked to the European child and adolescent health strategy for which there is a need for better data collection. One such area is maternal alcohol consumption, for which data are collected by only one third of the countries, despite its high risk of harm for the health of the mother *(13)* and fetus *(14)*. Prenatal alcohol exposure is a leading preventable cause of birth defects and neurodevelopmental abnormalities, and can cause a range of developmental, cognitive, and behavioural conditions that can appear at any time during childhood and may last a lifetime.

Mental health services for children and adolescents would also benefit from additional data collection that can support countries in planning and implementing programmes and policies relating to, for example, the number of prescriptions for children with mental and behavioural problems, for which many countries indicated that no data were collected (see also Chapter 8). More generally, disaggregated staffing levels by geographic area and information systems that separate out service provision for children and adolescents are areas that support improved national programming and for which additional investment is required (see also Chapter 4). The former is particularly low in EU Member States, with only seven EU countries reporting such data collection, while 15 countries in the CIS/SEEHN subregions report collecting data in this way.

These results should be interpreted with caution, since countries may have different mechanisms in place to ensure adequate provision across the country (through health insurance, for example). AA-HA! *(6)* provides a sample list of indicators to monitor adolescent mental health programmes that could be useful as countries work to measure and evaluate this type of intervention. Lack of data on prescriptions is critical, since documenting this can help avoid the potential danger of overprescription of psychotropic drugs for young people, as well as underserving child and adolescent populations.

Conclusion

Most countries disaggregate their coverage data by sex, followed by geographic area, and migrant status. Improvements in disaggregation by socioeconomic background and ethnic background can support interventions that better address inequalities and help countries make children's lives visible throughout their policy, programming and services. The 2017 survey showed a general need to collect data more systematically across a number of categories and highlighted a number of areas where efforts should be made to better document potential areas of neglect.

Table 3.1 includes all indicators used in this chapter, as well as data from the country profiles and the survey displayed by country with summary statistics.

Table 3.1. Collecting key data on all children: summary table

Country	Child and adolescent health coverage data analysed in terms of differences in rural, suburban and specific urban areas	Child and adolescent health coverage data alayed in terms of differences in socioeconomic background	Child and adolescent health coverage data alayed in terms of differences in ethnic background	Child and adolescent health coverage data alayed in terms of differences in migrant status	Child and adolescent health coverage data alayed in terms of differences in sex	Information systems separating out service provision to children	Information systems separating out service provision to adolescents	Collecting data on maternal alcohol consumption
Albania	–	–	–	–	–	–	–	–
Andorra	No	Yes	No	No	Yes	No	No	No
Armenia	Yes	Yes	No	No	Yes	Yes	Yes	No
Austria	Yes	No	No	No	Yes	Yes	No	No
Azerbaijan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Belarus	Yes	No	No	No	Yes	Yes	Yes	No
Belgium	–	–	–	–	–	–	–	No
Bosnia and Herzegovina	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Bulgaria	Yes	–	Yes	Yes	No	Yes	–	No
Croatia	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Cyprus	No	No	No	No	No	No	–	No
Czechia	No	No	No	No	No	Yes	Yes	Yes
Denmark	Yes	Yes	No	No	Yes	Yes	Yes	No
Estonia	Yes	Yes	Yes	No	Yes	No	No	No
Finland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
France	–	–	–	–	–	–	–	Yes
Georgia	Yes	No	No	No	Yes	Yes	Yes	Yes
Germany	No	No	No	No	Yes	Yes	Yes	Yes
Greece	–	–	–	–	–	–	–	–
Hungary	Yes	No	No	Yes	Yes	Yes	–	No
Iceland	No	No	No	No	No	–	–	Yes
Ireland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Israel	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Italy	–	–	–	–	–	–	–	–
Kazakhstan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kyrgyzstan	Yes	–	–	–	Yes	Yes	Yes	Yes
Latvia	Yes	Yes	Yes	No	Yes	Yes	–	Yes
Lithuania	Yes	No	No	No	Yes	Yes	Yes	No
Luxembourg	No	Yes	–	–	Yes	–	–	Yes
Malta	Yes	No	No	No	Yes	Yes	Yes	Yes
MKD[a]	Yes	No	No	No	Yes	Yes	Yes	No
Monaco	–	–	–	–	–	–	–	–
Montenegro	No	No	No	No	No	Yes	Yes	No
Netherlands	–	–	–	–	–	–	–	No
Norway	–	–	–	–	–	Yes	–	Yes
Poland	Yes	No	No	No	Yes	–	–	–
Portugal	Yes	No	No	No	Yes	Yes	Yes	Yes
Republic of Moldova	Yes	No	No	No	Yes	Yes	No	No
Romania	Yes	–	–	–	Yes	Yes	Yes	–
Russian Federation	Yes	Yes	No	Yes	Yes	Yes	Yes	No
San Marino	–	–	–	–	–	–	–	–
Serbia	No	No	No	No	No	No	No	No
Slovakia	Yes	No	No	No	No	Yes	Yes	No
Slovenia	–	–	–	–	Yes	–	–	No
Spain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Sweden	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Switzerland	No	Yes	No	No	Yes	–	–	No
Tajikistan	–	–	–	–	–	–	–	No
Turkey	No	No	No	Yes	Yes	–	–	No
Turkmenistan	Yes	No	No	No	Yes	–	–	Yes
Ukraine	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
United Kingdom	No	No	No	No	No	Yes	Yes	No
Uzbekistan	Yes	Yes	No	No	Yes	Yes	Yes	No

% Overall	Yes, No	63	25	40	42	23	58	27	54	73	17	69	8	56	10	38	58
% EU15	Yes, No	46	31	46	31	23	46	31	38	69	8	69	0	62	8	46	54
% EU13	Yes, No	77	15	23	54	23	62	15	69	69	31	69	15	54	8	31	54
% CIS	Yes, No	91	9	55	27	27	55	36	45	91	0	82	0	64	9	45	55
% SEEHN	Yes, No	75	25	25	50	38	50	38	50	63	38	88	13	63	25	0	88

P: planned.

[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

Table 3.1 contd

Country	Collecting data on children and adolescents <18 treated by a mental health professional	Collecting systematic information on health of refugee children	Providing all care for free for migrant children	Providing all care for free for refugee children	Statistics on the number of underage migrant or refugee children in care of social services	Statistics on the health services provided to at-risk groups, e.g., Roma or aboriginal children	Representative surveys on intimate-partner violence including young people <18	Frequency of nationally representative population-based surveys on child maltreatment	Country code
Albania	–	–	–	–	–	–	–	–	**ALB**
Andorra	No	No	Yes	No	Yes	No	No	Other	**AND**
Armenia	Yes	No	No	Yes	Yes	No	No	–	**ARM**
Austria	Yes	No	No	No	No	No	No	7–10 years	**AUT**
Azerbaijan	Yes	Yes	Yes	Yes	Yes	No	Yes	1–3 years	**AZE**
Belarus	Yes	No	Yes	Yes	No	No	No	1–3 years	**BLR**
Belgium	Yes	No	–	–	–	No	No	Never	**BEL**
Bosnia and Herzegovina	Yes	No	–	–	No	No	No	–	**BIH**
Bulgaria	Yes	No	Yes	Yes	Yes	No	No	–	**BGR**
Croatia	Yes	No	Yes	Yes	Yes	No	Yes	1–3 years	**HRV**
Cyprus	Yes	Yes	No	Yes	Yes	Yes	No	Other	**CYP**
Czechia	Yes	No	No	Yes	Yes	No	No	Other	**CZE**
Denmark	Yes	No	Yes	Yes	No	No	Yes	1–3 years	**DNK**
Estonia	Yes	No	Yes	Yes	Yes	No	Yes	4–6 years	**EST**
Finland	Yes	No	Yes	Yes	No	No	Yes	Never	**FIN**
France	No	–	–	–	–	–	No	Other	**FRA**
Georgia	Yes	No	Yes	Yes	Yes	No	No	Never	**GEO**
Germany	Yes	Yes	Yes	Yes	No	No	Yes	1–3 years	**DEU**
Greece	–	–	–	–	–	–	–	–	**GRC**
Hungary	Yes	No	Yes	Yes	Yes	No	No	1–3 years	**HUN**
Iceland	No	–	–	–	–	No	Yes	–	**ISL**
Ireland	Yes	Yes	Yes	Yes	Yes	Yes	No	1–3 years	**IRL**
Israel	–	Yes	No	No	Yes	Yes	Yes	1–3 years	**ISR**
Italy	–	–	–	–	–	–	–	–	**ITA**
Kazakhstan	Yes	Yes	Yes	No	–	Yes	No	1–3 years	**KAZ**
Kyrgyzstan	Yes	No	Yes	Yes	No	No	No	1–3 years	**KGZ**
Latvia	Yes	Yes	No	No	Yes	No	Yes	Other	**LVA**
Lithuania	Yes	No	–	–	–	No	No	–	**LTU**
Luxembourg	No	No	Yes	Yes	Yes	No	Yes	4–6 years	**LUX**
Malta	Yes	No	Yes	Yes	Yes	No	No	Never	**MLT**
MKD[a]	Yes	Yes	Yes	Yes	Yes	Yes	No	Other	**MKD[a]**
Monaco	–	–	–	–	–	–	–	–	**MCO**
Montenegro	No	No	Yes	Yes	Yes	No	Yes	Other	**MNE**
Netherlands	No	Yes	Yes	Yes	–	–	–	4–6 years	**NLD**
Norway	Yes	Yes	–	–	Yes	No	Yes	Other	**NOR**
Poland	–	Yes	No	Yes	Yes	–	No	–	**POL**
Portugal	Yes	No	Yes	Yes	Yes	Yes	No	–	**PRT**
Republic of Moldova	Yes	No	–	–	No	No	Yes	1–3 years	**MDA**
Romania	Yes	No	P	–	No	No	No	–	**ROU**
Russian Federation	Yes	No	Yes	Yes	No	No	No	Other	**RUS**
San Marino	–	–	–	–	–	–	–	–	**SMR**
Serbia	No	No	Yes	Yes	No	No	No	4–6 years	**SRB**
Slovakia	Yes	Yes	No	No	Yes	No	No	–	**SVK**
Slovenia	Yes	–	–	–	–	No	–	–	**SVN**
Spain	Yes	No	–	–	No	No	Yes	–	**ESP**
Sweden	No	No	Yes	Yes	No	No	Yes	4–6 years	**SWE**
Switzerland	No	No	No	–	No	No	No	–	**CHE**
Tajikistan	Yes	Yes	–	–	No	Yes	No	Never	**TJK**
Turkey	–	–	–	–	–	–	No	–	**TUR**
Turkmenistan	Yes	No	Yes	Yes	No	No	No	4–6 years	**TKM**
Ukraine	Yes	Yes	Yes	Yes	Yes	Yes	No	1–3 years	**UKR**
United Kingdom	No	Yes	Yes	Yes	Yes	Yes	Yes	1–3 years	**GBR**
Uzbekistan	Yes	No	–	–	–	–	No	–	**UZB**

% Overall	Yes, (P), No	73	21	31	60	54	3	19	56	13	48	33	19	71	35	63	13	1–3 years
% EU15	Yes, (P), No	62	38	31	62	69	0	8	69	8	31	46	23	62	62	38	6	4–6 years
% EU13	Yes, (P), No	92	0	31	62	38	8	38	62	15	77	8	8	85	23	69	1	7–10 years
% CIS	Yes, (P), No	100	0	36	64	64	0	9	55	9	27	55	27	64	18	82	8	Other
% SEEHN	Yes, (P), No	63	25	25	75	50	13	13	50	13	50	50	25	75	38	63	5	Never

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4. Health systems and quality of care

Introduction

This chapter summarizes indicators related to health systems and quality of care for child and adolescent health, focusing on the evidence for strengthening people-centred health systems and increasing public health capacity to improve child and adolescent health and development. The indicators are those relevant to the European child and adolescent health strategy, especially to priority 2 on transforming the governance of child and adolescent health, with an emphasis on supporting growth during adolescence.

Key findings

- About half of the countries have mixed-care systems in which general practitioners (GPs) and paediatricians provide primary care for children; in 10 countries, it is only paediatricians.
- There is marked variability in staffing levels in health care for children and adolescents between urban and rural settings; half of the countries collect this information.
- A quarter of countries do not have a system in place to train health professionals in adolescent health.
- A third of countries do not perform regular perinatal death audits.
- Essential drugs lists and paediatric formulations for essential drugs are not widely available across the Region.
- About two thirds of countries have a policy to facilitate transition from paediatric to adult care to ensure the continuum of care.

Findings

Health systems in the Region have different care models (Fig. 4.1) and staffing levels (Fig. 4.2–4.4) to provide services for children and adolescents (an explanation of how the boxplot figures are presented is provided in Annex 1 (see also Fig. A1.5)).

Primary care models for children

Fig. 4.1, built from the MOCHA study and other sources *(1–12)*, shows that most countries in the Region (42%) have a mixed primary care system (that is, one in which GPs and paediatricians play significant roles in primary care for children), while 34% and 19% have GP-led and paediatrician-led primary child care systems, respectively.

Fig. 4.1. Models of primary care systems for children

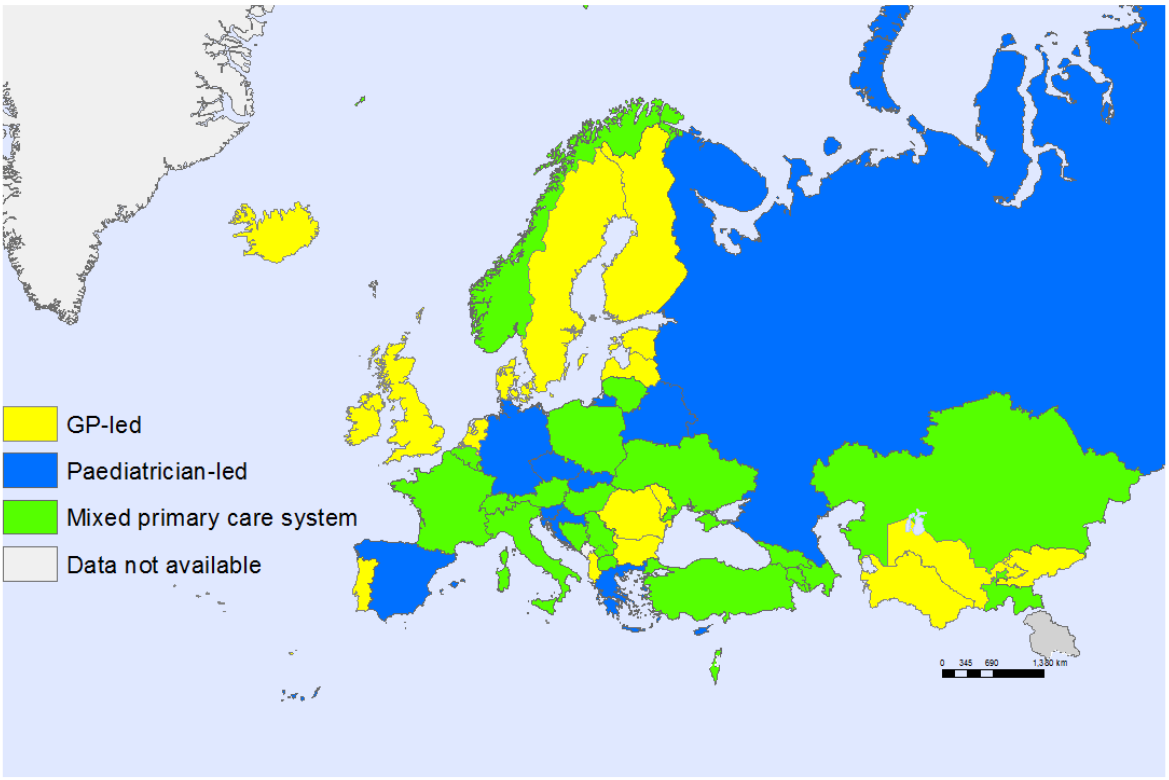


Fig. 4.2. GPs per 100 000 population, by country grouping

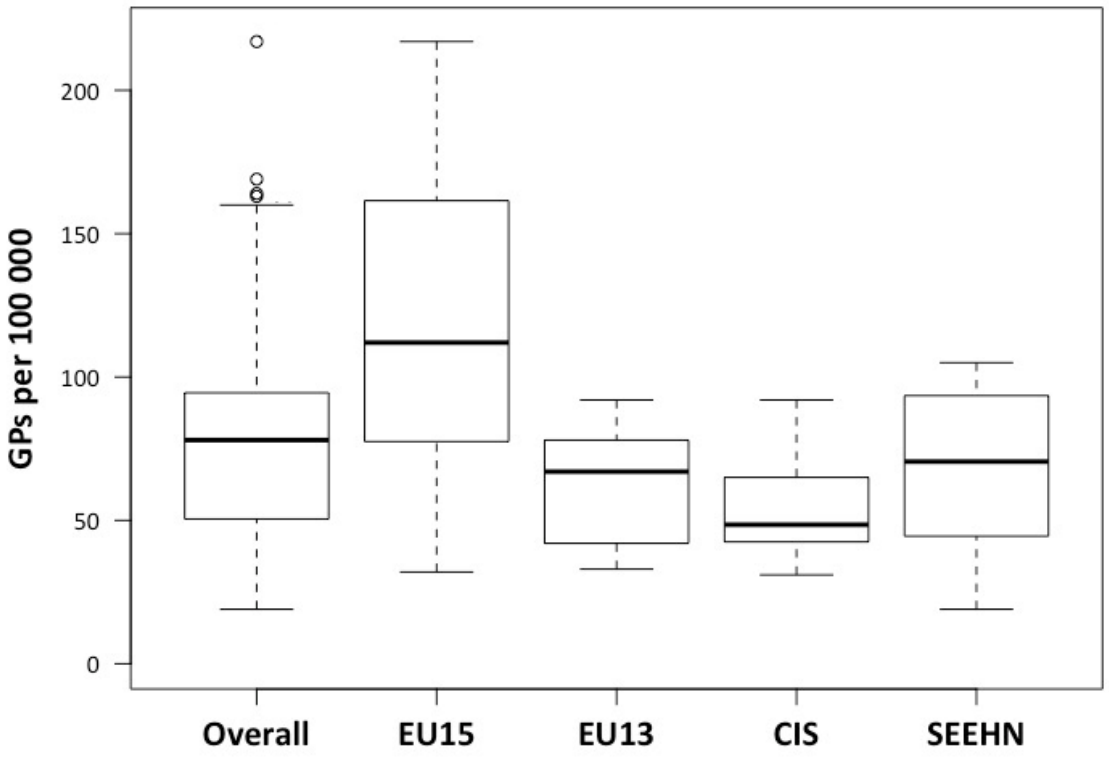


Fig. 4.3. Paediatricians per 100 000 population, by country grouping

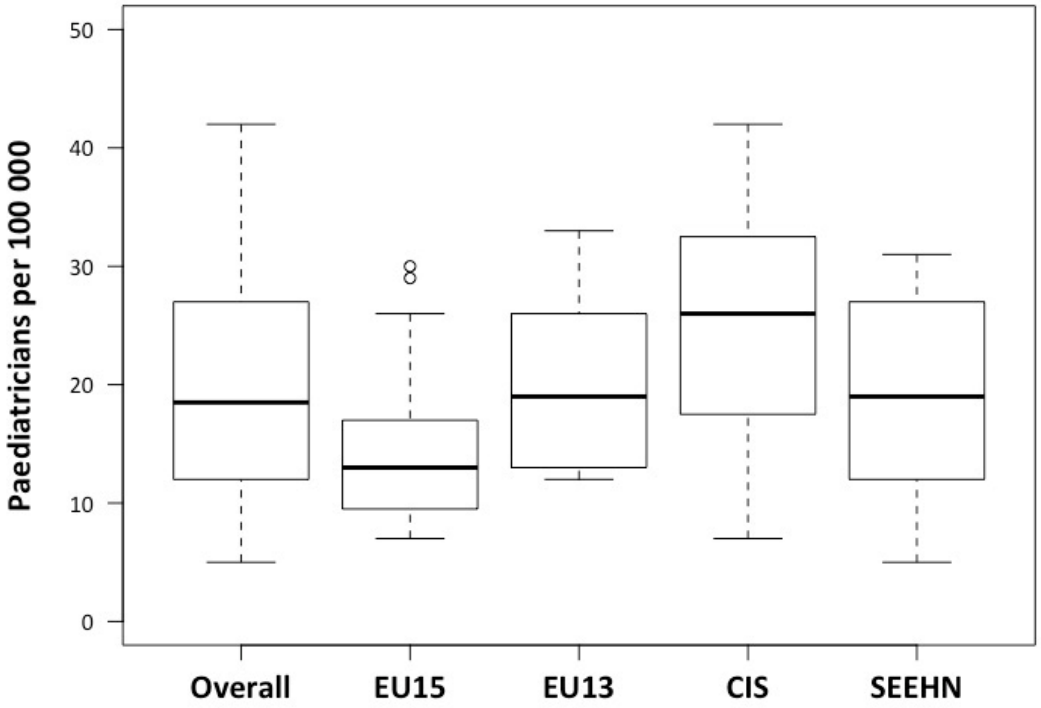
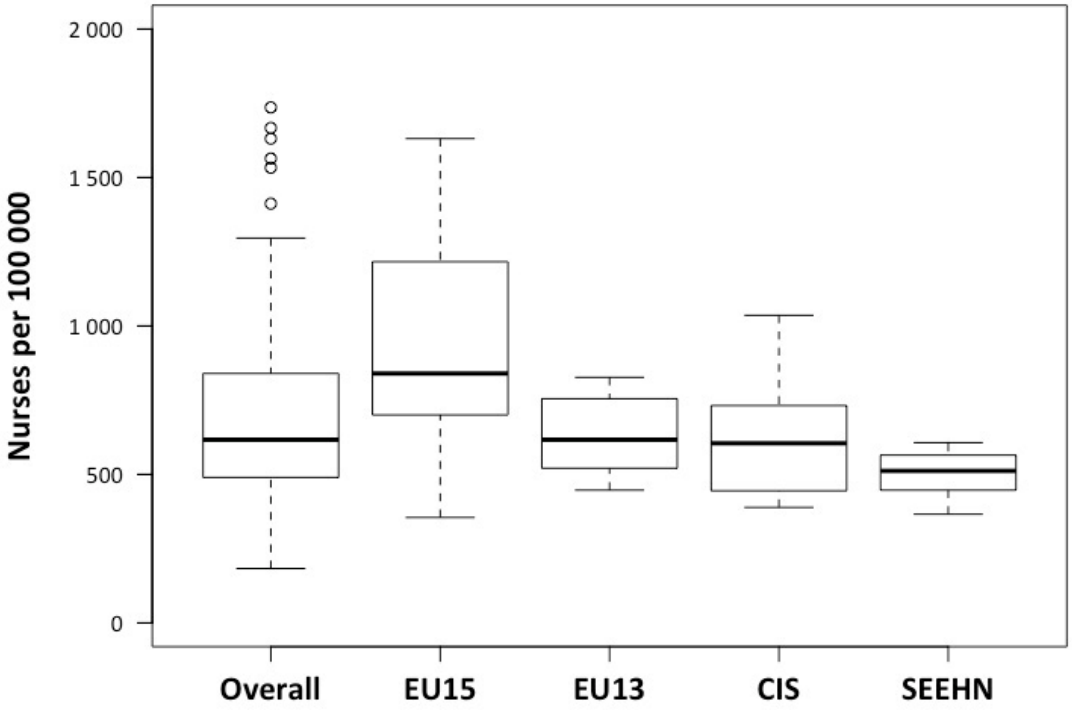


Fig. 4.4. Nurses per 100 000 population, by country grouping



Staffing

Staffing levels

The Region exhibits a wide range of staffing levels in the health sector, with country groupings reflecting this difference. Data include the numbers of GPs, paediatricians and nurses per 100 000 population for countries in the Region. The number of GPs per 100 000 population (Fig. 4.2) ranges from a low of 19 (Bosnia and Herzegovina) to a high of 217 (Portugal), with a subregional average of 83. Paediatricians per 100 000 population (Fig. 4.3) range from five (Albania) to 42 (Azerbaijan), with a subregional average of 19. The number of nurses per 100 000 population (Fig. 4.4) in the Region ranges from 183 (Turkey) to a high of 1736 (Switzerland), with a subregional average of 760. There are more GPs in EU15 countries, while CIS countries have higher numbers of paediatricians and nurses. SEEHN countries have the lowest number of nurses.

Staffing gaps

The European Region is split in relation to collecting data about gaps between staffing levels for child and adolescent health services (Fig. 4.5): 23 countries (48%) reported that they do, and 20 (47%) that they do not. Data collection disaggregated by urban/rural or capital/non-capital settings is weakest in EU countries, with only seven reporting data collection about gaps in staffing levels, against 15 in the CIS and SEEHN subregions (Fig. 4.6).

Fig. 4.5. Data about gaps between staffing levels for child and adolescent health services disaggregated by urban/rural setting, and capital/non-capital

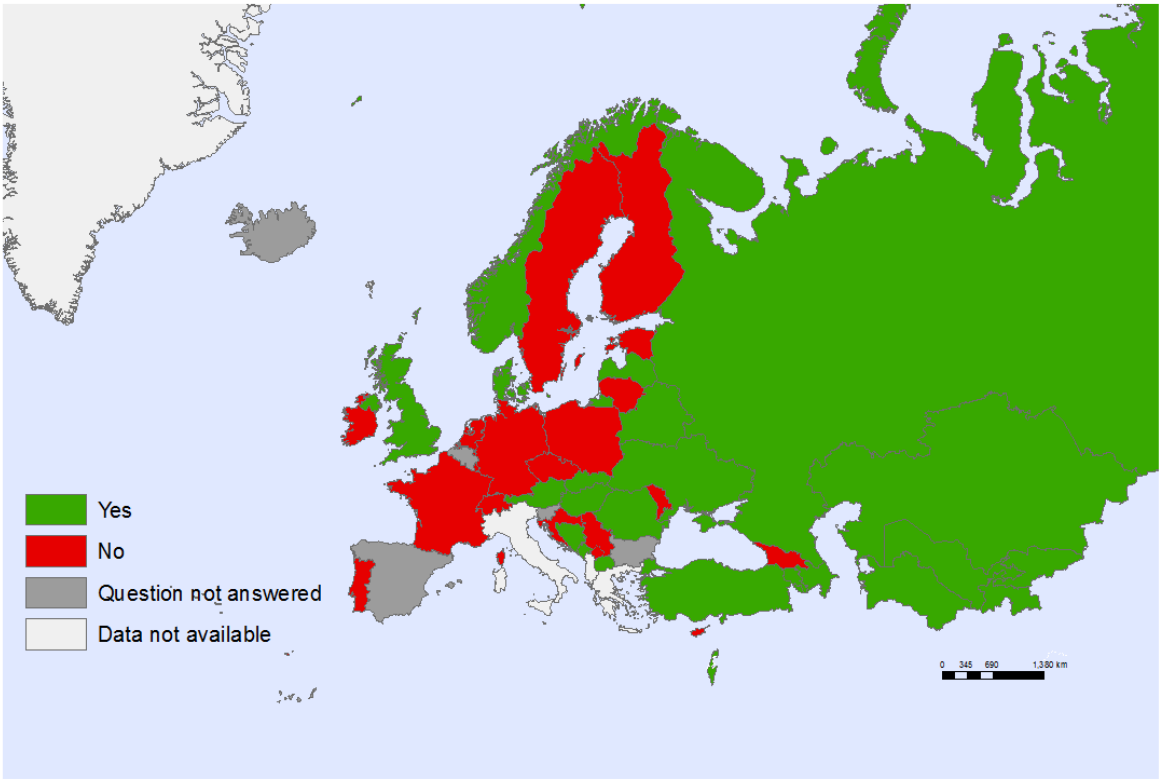
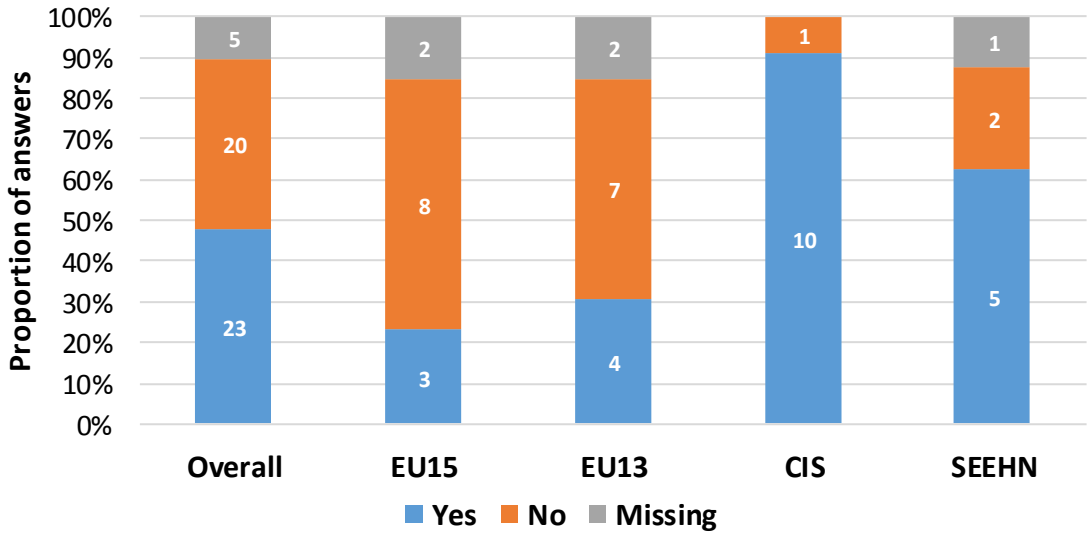


Fig. 4.6. Collecting data about gaps between staffing levels



Continuing education on adolescent health

Although many countries in the Region (28 (58%)) reported that they have a mechanism for continuous professional education in adolescent health, 11 (23%)) do not have such a system in place (including two in each country grouping) (Fig. 4.7 and 4.8).

Fig. 4.7. Mechanism for continuous education for health professionals on adolescent health (countries)

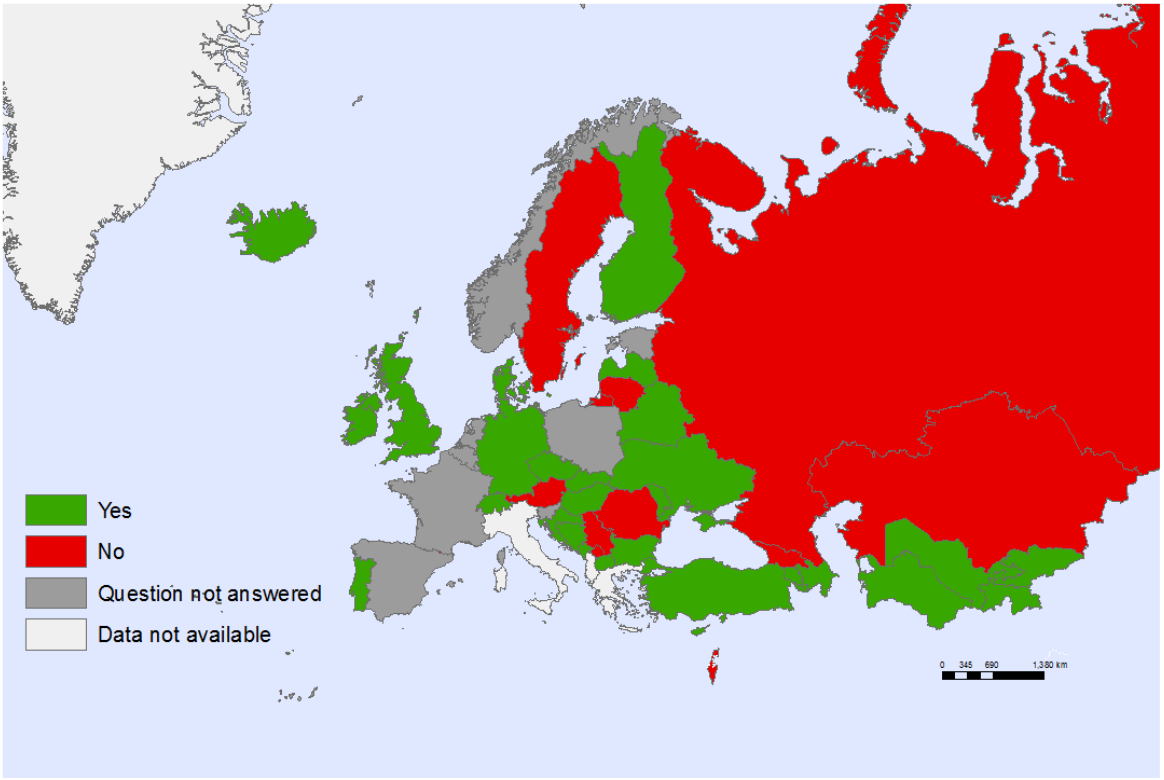
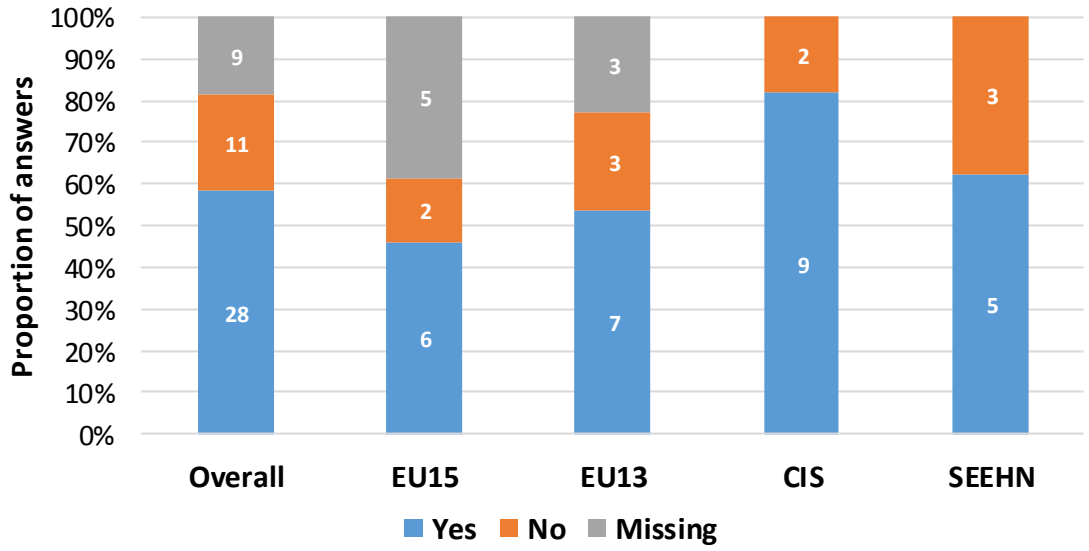


Fig. 4.8. Mechanism for continuous education for health professionals for adolescent health (country grouping)



Services

Services without pay

Twenty-eight countries (58%) gave adolescents access to all health services without paying, while 18 (39%) reported that they did not (Fig. 4.9). As Fig. 4.10 shows, EU15 countries were divided on adolescent access to free services, while most other country groupings offer free access.

Fig. 4.9. Adolescents having access to all services without paying (countries)

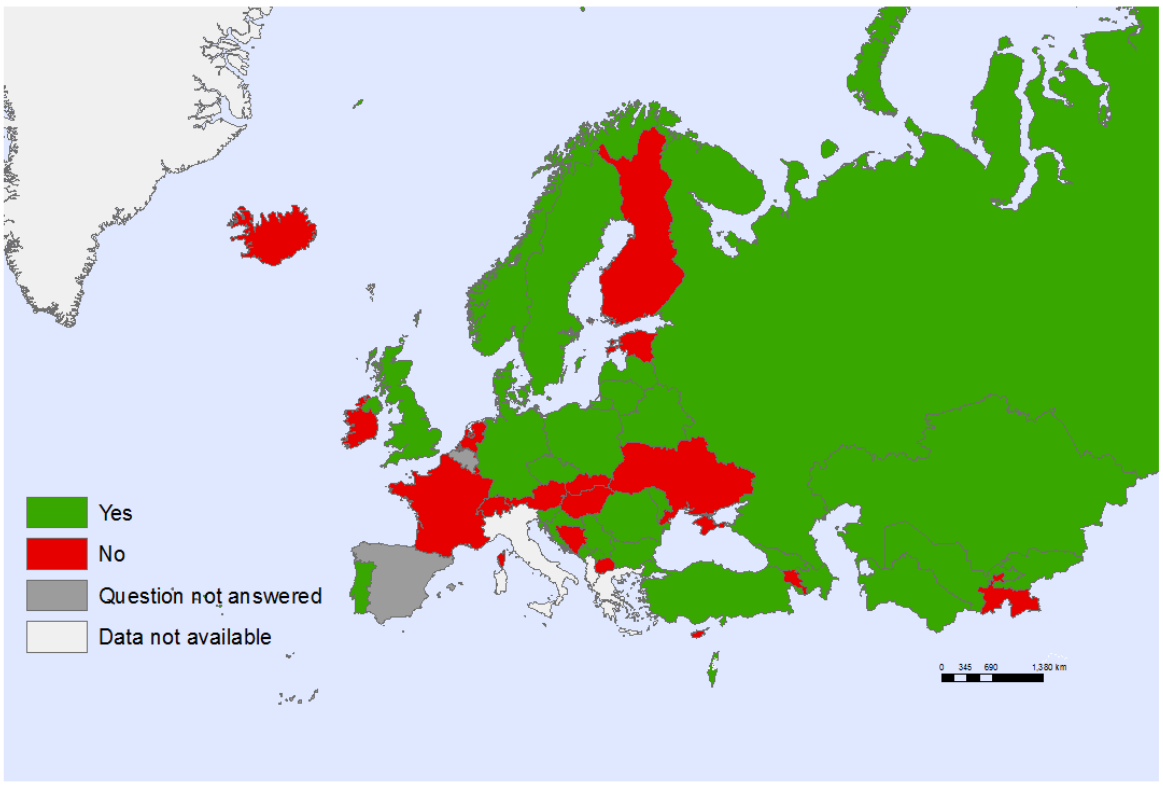
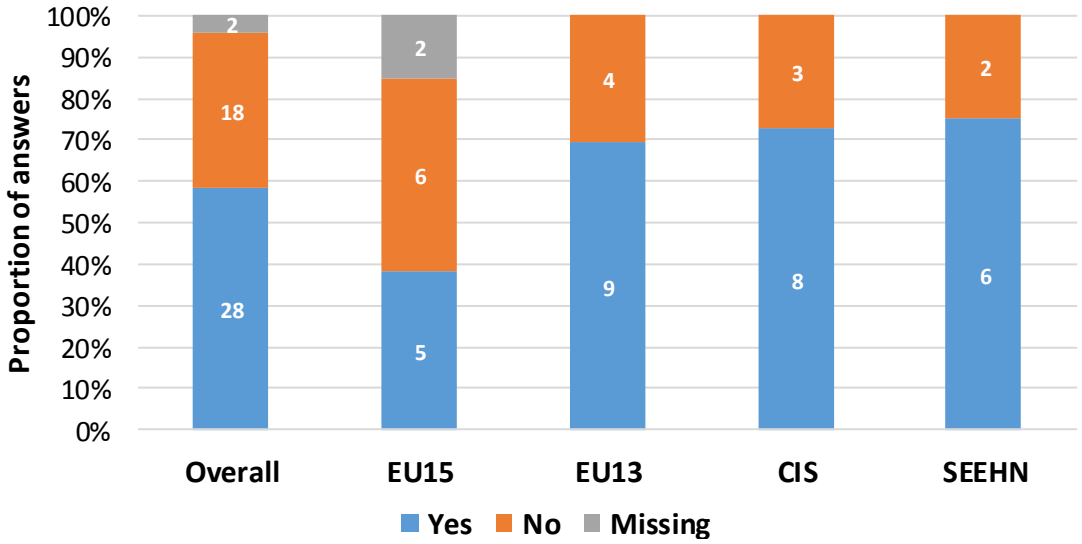


Fig. 4.10. Adolescents having access to all services without paying (country grouping)

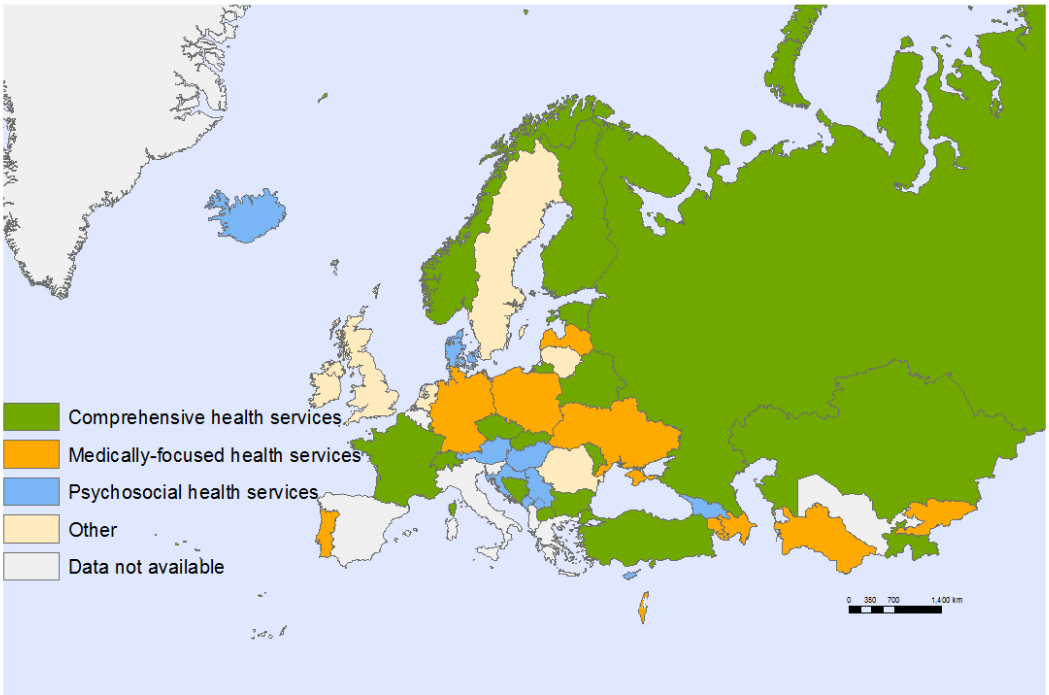


Types of adolescent-friendly health services

When questioned about types of adolescent-friendly services, 44 countries (92%) provided qualitative responses. Answers were grouped into four main areas: comprehensive, medically-focused, psychosocial/preventative, and other services.

In terms of comprehensive services, 17 countries reported offering a combination of medical, psychosocial and preventative services that included general medical care, counselling, school-based services, paediatrics, and sexual and reproductive health services. Eleven reported offering only medically-focused health services, with an emphasis on sexual and reproductive health, and hospital-based and general medical services. Ten offered psychosocial/preventative-type health services that focused on counselling and school-based health services. The remaining six reported offering other types of services, such as focusing on influencing legislation and policies to address the need for adolescent-friendly health services, the development of a quality accreditation process, laws on the rights of the child, youth-friendly models, a youth insurance act, health reform and information on adolescent-friendly health services. Fig. 4.11 provides geographic representation of these data.

Fig. 4.11. Types of adolescent-friendly health services



Transition from paediatric to adult services

Thirty countries (63%) reported having a policy for the transition from paediatric to adult services for continuing care patients, while 13 (27%) did not have a policy in place. Fig. 4.12 and 4.13 show the geographic spread of these data, highlighting that CIS countries have the highest proportion of countries with such a policy in place.

Fig. 4.12. Laws, regulations or policies on the transition from paediatric to adult services for children who need continuing care (countries)

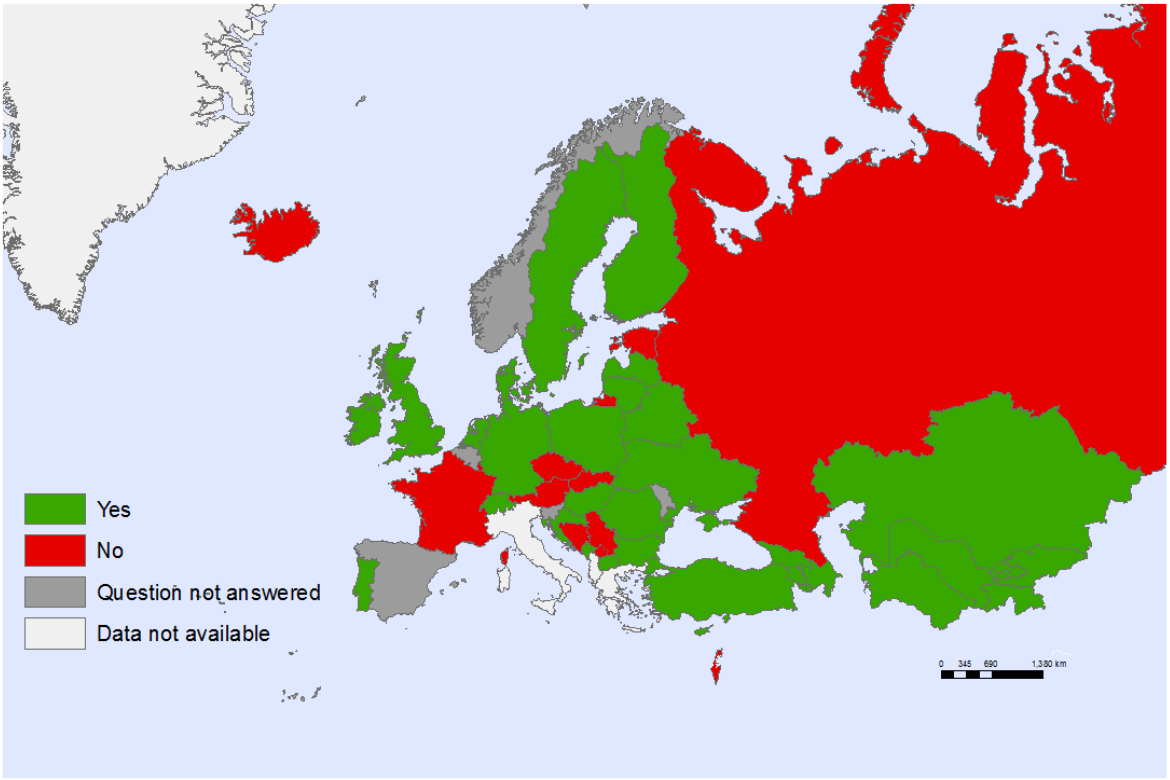
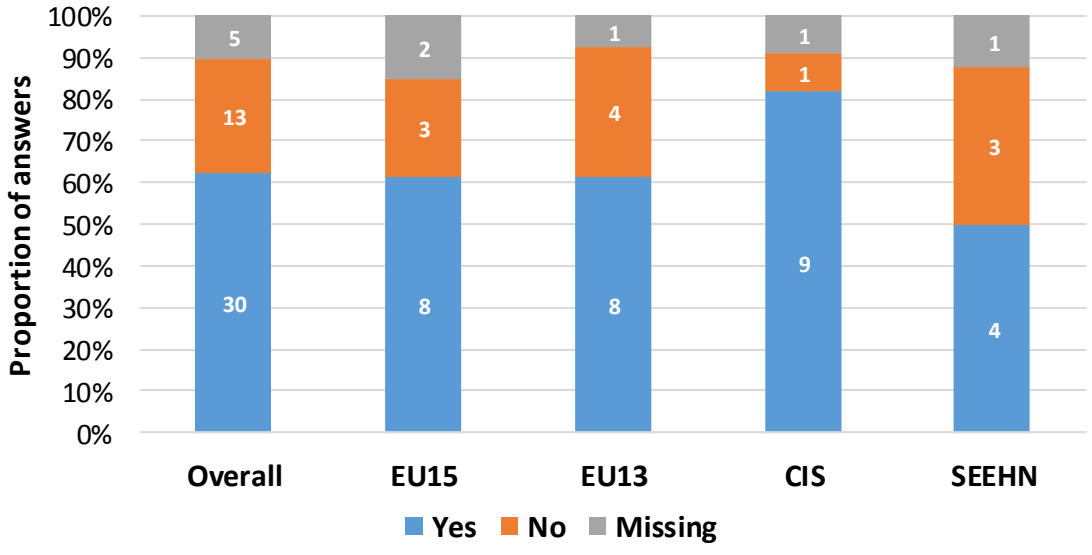


Fig. 4.13. Laws, regulations or policies on the transition from paediatric to adult services for children who need continuing care (country grouping)



Quality of care

Mechanisms for assuring quality of care

Forty countries (83%) reported that they have a mechanism in place to assure the quality of care of child and adolescent services (such as a quality improvement or assurance programme), while six did not have such a mechanism in place. Fig. 4.14 and 4.15 show that all countries in the latter category are in the EU.

Fig. 4.14. Mechanism for assuring quality of care for children and/or adolescents (countries)

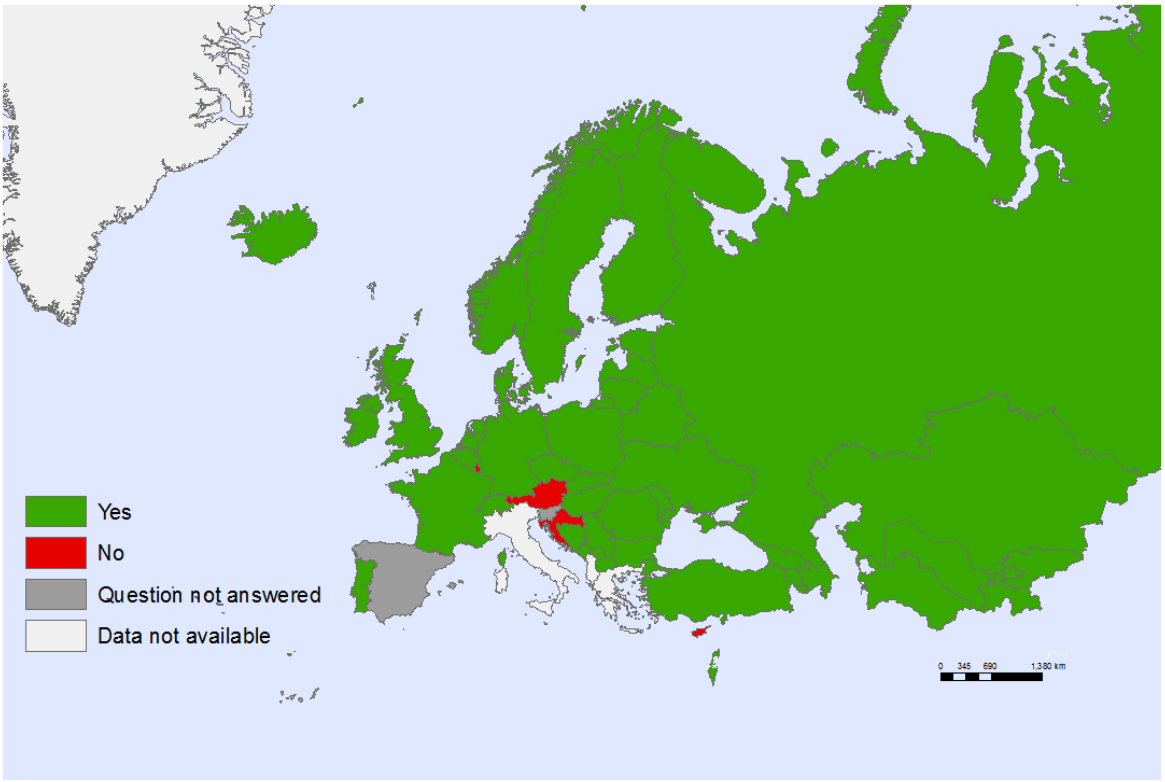
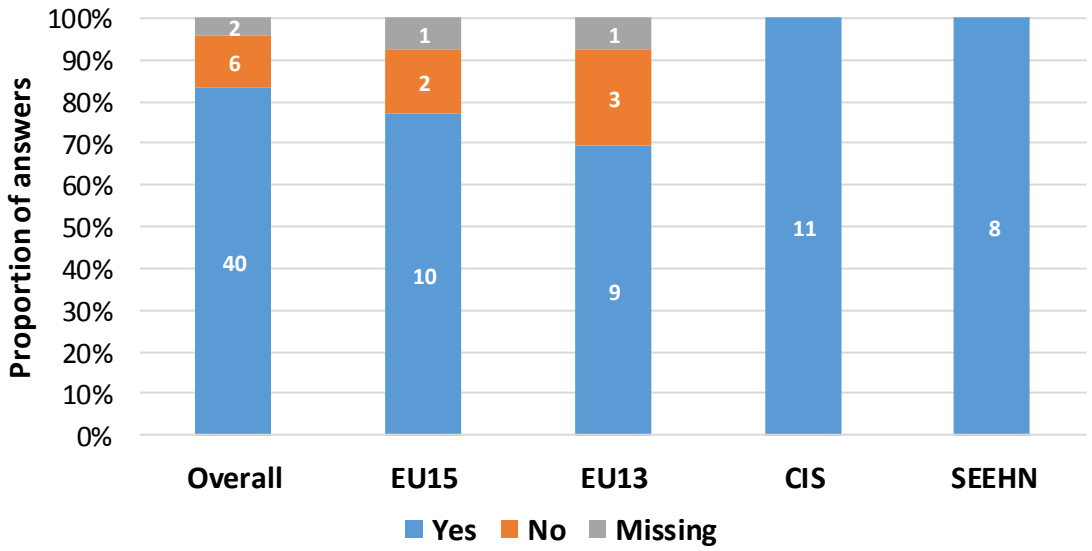


Fig. 4.15. Mechanism for assuring the quality of care for children and/or adolescents (country grouping)



Perinatal death audits

Twenty-seven countries (56%) reported an obligation to perform regular perinatal death audits, while 16 (33%) do not. Fig. 4.16 and 4.17 show that EU15 countries are less likely to perform these than any other country grouping.

Fig. 4.16. Legal obligation to perform regular perinatal death audits in hospitals (countries)

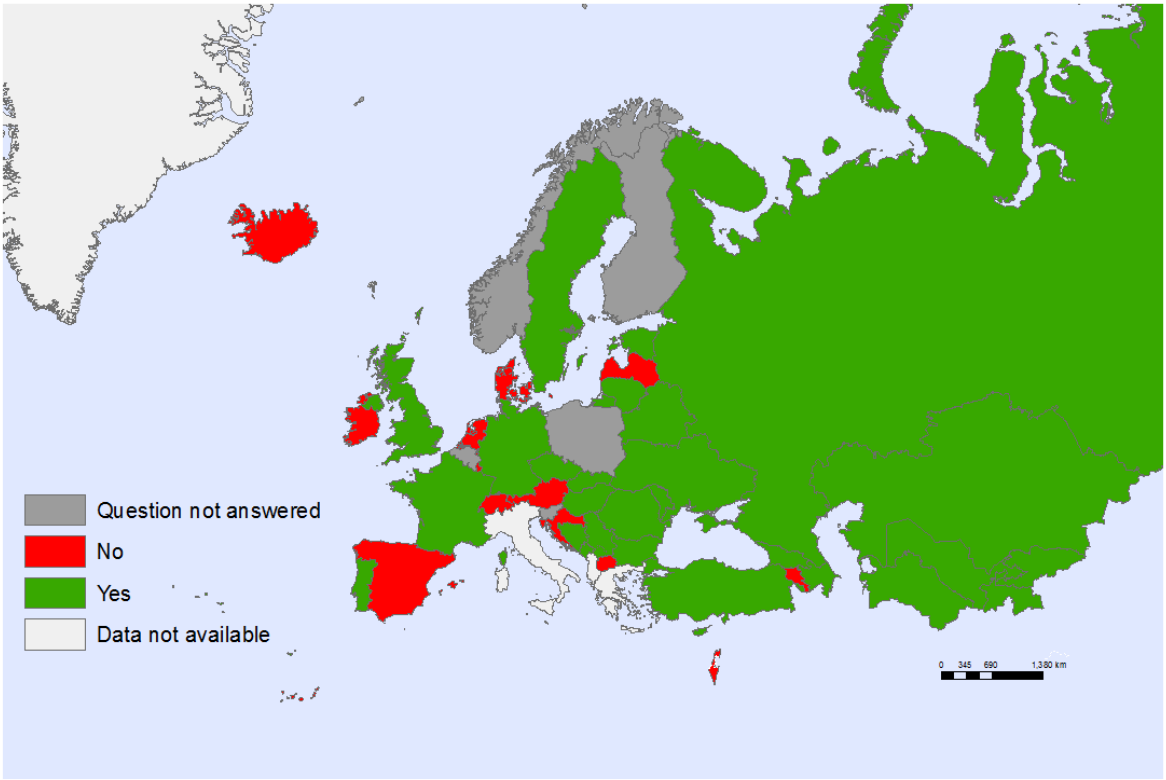
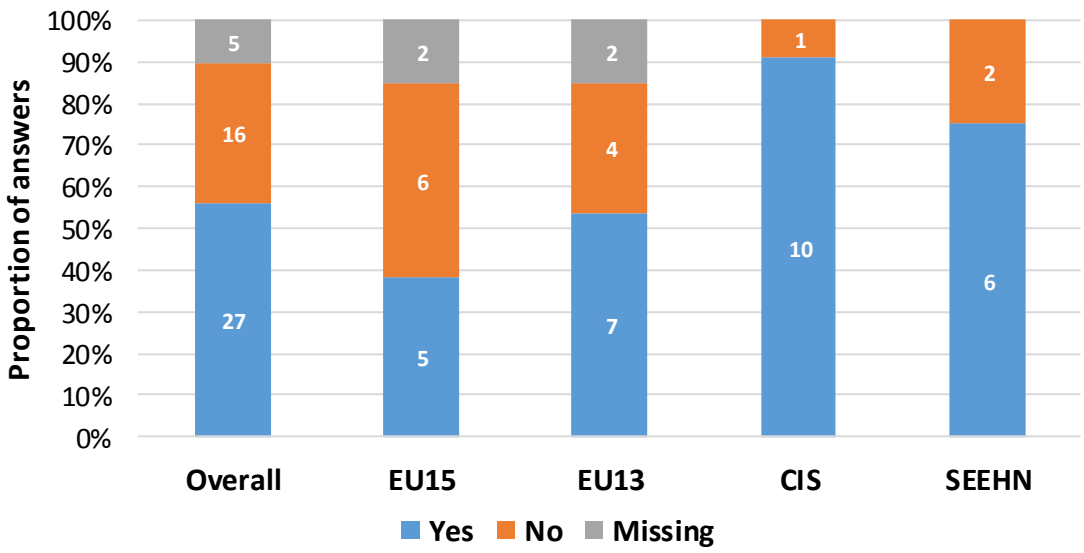


Fig. 4.17. Legal obligation to perform regular perinatal death audits in hospitals (country grouping)



Hospitalization rates

Hospitalization rates vary widely within the Region and by age group. Rates per 1000 for children under 18 by age group were reported. The lowest rate for children under 5 (Fig. 4.18) was 25 (Portugal) and the highest 570 (Republic of Moldova), with a subregional average of 252. In the 5–9 years group (Fig. 4.19), the lowest rate was 15 (Norway) and the highest 188 (Lithuania), with a subregional average of 83. The lowest rate in the 10–14 years grouping (Fig. 4.20) was 16 (Norway) and the highest 154 (Lithuania), with a subregional average of 74. In the 0–14 years group (Fig. 4.21), the lowest rate was 32 (Norway) and the highest 275 (Lithuania), with a subregional average of 135. For the 15–18 years group (Fig. 4.22), the lowest rate was 22 (Norway) and the highest 185 (Lithuania), with a subregional average of 89.

Most countries reported on the 0–14 category (see Table 4.1), but about half could not provide data for other groups. Values for these indicators are missing from between 19 to 26 countries, depending on the age category.

Fig. 4.18. Hospitalization rates, under 5 years, country grouping

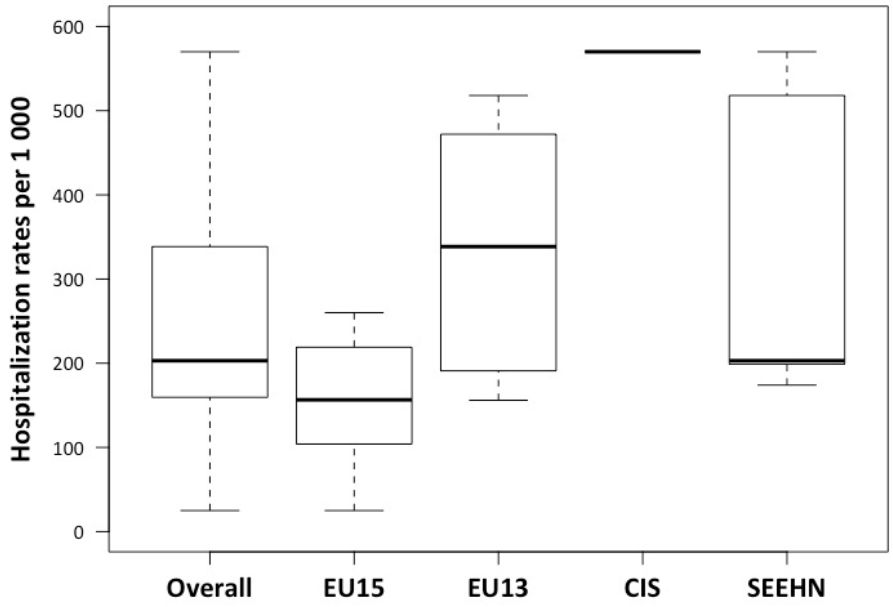


Fig. 4.19. Hospitalization rates, 5–9 years, country grouping

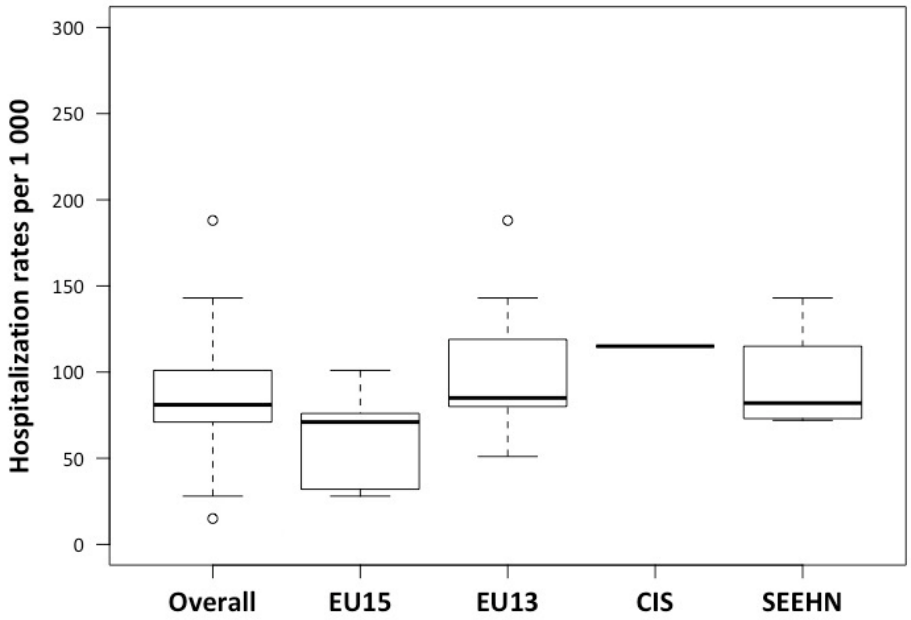


Fig. 4.20. Hospitalization rates, 10–14 years, country grouping

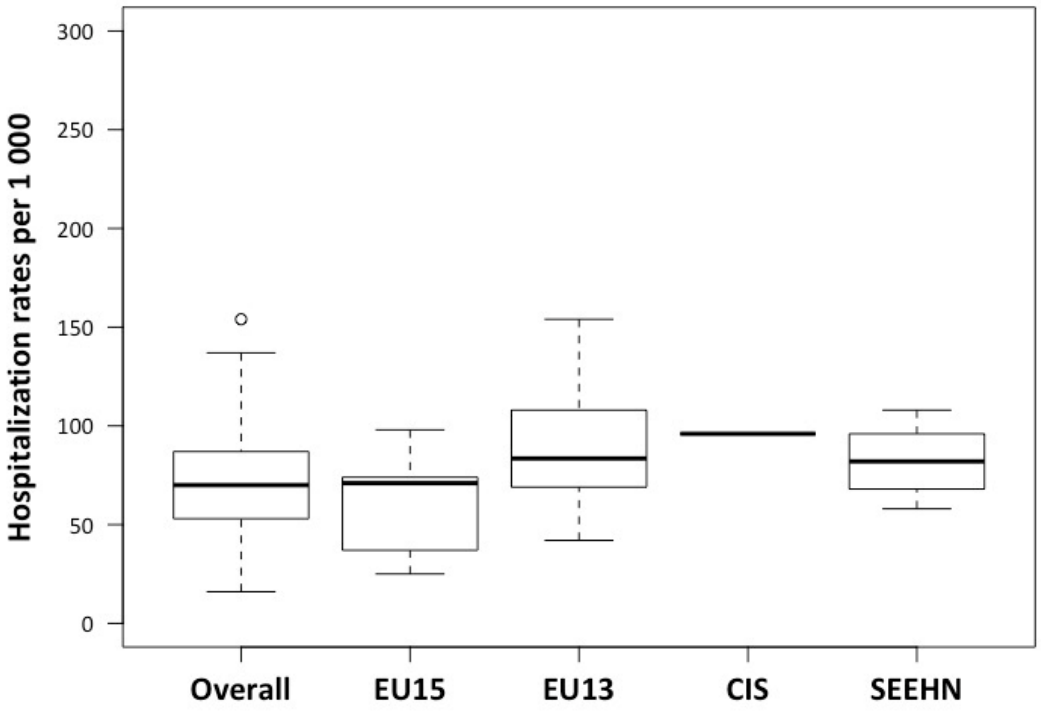


Fig. 4.21. Hospitalization rates, 0–14 years, country grouping

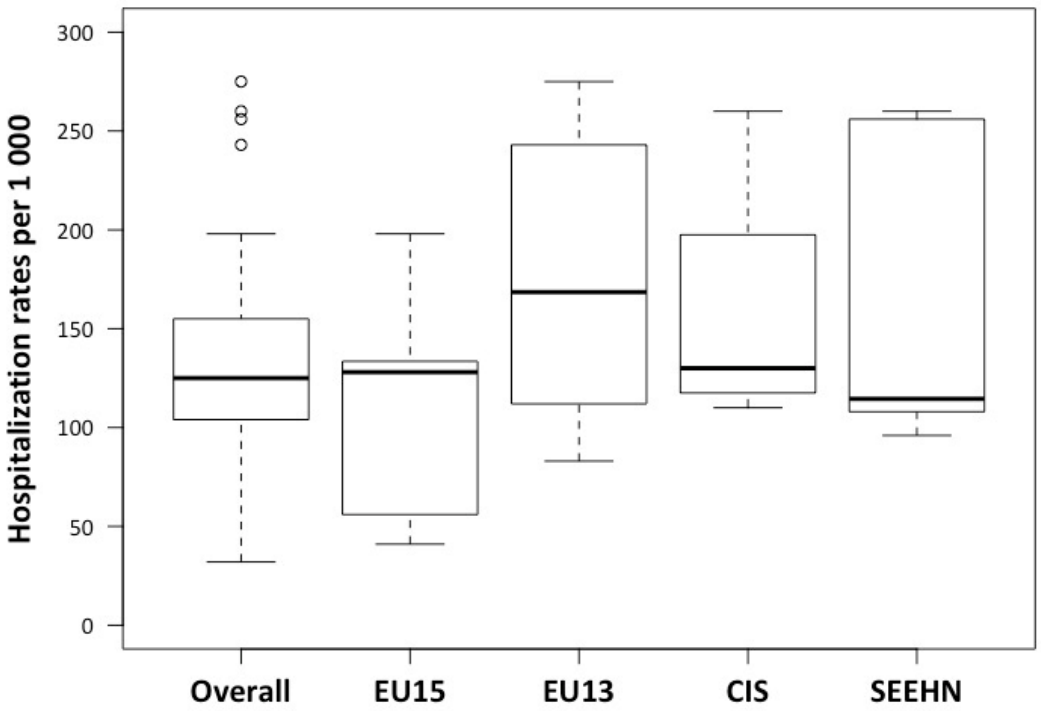
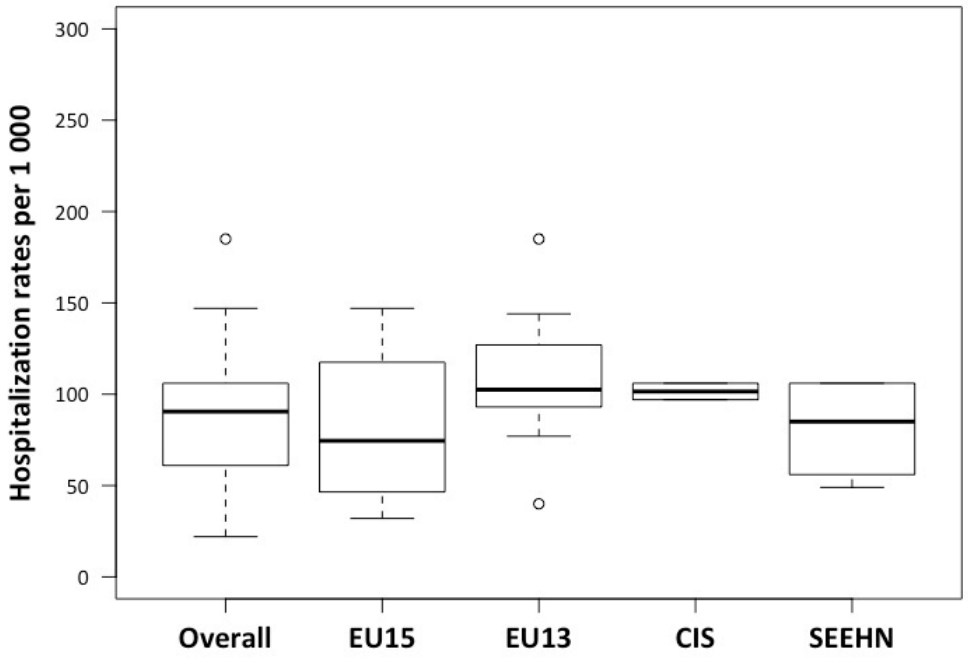


Fig. 4.22. Hospitalization rates, 15–18 years, country grouping



Medicines for children

Paediatric essential drugs list

Fifteen countries (31%) reported having adopted a paediatric essential drugs list, while 25 (52%) have not done so (Fig. 4.23). Fig. 4.24 shows that CIS countries tend to have a paediatric essential drugs list, while EU countries more commonly do not have such lists. Of the 15 countries that reported having adopted a paediatric essential drugs list, 13 had made it public and two had not (Fig. 4.25). Most countries that make the list public are in the CIS group (Fig. 4.26).

Fig. 4.23. Have adopted a paediatric essential drugs list (countries)

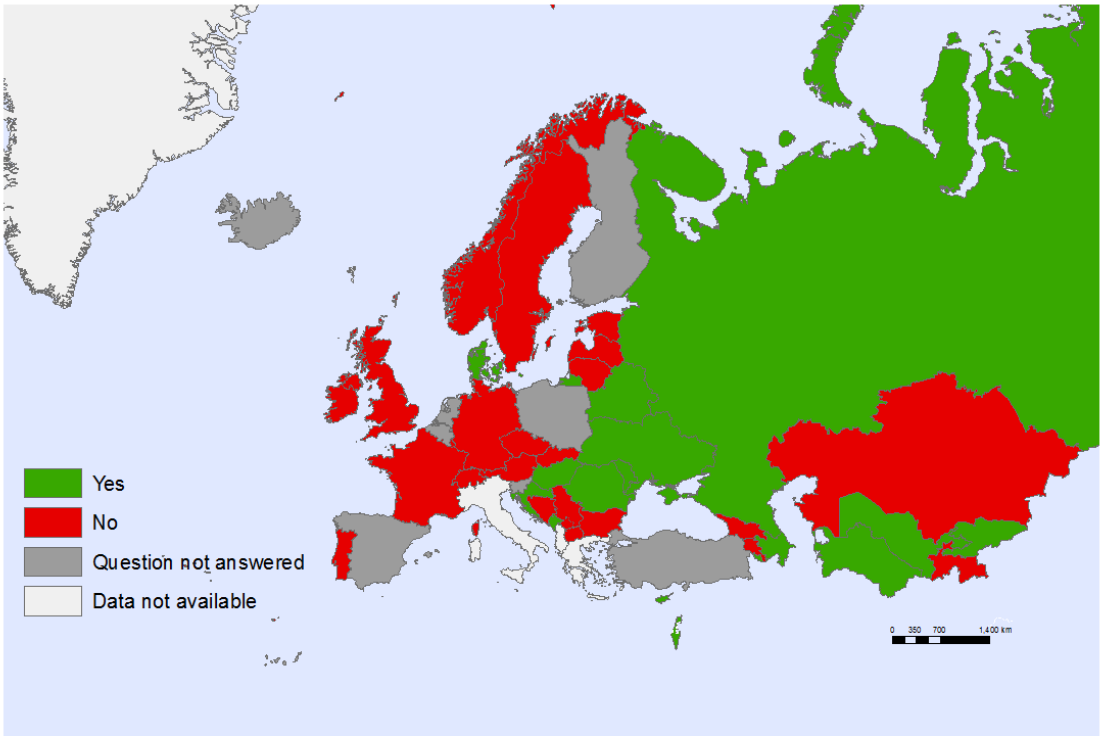


Fig. 4.24. Have adopted a paediatric essential drugs list (country grouping)

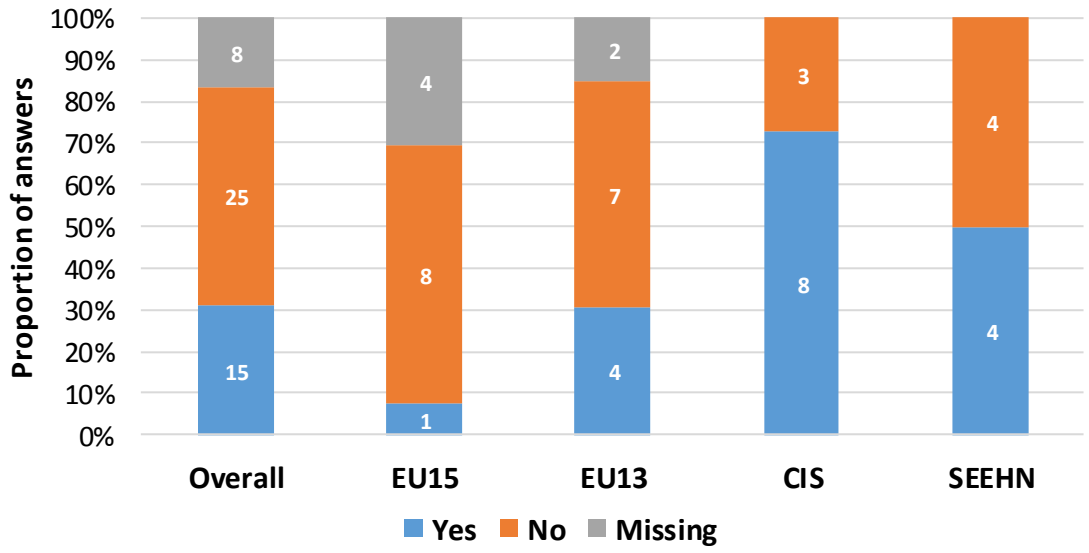


Fig. 4.25. Paediatric essential drugs list is public (countries)

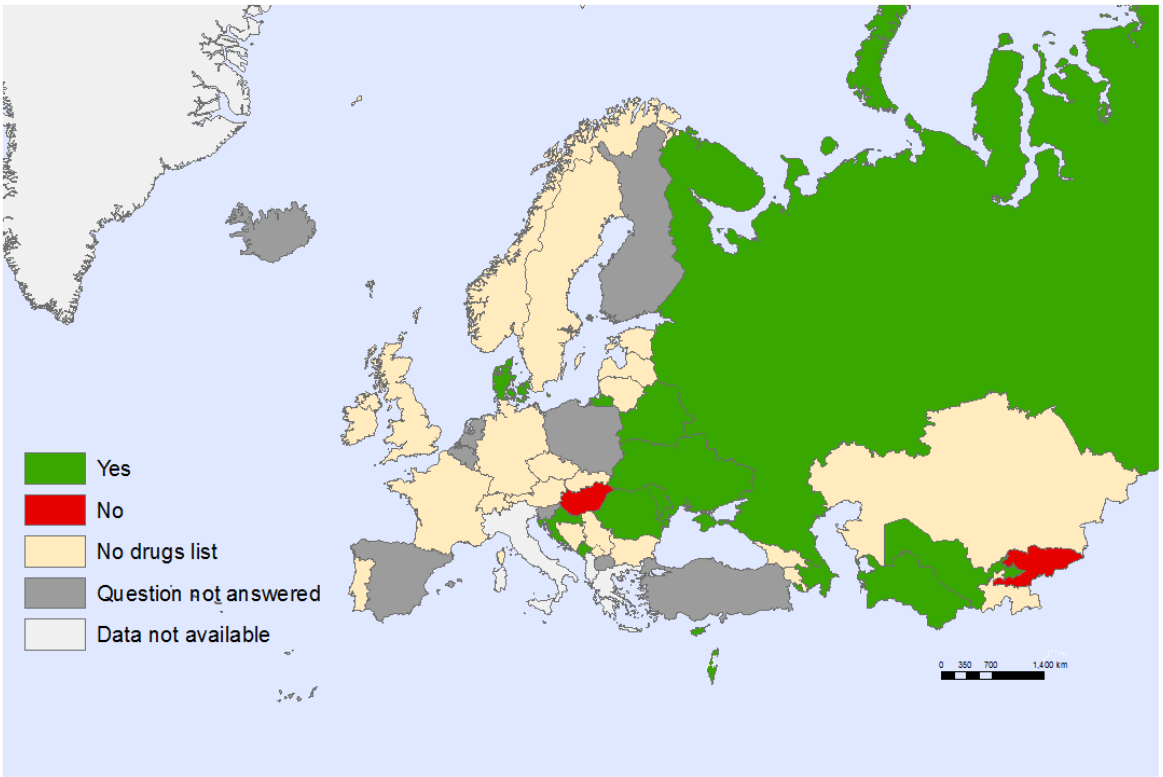
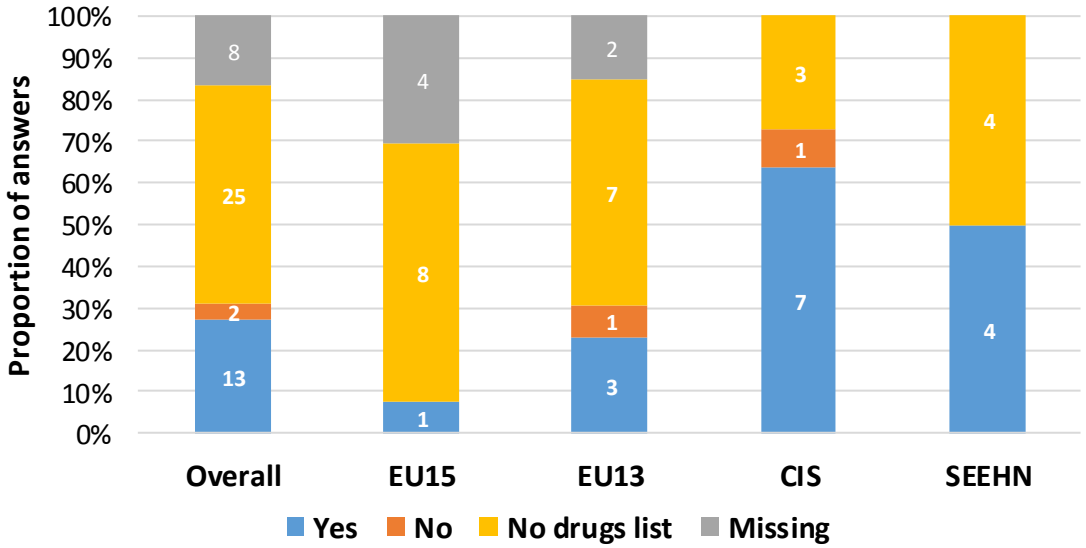


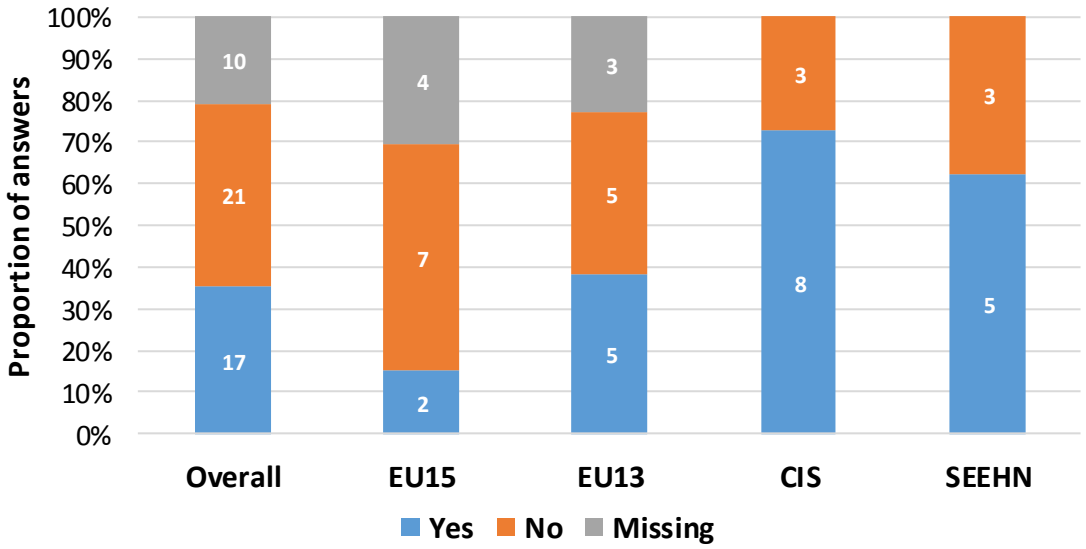
Fig. 4.26. Paediatric essential drugs list is public (country grouping)



Paediatric formulations

Seventeen countries (35%) reported having paediatric formulations of all essential drugs, while 21 (44%) did not. Fig. 4.27 shows that countries in the CIS and SEEHN groups tend to have paediatric formulations, while EU15 countries are less likely to report having them.

Fig. 4.27. Paediatric formulations of all essential drugs (country grouping)



Drug prescriptions

Twenty-two countries (45%) reported having information about the number of drug prescriptions issued to children and adolescents under 18, while 21 countries (44%) said they have no such data (Fig. 4.28). Fig. 4.29 shows that EU13 countries are less likely to have such information than other geographic groupings.

Fig. 4.28. Information about the number of drug prescriptions to children and adolescents under 18 collected (countries)

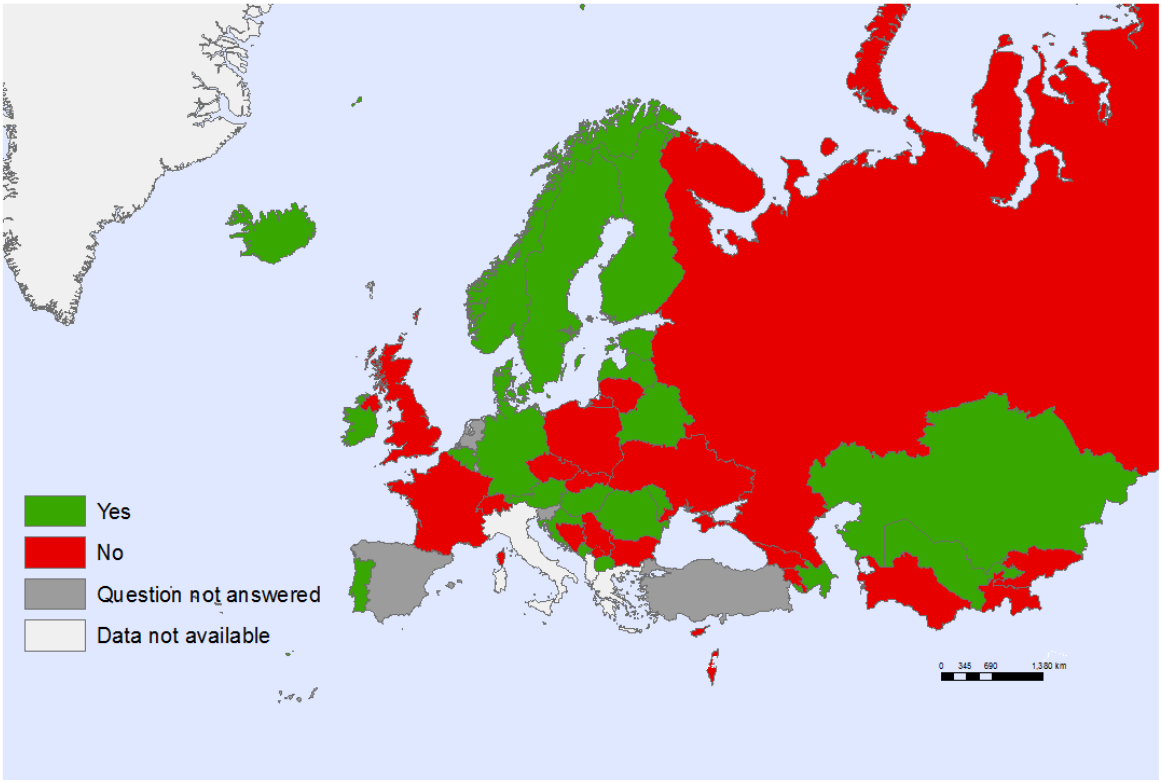
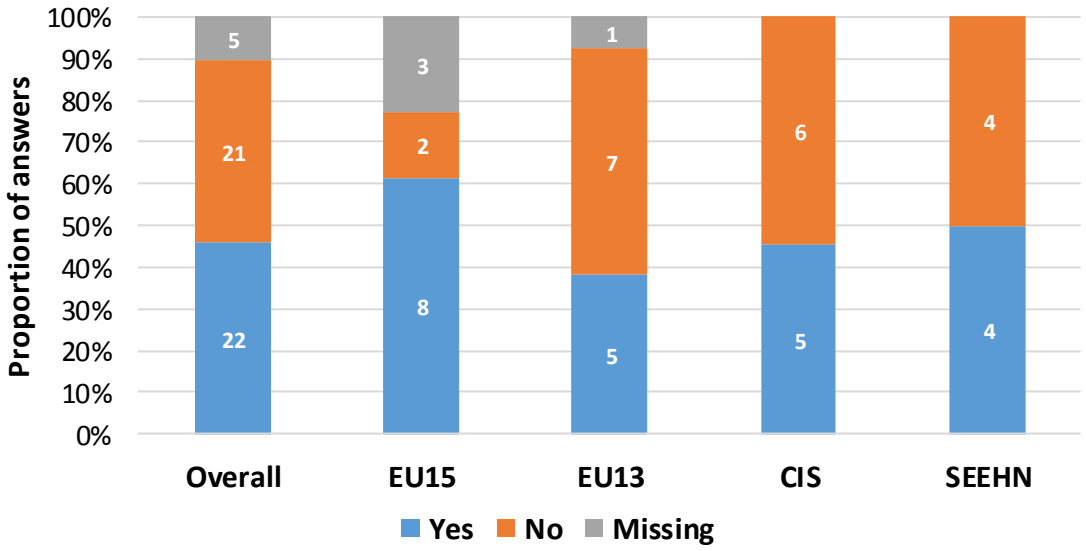


Fig. 4.29. Information about the number of drug prescriptions to children and adolescents under 18 collected (country grouping)



Findings in perspective

Health systems need to be adaptable to adjust to changing environments and health needs by, for example, addressing staffing gaps in health providers with specific training in child or adolescent health, organizing health services to accommodate differences in rural or urban needs, or developing ways in which services are delivered and monitored *(13)*. In doing so, they can meet their obligation to provide quality services for all children according to need.

Workforce

At the heart of every health system lies its workforce. Staffing levels in the Region vary widely: EU15 countries have the highest numbers of GPs, SEEHN countries have the lowest number of nurses, and CIS countries have higher numbers of paediatricians and nurses. Health-care systems for children are structured differently throughout the Region. The MOCHA project, which is yet to conclude, will shed light on what works best through a systematic evaluation of the types of health care that exist in EU countries *(2,3)*, but the project's descriptive parts already provide elements on which countries can draw. Large differences in staffing levels within a health system, either high or low, will raise concerns about the quality of care provided. This survey could ask only about systems in place, meaning it was unable collect more specific data on the quality of care provided; this will need to be addressed by future detailed surveys.

The 2017 survey also showed that almost half of reporting countries do not collect data about gaps in staffing levels for child and adolescent health services by setting. Disaggregated data collection and its analysis to address gaps supports the targeting of investments and resource allocations within countries for more equitable care provision. Efforts should also ensure that services are reaching marginalized subgroups of children and adolescents *(14)*. Chapter 3 revealed that about 60% of countries do not collect systematic information on the health of migrant and refugee children, nor do they collect data on gaps in their access to free services.

The focus in the past was on child survival, and consequently providing care to children. More recently, adolescent health has received greater attention. Progress towards universal health coverage for adolescents will require attention to education of the workforce specifically in adolescent health *(14)*. Many countries report having a system in place to train health professionals on adolescent health care, but there are subregional differences that merit attention. There is a need for investment that makes professional education in adolescent health a basic component of pre-service and continuous medical training, irrespective of whether the provider is a GP or a paediatrician.

WHO developed core competencies in adolescent health and development for primary care providers to support countries in building an adolescent-competent workforce *(14)*. AA-HA! shows the three domains for core competencies of an adolescent-competent workforce that provide either foundational knowledge of adolescent health care or situational clinical care; these domains can be taught in pre- and in-service education *(13)*. Mandatory competency-based education in adolescent health care in pre-service curricula and postgraduate education can provide a strong foundation for creating a health workforce that is competent in adolescent health *(13)*.

Improving quality of care

There is room for improvement in access to services without paying; the adoption of mechanisms to assess quality of care of child and adolescent services and to reinforce human rights-based approaches to health *(13)*. Services without paying can also remove an important barrier to adolescent access to health services *(13)*. As neonatal deaths accounted for 52% of under-5 deaths in the European Region in 2016 *(15)*, additional efforts are needed in this area. One form of quality assurance is to perform regular perinatal death audits, which allow preventable causes of deaths to be identified and the circumstance that contributed to the adverse outcome to be described *(15)*. Similar approaches exist for older children *(16)*.

In light of the transition to the SDGs, WHO has led a series of consultations to reconsider and revise its programming on child health. The main conclusion emerging from the meeting on child health redesign in the Region at the WHO Regional Office for Europe on 31 October–2 November 2017 was that the revisited child health approach will need to build on the results and lessons learnt from regional and global IMCI reviews *(17)*.

IMCI, a guideline developed by WHO and UNICEF in 1995, promotes a package of simple, affordable and effective interventions for combined management of the major childhood illnesses and malnutrition, including antibiotic use, treatment of anaemia, immunization and breastfeeding promotion *(18)*. The package is assumed to have contributed to the decrease in child mortality that took place during the MDGs period *(17,19)*. This new approach means ending non-evidence-based practices, counteracting inappropriate medicalization, and ending unnecessary treatment and hospitalization *(17)*. Innovative tools and mechanisms to support implementation of quality child health services, such as supportive supervision and collaborative quality improvement approaches, are worthy of promotion *(17,20)*.

Much morbidity and mortality among children and adolescents is preventable. Hospitals can contribute to reductions by, for example, routinely performing perinatal death audits that are non-punitive and build on experiences. Due in part to issues related to misclassification of stillbirths and neonatal deaths, this type of review requires significant attention and support *(21)*. Case studies from the Republic of Moldova and the United Kingdom show how this can be done and sustained over time *(22,23)*.

Hospitalization rates for children vary widely and by age group, with a need for better and more consistent reporting, especially disaggregation between the ages of 5 and 18. Chapter 3 provides additional examples of areas where a lack of disaggregation has affected countries' potential to address inequalities. A reduction in hospitalization rates was seen after a WHO quality improvement intervention in a cluster randomized controlled trial in Kyrgyzstan *(24)*. Lazzerini et al. found that supportive supervision can improve adherence to clinical guidelines and overall quality of care *(24)*.

Evidence from high- and low-income countries shows that services for adolescents are often highly fragmented, poorly coordinated and uneven in quality. Pockets of excellent practice exist, but overall, services need significant improvement and should be brought into conformity with existing guidelines. The WHO/Joint United Nations Programme on HIV/AIDS (UNAIDS) global standards for quality health-care services for adolescents *(25)* seeks to assist policy-makers and health service planners in improving the quality of health-care services for adolescents. The goal is that adolescents find it easier to obtain the health services they need to promote, protect and improve their health and well-being. Quality measurement tools that can be used for this include an adolescent client exit-interview tool, while a coverage measurement tool could be an adolescent in the community interview tool *(25)*.

Paediatric formulations and essential drugs lists

Paediatric formulations and essential drugs lists are available in about one in three countries (35% and 31% respectively). CIS countries are more likely to have these lists, compared to EU countries. The WHO model lists of essential medicines *(26)*, launched in 1977 and updated every two years, were developed to meet the priority health-care needs of populations. This was complemented in 2007 by an essential medicines list for children, the most recent version of which was published in 2017 *(27)*.

While efforts have been made to better acknowledge the needs of children in essential drugs lists and to improve the availability of paediatric formulations, lack of access to appropriate medicines for children in cases where they would make a potential difference to survival continues to be a problem globally *(28)*. Additionally, fewer than half of countries reported having information about the number of drug prescriptions issued to children and adolescents under 18. Without monitoring, over- and underuse of prescription medications cannot be identified and addressed. Closing the gap will be essential for achievement of the SDGs, which means not only that the availability of age-appropriate formulations improves, but also that they are delivered in optimal doses *(28)*.

Conclusion

Health systems for children and adolescents are diverse. Some have paediatricians as the primary providers, while others have GPs. These systems, have their strengths and weaknesses, but all depend on sufficient numbers of providers who are accessible and have the skills to work with children and adolescents and to understand their health conditions. There is a need to collect and analyse disaggregated data to support health systems to make the right choices for children and adolescents (see also Chapters 3 and 8). An essential drugs list for children and paediatric formulations of all essential drugs are important tools for countries throughout the Region to adopt. Developing and implementing national quality standards, monitoring systems and processes for quality improvement in line with WHO standards are needed everywhere.

Table 4.1 includes all indicators used in this chapter, and data from the country profiles and the survey displayed by country with summary statistics.

Table 4.1. Heath systems and quality of care: summary table

Country	Transition from paediatric to adult services for continuing care	Mechanism for assuring the quality of care	Mechanism for continuous education for professionals for adolescent health	Obligation to perform regular perinatal death audits	Paediatric essential drugs list is public	Paediatric formulations of all essential drugs	Information about the number of drug prescriptions	Collecting data about gaps between staffing levels	Care models	Country code
Albania	–	–	–	–	–	–	–	–	GP-led	**ALB**
Andorra	No	No	No	No	No list	No	No	No	GP-led	**AND**
Armenia	Yes	Yes	Yes	No	No list	Yes	No	Yes	Mixed	**ARM**
Austria	No	No	No	No	No list	No	Yes	Yes	Mixed	**AUT**
Azerbaijan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mixed	**AZE**
Belarus	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Paediatrician-led	**BLR**
Belgium	–	Yes	–	–	–	–	Yes	–	Mixed	**BEL**
Bosnia and Herzegovina	No	Yes	Yes	Yes	No list	No	No	Yes		**BIH**
Bulgaria	Yes	Yes	Yes	Yes	No list	Yes	No	–	GP-led	**BGR**
Croatia	Yes	No	Yes	No	Yes	No	Yes	No	Paediatrician-led	**HRV**
Cyprus	Yes	No	Yes	No	Yes	Yes	No	No	Paediatrician-led	**CYP**
Czechia	No	Yes	Yes	Yes	No list	No	No	No	Paediatrician-led	**CZE**
Denmark	Yes	Yes	Yes	No	Yes	No	Yes	Yes	GP-led	**DNK**
Estonia	No	Yes	–	Yes	No list	No	Yes	No	GP-led	**EST**
Finland	Yes	Yes	Yes	–	–	Yes	Yes	No	GP-led	**FIN**
France	No	Yes	–	Yes	No list	No	No	No	Mixed	**FRA**
Georgia	Yes	Yes	No	Yes	No list	No	No	No	Mixed	**GEO**
Germany	Yes	Yes	Yes	Yes	No list	No	Yes	No	Paediatrician-led	**DEU**
Greece	–	–	–	–	–	–	–	–	Paediatrician-led	**GRC**
Hungary	Yes	Yes	Yes	Yes	Not public	Yes	Yes	Yes	Mixed	**HUN**
Iceland	No	Yes	Yes	No	–	–	Yes	–	GP-led	**ISL**
Ireland	Yes	Yes	Yes	No	No list	Yes	Yes	No	GP-led	**IRL**
Israel	No	Yes	No	No	Yes	Yes	No	Yes	Mixed	**ISR**
Italy	–	–	–	–	–	–	–	–	Mixed	**ITA**
Kazakhstan	Yes	Yes	No	Yes	No List	Yes	Yes	Yes	Mixed	**KAZ**
Kyrgyzstan	Yes	Yes	Yes	Yes	Not public	No	No	Yes	GP-led	**KGZ**
Latvia	Yes	Yes	Yes	No	No List	Yes	Yes	Yes	GP-led	**LVA**
Lithuania	Yes	Yes	No	Yes	No List	–	No	No	Mixed	**LTU**
Luxembourg	No	No	–	No	No List	–	–	No	Mixed	**LUX**
Malta	No	No	No	No	No List	No	No	No	GP-led	**MLT**
MKD[a]	Yes	Yes	Yes	No	No List	No	Yes	Yes	Mixed	**MKD[a]**
Monaco	–	–	–	–	–	–	–	–		**MCO**
Montenegro	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		**MNE**
Netherlands	Yes	Yes	–	No	–	–	–	No	GP-led	**NLD**
Norway	–	Yes	–	–	No list	–	Yes	Yes	Mixed	**NOR**
Poland	Yes	Yes	–	–	–	–	No	No	Mixed	**POL**
Portugal	Yes	Yes	Yes	Yes	No list	No	Yes	No	Mixed	**PRT**
Republic of Moldova	–	Yes	Yes	Yes	Yes	Yes	Yes	No	GP-led	**MDA**
Romania	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	GP-led	**ROU**
Russian Federation	No	Yes	No	Yes	Yes	No	No	Yes	Paediatrician-led	**RUS**
San Marino	–	–	–	–	–	–	–	–		**SMR**
Serbia	No	Yes	No	Yes	No list	No	No	No	Mixed	**SRB**
Slovakia	No	Yes	Yes	Yes	No list	No	No	Yes	Paediatrician-led	**SVK**
Slovenia	–	–	–	–	–	–	–	–	Paediatrician-led	**SVN**
Spain	–	–	–	No	–	–	–	–	Paediatrician-led	**ESP**
Sweden	Yes	Yes	No	Yes	No list	No	Yes	No	GP-led	**SWE**
Switzerland	Yes	Yes	Yes	No	No list	No	No	No	Mixed	**CHE**
Tajikistan	Yes	Yes	Yes	Yes	No list	Yes	No	Yes	Mixed	**TJK**
Turkey	Yes	Yes	Yes	Yes	–	–	–	Yes	Mixed	**TUR**
Turkmenistan	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	GP-led	**TKM**
Ukraine	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Mixed	**UKR**
United Kingdom	Yes	Yes	Yes	Yes	No list	No	No	Yes	GP-led	**GBR**
Uzbekistan	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	GP-led	**UZB**

% Overall	Yes, No, (NP), (NL)	63	27	83	13	58	23	56	33	27	4	52	35	44	46	44	48	42	18	GP-led
% EU15	Yes, No, (NP), (NL)	62	23	77	15	46	15	38	46	8	0	62	15	54	62	15	23	62	10	Paediatrcian-led
% EU13	Yes, No, (NP), (NL)	62	31	69	23	54	23	54	31	23	8	54	38	38	38	54	31	54	21	Mixed
% CIS	Yes, No, (NP), (NL)	82	9	100	0	82	18	91	9	64	9	27	73	27	45	55	91	9	4	Missing
% SEEHN	Yes, No, (NP), (NL)	50	38	100	0	63	38	75	25	50	0	50	63	38	50	50	63	25		

NL: no list. NP: not public.

[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

Table 4.1 contd

GPs per 100 000 population	General paediatricians per 100 000 population	Nurses per 100 000 population	Hospitalization rate under 5 per 1 000	Hospitalization rate aged 5–9 per 1 000	Hospitalization rate aged 10–14 per 1 000	Hospitalization rate aged 15–18 per 1 000	Hospitalization rate aged 0–14 per 1 000	Country code	Country
–	5	430	–	–	–	–	–	ALB	Albania
–	26	355	121	56	43	61	73	AND	Andorra
51	26	456	–	–	–	97	135	ARM	Armenia
164	16	787	201	101	98	147	133	AUT	Austria
92	42	605	–	–	–	–	–	AZE	Azerbaijan
–	40	1 016	–	–	–	–	–	BLR	Belarus
112	13	952	–	–	–	–	–	BEL	Belgium
19	10	515	–	–	–	–	–	BIH	Bosnia and Herzegovina
66	20	447	518	143	108	106	256	BGR	Bulgaria
78	19	621	191	76	69	77	112	HRV	Croatia
42	33	490	156	51	42	40	83	CYP	Cyprus
70	12	800	362	96	87	127	182	CZE	Czechia
69	7	1 631	260	71	71	88	134	DNK	Denmark
89	13	617	248	82	82	93	137	EST	Estonia
120	9	1 412	–	–	–	–	–	FIN	Finland
160	12	995	219	76	74	–	123	FRA	France
88	32	328	222	108	53	64	128	GEO	Georgia
169	12	1 296	–	–	–	–	–	DEU	Germany
32	30	355	–	–	–	–	–	GRC	Greece
34	27	643	315	80	69	94	155	HUN	Hungary
57	5	1 533	–	–	–	–	–	ISL	Iceland
163	9	1 237	–	–	–	–	133	IRL	Ireland
105	31	482	–	–	–	–	96	ISR	Israel
89	29	614	–	–	–	–	–	ITA	Italy
31	38	747	–	–	–	–	–	KAZ	Kazakhstan
–	10	558	–	–	–	–	110	KGZ	Kyrgyzstan
67	13	488	472	119	137	144	243	LVA	Latvia
92	27	755	483	188	154	185	275	LTU	Lithuania
88	15	1 196	–	–	–	–	41	LUX	Luxembourg
81	16	798	163	82	68	99	104	MLT	Malta
97	19	366	203	72	82	56	119	MKD	MKD[a]
133	28	1 564	–	–	–	–	–	MCO	Monaco
39	27	512	199	73	58	49	110	MNE	Montenegro
145	9	840	–	–	–	–	–	NLD	Netherlands
87	14	1 667	64	15	16	22	32	NOR	Norway
33	13	521	–	–	–	–	–	POL	Poland
217	18	605	25	–	–	–	198	PRT	Portugal
50	14	607	570	115	96	106	260	MDA	Republic of Moldova
75	12	565	–	–	–	–	–	ROU	Romania
47	21	389	–	–	–	–	–	RUS	Russian Federation
–	–	833	–	–	–	–	–	SMR	San Marino
90	28	596	174	82	68	85	108	SRB	Serbia
41	20	575	414	88	85	125	196	SVK	Slovakia
58	26	827	–	–	–	–	–	SVN	Slovenia
75	26	515	104	28	25	32	52	ESP	Spain
64	10	839	112	32	37	61	60	SWE	Sweden
111	19	1 736	–	–	–	–	–	CHE	Switzerland
–	22	391	–	–	–	–	–	TJK	Tajikistan
54	9	183	–	–	–	–	–	TUR	Turkey
79	7	434	–	–	–	–	125	TKM	Turkmenistan
39	27	717	–	–	–	–	–	UKR	Ukraine
80	16	823	–	–	–	–	–	GBR	United Kingdom
46	26	1 036	–	–	–	–	–	UZB	Uzbekistan
83	19	760	252	83	74	89	135		Average
217	42	1 736	570	188	154	185	275		Highest value
PRT	AZE	CHE	MDA	LTU	LTU	LTU	LTU		Highest country
19	5	183	25	15	16	22	32		Lowest value
BIH	ALB	TUR	PRT	NOR	NOR	NOR	NOR		Lowest country

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5. Rights and participation

Introduction

This chapter summarizes the indicators included in the country profiles and baseline survey related to young people's rights and participation in national strategy efforts. The content relates to the European child and adolescent health strategy's overall priority of "Making children's lives visible" and its second priority of transforming the governance of child and adolescent health – supporting growth during adolescence.

The chapter describes the ways in which children's and adolescents' rights to health are implemented and acknowledged, and highlights their opportunities to participate in the process of creation and implementation of these policies. Findings are put in perspective in accordance with the UNCRC *(1)*.

Key findings

- Thirty-five countries have an ombudsman with a mandate for children's and adolescents' right to health and nearly all said that health has been a consistent part of UNCRC reporting.
- Children and adolescents are not consulted in 15 countries in the review, development, or implementation of their child and adolescent health strategy.
- Access to contraception or abortion without parental consent was reported by 32 and 23 countries, respectively.
- Less than half of the countries report that they systematically collect information on children's and adolescents' knowledge on sexuality.
- Policies for assent, confidentiality and consent, as well as those for adolescents' access to care without parental consent, exist in three quarters of the countries.

Findings

Reporting under the UNCRC

All countries reported that health consistently has been part of national reporting under the UNCRC. Information is missing only from Belgium (Fig. 5.1).

Fig. 5.1. Health consistently has been part of national reporting under the UNCRC (Article 24)

Ombudsman

Having an ombudsman for children was reported by 35 countries (73%). One country in the EU15 group, five EU13 countries, four from the CIS and three from SEEHN reported having no ombudsman for children.

Thirty-four countries (71%) reported that their ombudsman has a mandate for children's and adolescents' right to health (Fig. 5.2 and 5.3). Kyrgyzstan stated that it has an ombudsman but without a mandate that includes children's and adolescents' right to health.

Fig. 5.2. Ombudsman's mandate includes children's and adolescents' right to health (countries)

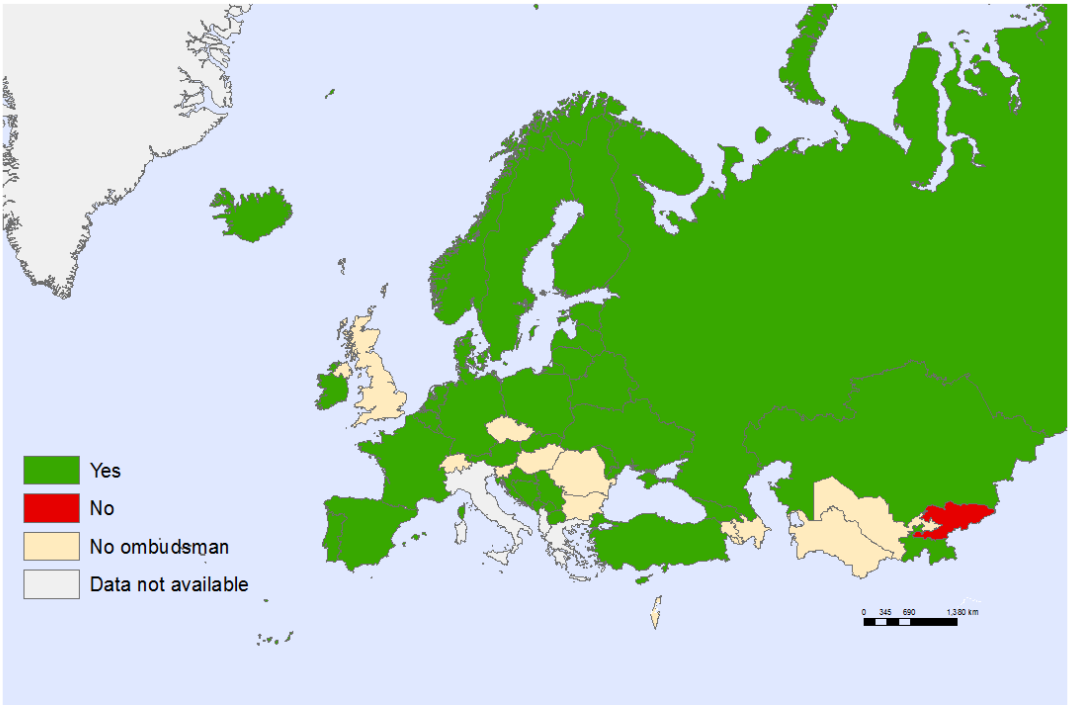
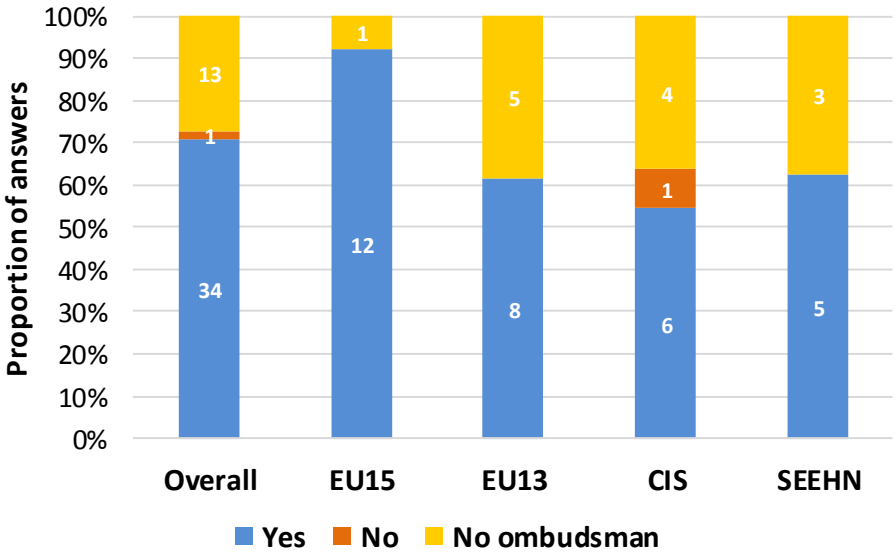


Fig. 5.3. Ombudsman's mandate includes children's and adolescents' right to health (country grouping)



Countries were asked to provide additional information on the mandate for their ombudsmen. Twenty-three have a mandate that focuses specifically on child rights (48%). Seven (15%) reported that the mandate extends further on other target populations or topic areas, such as adolescents, adults, broader health issues and gender equity. Four reported that their ombudsman has a broader, overlapping mandate (8%). Seventeen (36%) described the ombudsman's responsibilities in more detail, mostly involving children's rights and often including intervention in, or mediation of, breaches, and monitoring, protection and compliance.

Youth participation in child and adolescent health strategies

Of the 36 countries reporting having a child and adolescent health strategy in 2016/2017 (see Chapter 2), 58% reported that young people were involved in the review, development or implementation of the strategy (Fig. 5.4 and 5.5).

Fig. 5.4. Young people have been involved in the review/development/implementation of the child and adolescent health strategy (countries)

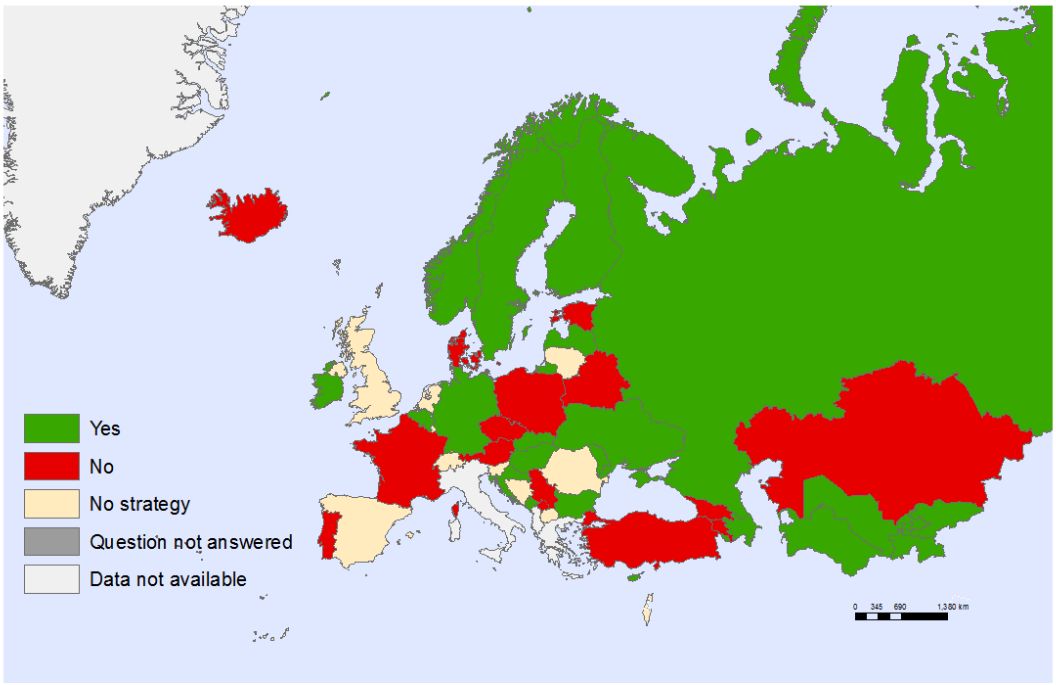
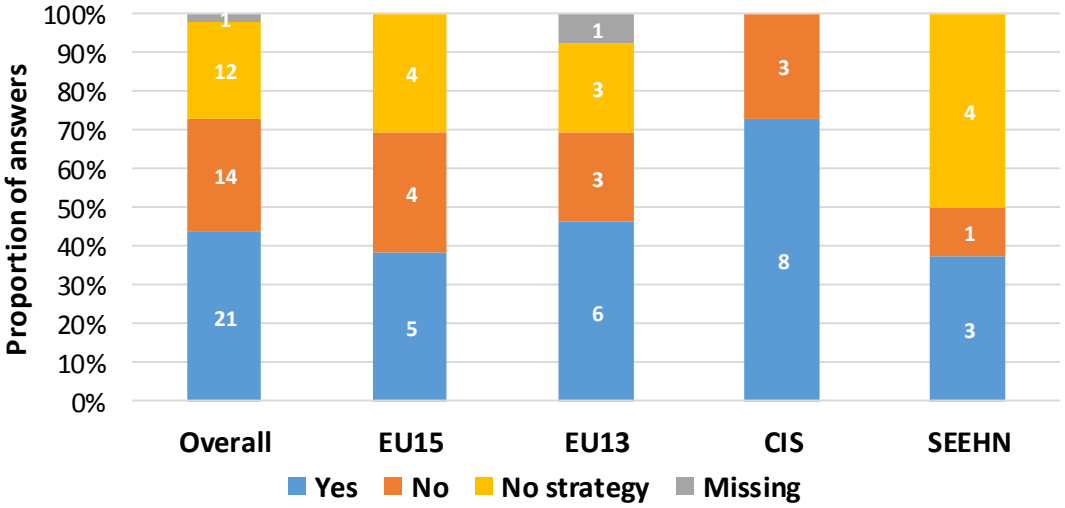


Fig. 5.5. Young people have been involved in the review/development/implementation of the child and adolescent health strategy (country grouping)

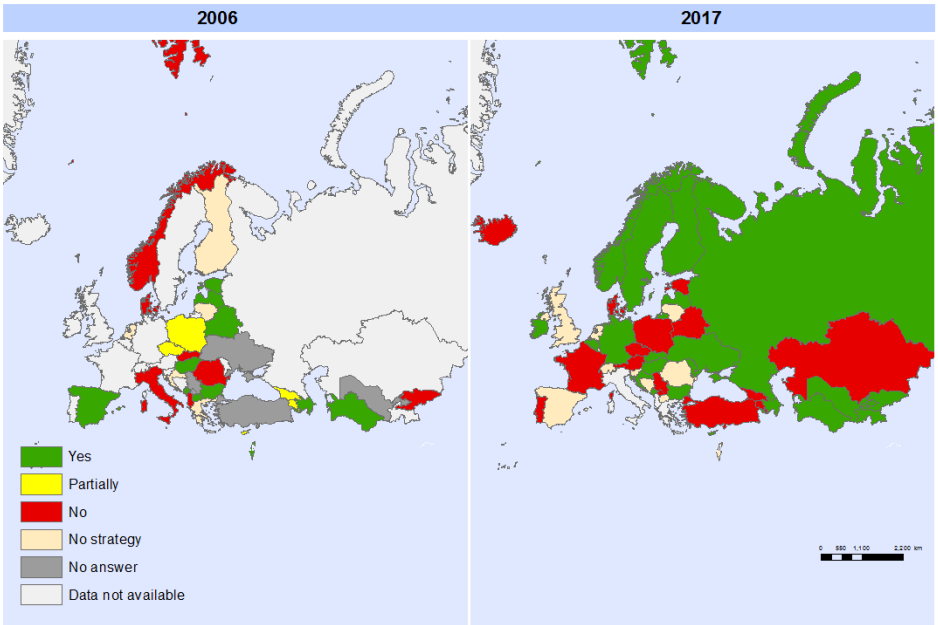


In the analysis of qualitative information provided, it can be shown that countries have different methods of involving young people. Azerbaijan and the Russian Federation reported that they offer children and adolescents access to open hearings and discussions held in government. The ombudsman in Sweden holds regular meetings and an open dialogue with children. Ireland has a governing policy to consult with children and adolescents on all strategies that affect them. Other countries involve young people in parts of the process, Norway through an input meeting, Montenegro in monitoring the strategy and Slovakia in the planning process of projects addressing the strategy's goals. Belgium and Tajikistan involve young people in subtopics of the strategy, Belgium in mental health and Tajikistan in adolescent sexual and reproductive health.

Comparing 2006 and 2017

In the 2006 survey, a question was included about the participation of young people in the process of reviewing or developing their national child and adolescent health strategy (see Chapter 2 for other comparative questions). The 2006 survey indicated that five countries had planned to involve young people in processes related to their strategy, but only one (Cyprus) reported in 2017 that young people were involved in these processes (Fig. 5.6).

Fig. 5.6. Young people have been involved in the review/development/implementation of the child and adolescent health strategy (2006 and 2017)



Programme to provide foster care for institutionalized children

Most countries (73%) have programmes in place to provide foster care for institutionalized children to protect them from the harms of early institutionalization (see Chapter 3). Fig. 5.7 shows that 35 countries reported having such a programme in place. Four countries (8%), with at least one in each country grouping except the CIS, do not provide foster care for institutionalized children (Fig. 5.8).

Fig. 5.7. Programme in place to provide foster care for institutionalized children (countries)

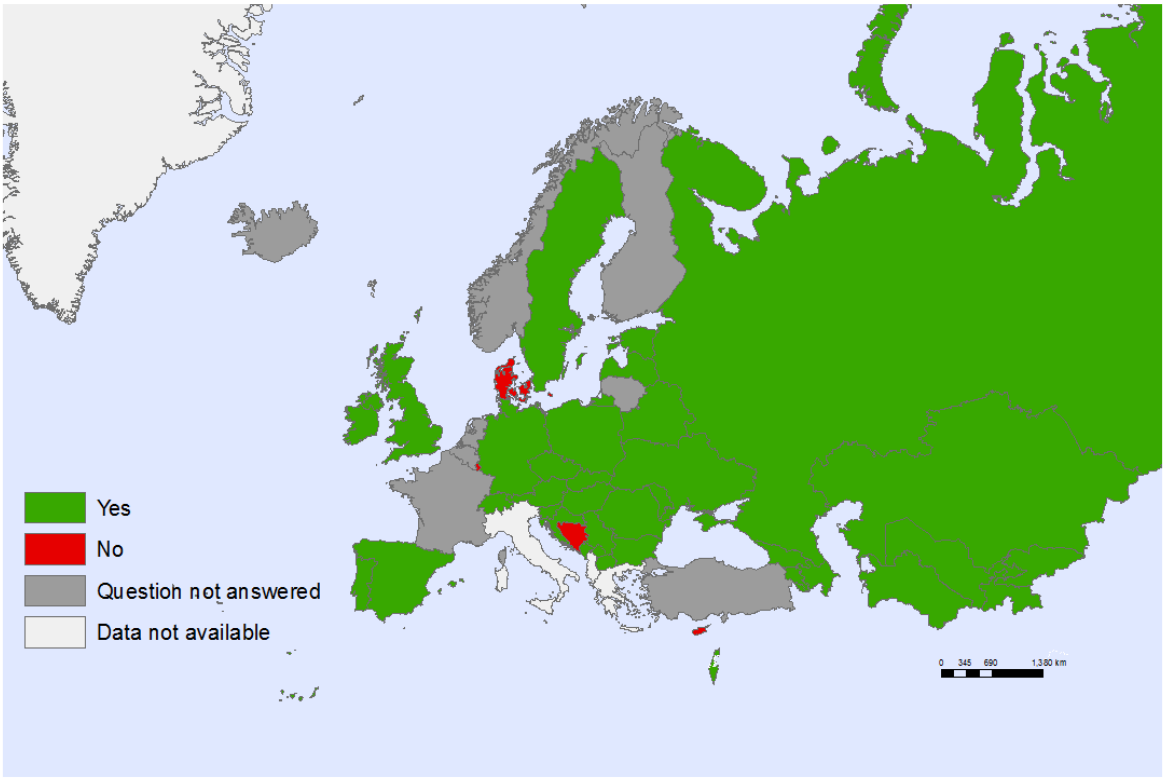
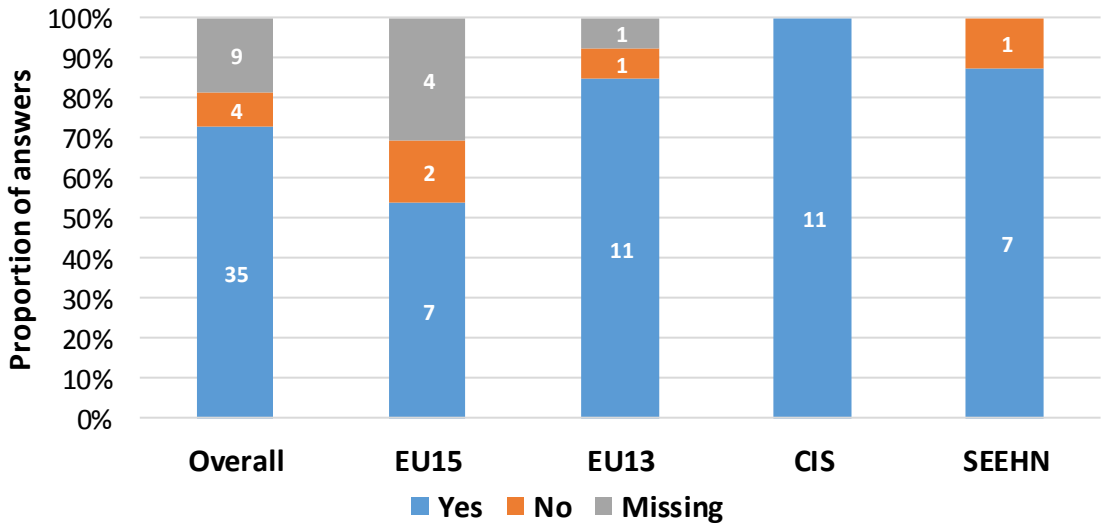


Fig. 5.8. Programme in place to provide foster care for institutionalized children (country grouping)



Policies providing guidance on consent, assent and confidentiality

Policies that provide guidance for children, adolescents, parents and health workers on consent, assent and confidentiality are in place in three quarters of the countries (36, 75%) (Fig. 5.9). As Fig. 5.10 shows, every country from the SEEHN group reported that such a policy exists, whereas only 69% of EU15 countries provide such guidance in policy form.

Fig. 5.9. Policies in place providing guidance on consent, assent and confidentiality (countries)

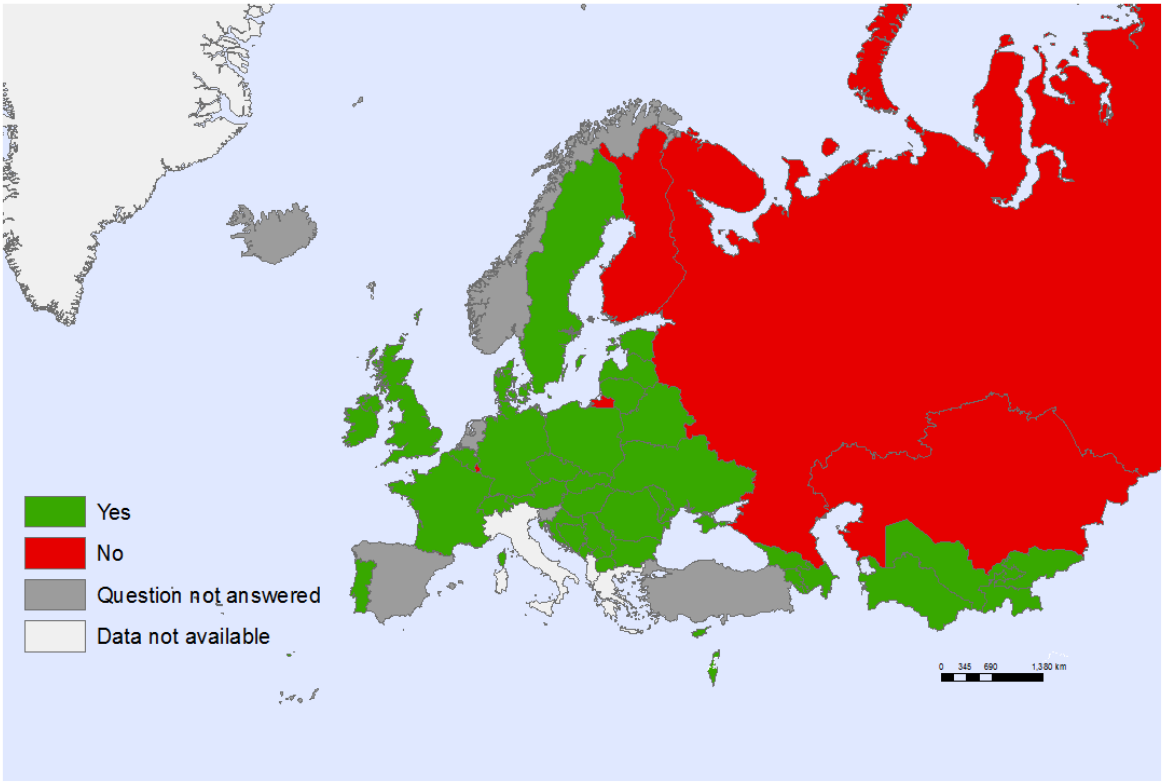
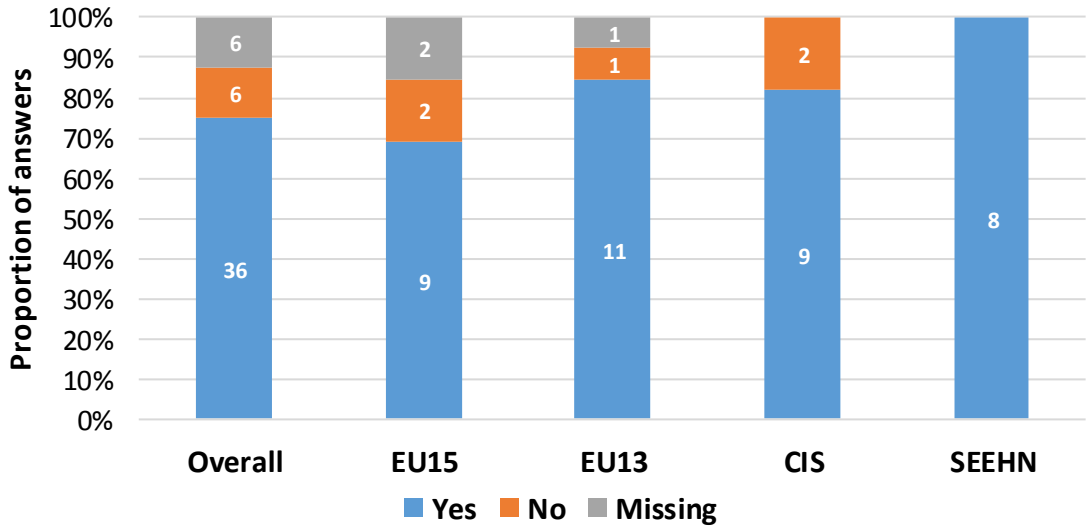


Fig. 5.10. Policies in place providing guidance on consent, assent and confidentiality (country grouping)



Policies for access to care without parental consent

Policies for access to care without parental consent for children are in place in 77% of the countries (Fig. 5.11). The available data indicate that 11 EU15 countries and all of those in the SEEHN provide legal access to care without the consent of a parent (Fig. 5.12).

Fig. 5.11. Legislation, policies or regulations for access to care for adolescents without parental consent in place (countries)

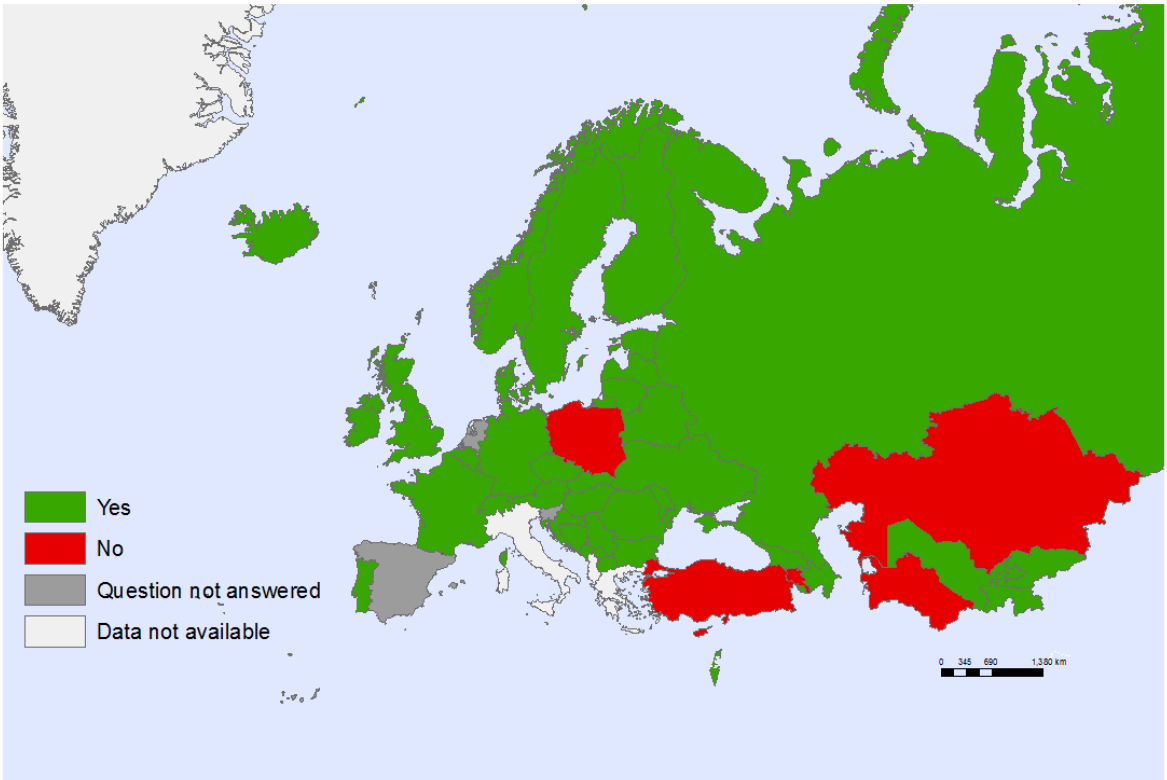
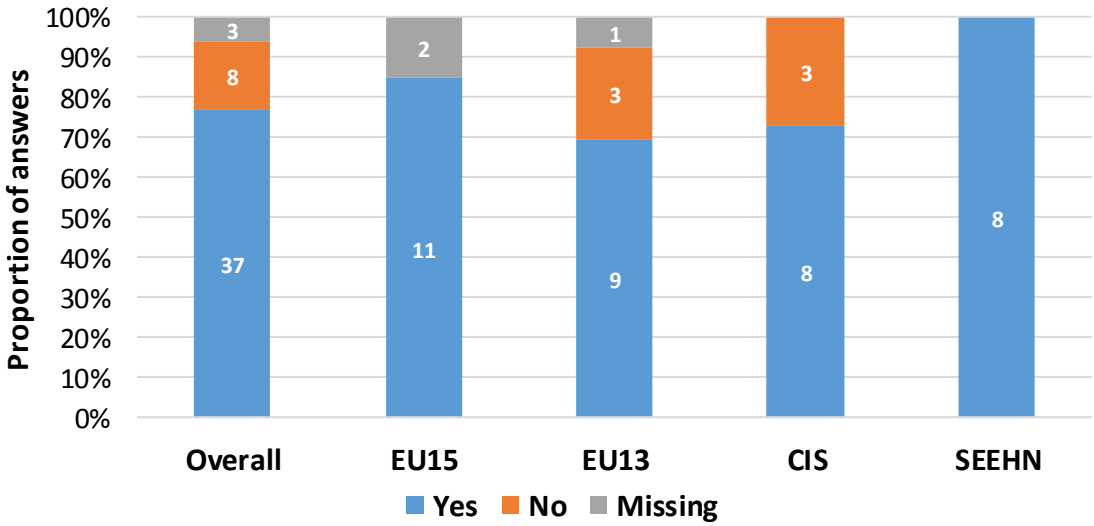


Fig. 5.12. Legislation, policies or regulations for access to care for adolescents without parental consent in place (country grouping)?



Adolescents' knowledge on sexuality

Only 21 countries (45%) reported the systematic collection of information on children's and adolescents' knowledge on sexuality (Fig. 5.13). There is a notable difference between the EU15/EU13 countries (Yes: 17; No: two) and the CIS/SEEHN countries (Yes: five; No: seven) (Fig. 5.14). For information about adolescent condom use, see Chapter 7.

Fig. 5.13. Information collected about children's and adolescents' knowledge on sexuality (countries)

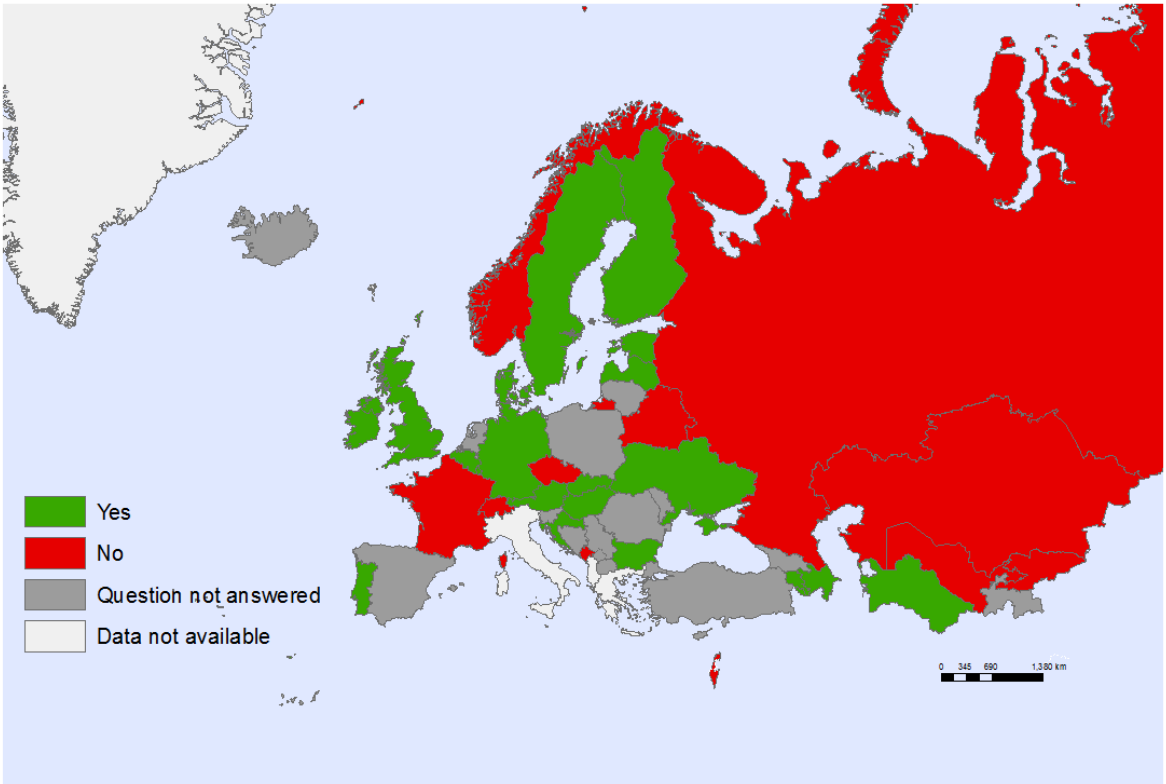
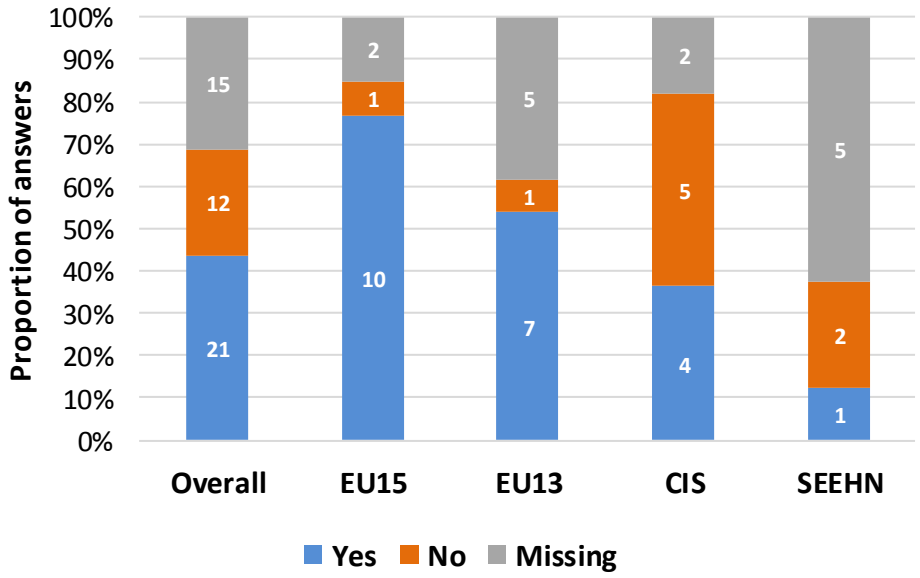


Fig. 5.14. Information collected about children's and adolescents' knowledge on sexuality (country grouping)



Access to contraception and abortion without parental consent

Legal access to contraception without parental consent for adolescents under 18 years of age was reported by 32 countries (66%). Access to abortion without parental consent is legal in 23 countries (48%) (Fig. 5.15–5.18).

Fig. 5.15. Legal access to contraception without parental consent for adolescents under 18 (countries)

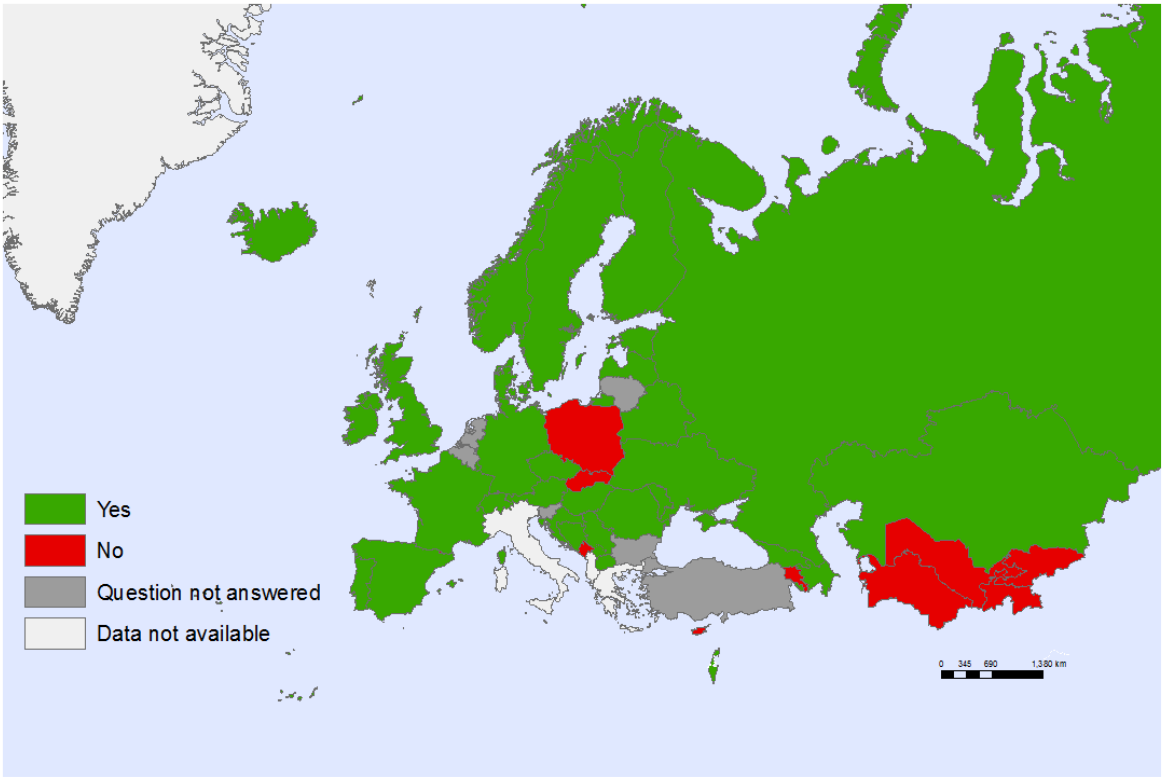


Fig. 5.16. Legal access to contraception without parental consent for adolescents under 18 (country grouping)

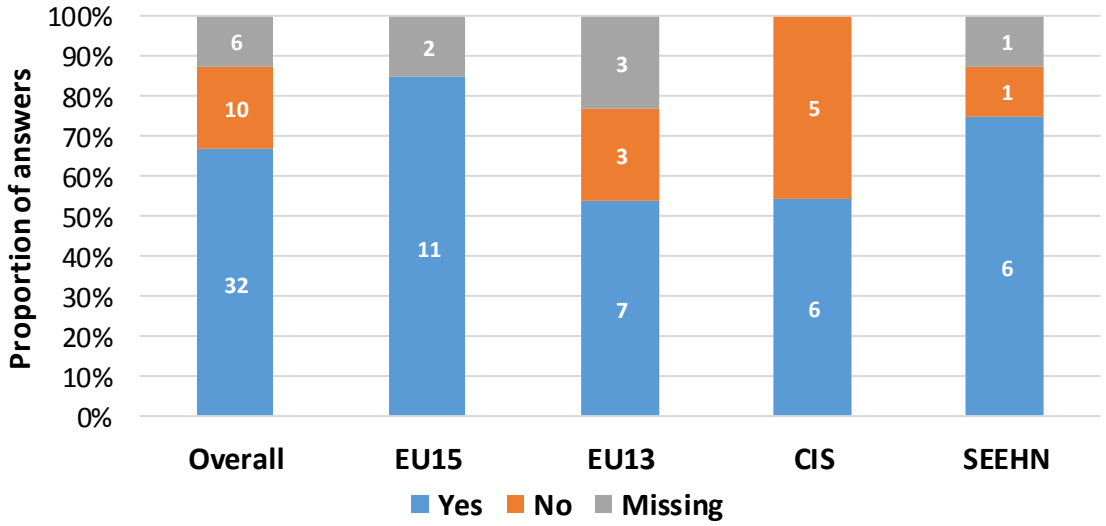


Fig. 5.17. Legal access to abortion without parental consent for adolescents under 18 (countries)

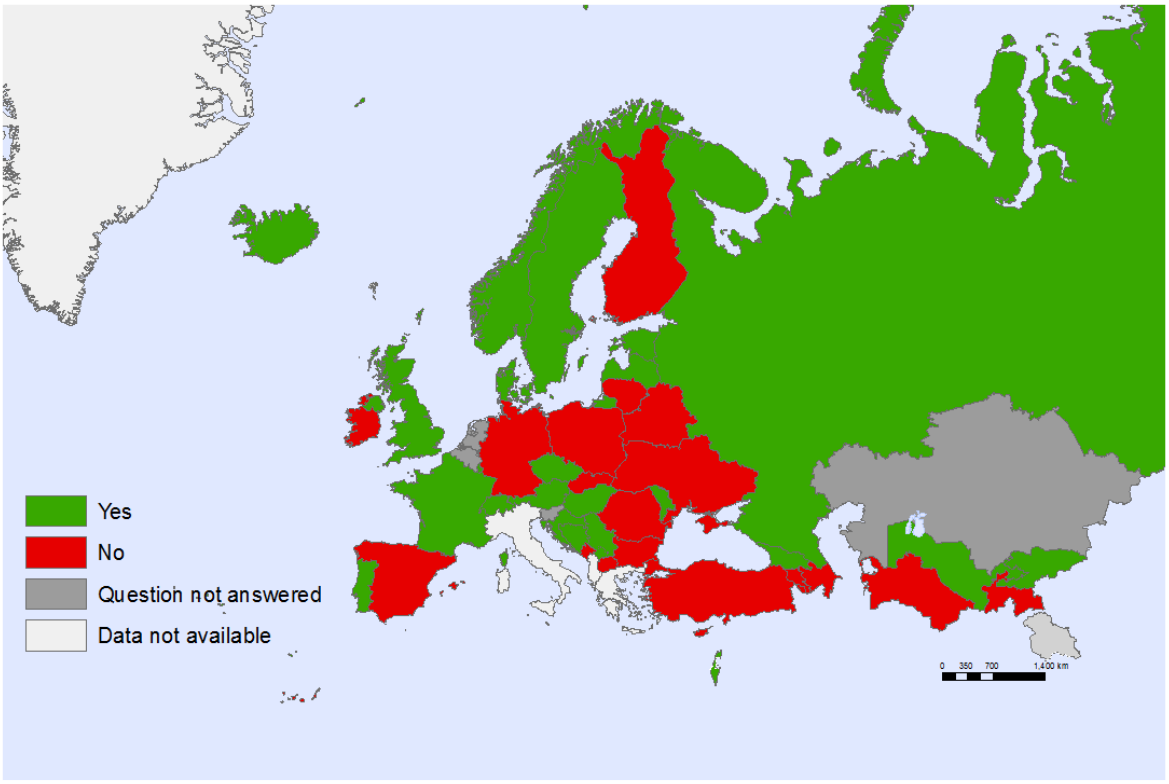
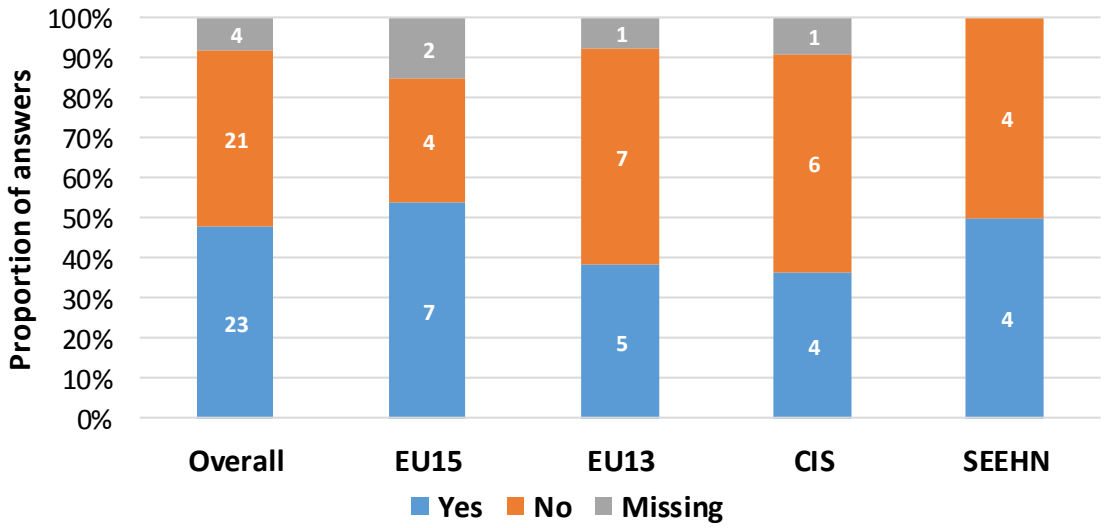


Fig. 5.18. Legal access to abortion without parental consent for adolescents under 18 (country grouping)



The specific type of policies differ strongly between countries, as revealed in their qualitative responses. In Austria, for example, legal abortion without parental consent is possible from the age of 14, and in the United Kingdom, it starts at 16. Adolescents under 18 in Denmark have the right to abortion in cases of physical or psychological violence risk or rejection by the family, but in any other case, young Danish people still need parental consent or consent from a special committee *(2)*.

Findings in perspective

Children's right to participate

The UNCRC was signed by all Member States of the WHO European Region, which attests to the Region's commitment to children's rights. Article 12 of the UNCRC states that children have a right to form and express their views and have them heard in any proceedings affecting them. As envisioned in the UNCRC, children must contribute to planning and implementation processes affecting their health care.

Young people's participation in the review, development or implementation of national child and adolescent health strategies in the Region has increased in the last decade, but 15 countries still do not involve young people. Some of the 21 countries reporting young people's involvement in their national strategy claimed surveys on children as a form of youth involvement in the process, but this is not a sufficient measure of participation.

Governments can make steady headway towards increased participation of children and adolescents in matters that affect them by adopting measurable indicators. Practical strategies can be found in the child participation assessment tool issued by the Council of Europe *(3)* and the *Every child's right to be heard* resource guide *(4)*.

Transparency and advocacy

Article 44 of the UNCRC requires state parties to report on country-level measures on children's rights. Every country in the European Region stated that health has consistently been part of national reporting, but an advocate in the form of an ombudsman who supports children's rights does not exist in one quarter of the reporting countries. Most that report having such an advocate for children indicate that their mandate includes young people's right to health. Information from the European Network of Ombudspersons for Children *(5)* indicates that countries such as Armenia, Azerbaijan, Bulgaria, Hungary, Slovenia and the United Kingdom have commissioners with a mandate for children's and adolescents' rights even though they reported not having an ombudsman for children. Increasing awareness of the role of ombudsmen in the context of the UNCRC can increase the ability of ombudsmen in these countries to advocate for children's rights within the national context.

Access to care without parental consent

Article 12 of the UNCRC also has significant implications for health services in relation to, for instance, the child's involvement in decision-making, access to confidential medical counselling and consent to treatment *(1)*. Young people's access to confidential medical counselling is important, especially in the context of sensitive information shared with health-care workers. Policies that provide guidance on consent, assent and confidentiality for children, adolescents, parents and health workers exist in most of the countries, especially in the SEEHN. The AA-HA! guideline states the importance of confidentiality in services provided to adolescents. Countries should establish procedures that ensure information disclosed to third parties and consultations with adolescents should always include time without a legal guardian *(6)*.

Young people should not only be heard and treated confidentially, but also have access to care and medical treatment without parental consent in order to have their right to good-quality health care fulfilled, independent of an adult. Adolescents nevertheless have limited capacity to access services independently of their parents. Legal access to contraception without parental consent is available in not more than two thirds of the countries, but even this might come with some limitations: in some countries, condoms are the only accessible form of contraception available to teenagers without parental consent. WHO *(7)* and Hindin & Kalamar *(8)* provide additional information on adolescents' contraceptive use, as does Chapter 7.

Only half of the countries give children the right to abortion without parental consent. Among those, discrepancies are noticeable between the actual response and the corresponding qualitative

information provided. Denmark, for example, responded positively to the question on abortion without parental consent, but indicated that adolescents still need a legal guardian in the form of a special committee for an abortion without parental consent. In Austria, adolescents need to "be capable of decision-making", with capability considered to be appropriate at age 14. The legal age in Switzerland is not fixed, but children are considered capable of judgement at age 12. Adolescents in Estonia must provide "a good reason" to terminate a pregnancy without parental consent. In Hungary, an adolescent is considered to be of legal age to access abortion without parental consent only after marriage. The AA-HA! guideline calls for removal of the need for third-party authorizations (by parents, for example) in the provision of sexual and reproductive health services, including access to contraception and abortion.

Two out of every three Member States in the Region (66%, 35 countries) signed the Oviedo Convention on Human Rights and Biomedicine, which states that "the opinion of the minor shall be taken into consideration as an increasingly determining factor in proportion to his or her age and degree of maturity" *(9)*. The UNCRC states that adults should listen to the opinions of children and adolescents and calls for their active involvement. Clearly, access to care should be facilitated for young people in the Region in terms of barriers such as affordability (see Chapter 4), confidentiality and parental consent.

Promoting targeted investment in adolescent sexuality

Adolescent sexuality is considered a sensitive issue in some countries of the European Region, despite a quarter of 15-year-old adolescents reporting having had sexual intercourse and reports from some countries that more than 30% do not use any form of contraception *(10)*. Assessing children's and adolescents' knowledge about sexuality is essential to implementing effective programmes targeting unintended pregnancy, risk-taking sexual behaviours, sexually transmitted infections and unsafe abortions *(11–15)*, but more than half of countries in the Region do not collect such data. Comprehensive sexuality education, as highlighted by the WHO action plan for sexual and reproductive health (*12*) and SDG target 3.7 (*16*), is a key target globally and in the European Region, but as indicated in Chapter 6, only about half of the countries have a policy on having sexuality education in primary and secondary schools.

Conclusion

Children's and adolescents' right to health is a consistent part of UNCRC reporting in nearly all Member States. Improvements are needed to ensure an advocate in the form of an ombudsman for children and adolescents is in place in the governments of all countries. To implement UNCRC targets that all countries have signed up to, and to reduce adolescent birth rates as specified in SDG target 3.7.2, efforts need to be made to provide access to information and care, especially sexual and reproductive health care, to young people without the need for parental consent and, furthermore, to better target improvement activities by collecting information on adolescents' knowledge on sexuality.

Table 5.1 includes all indicators used in this chapter, and data from the country profiles and the survey displayed by country with summary statistics.

Table 5.1. Rights and participation: summary table

Country	Young people's participation in child and adolescent health strategy development 2006	Young people's participation in child and adolescent health strategy development 2017	Having an ombudsman with a mandate on children's rights that includes right to health	Reporting under UNCRC	Policies for access to care for adolescents without parental consent	Policies providing guidance on consent, assent and confidentiality	Programme to provide foster care for institutionalized children	Data on children's and adolescents' knowledge on sexuality	Legal access to contraception without parental consent	Legal access to abortion without parental consent
Albania	No	–	–	–	–	–	–	–	–	–
Andorra	–	No strategy	No ombudsman	Yes	No	No	–	No	No	No
Armenia	Planned	No	No ombudsman	Yes	No	Yes	Yes	Yes	No	No
Austria	–	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Azerbaijan	Yes	Yes	No ombudsman	Yes	Yes	Yes	Yes	Yes	Yes	No
Belarus	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Belgium	–	Yes	Yes	–	Yes	Yes	No	Yes	–	–
Bosnia and Herzegovina	–	No strategy	Yes	Yes	Yes	Yes	Yes	–	Yes	Yes
Bulgaria	Yes	Yes	No ombudsman	Yes	Yes	Yes	Yes	Yes	–	No
Croatia	No strategy	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Cyprus	Planned	Yes	Yes	Yes	No	Yes	Yes	–	No	No
Czechia	Planned	No	No ombudsman	Yes	Yes	Yes	No	No	Yes	Yes
Denmark	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estonia	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Finland	No strategy	Yes	Yes	Yes	Yes	Yes	–	Yes	Yes	No
France	–	No	Yes	Yes	Yes	No	–	No	Yes	Yes
Georgia	Planned	No	Yes	Yes	Yes	Yes	Yes	–	Yes	Yes
Germany	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Greece	No strategy	–	–	–	–	–	–	–	–	–
Hungary	Yes	Yes	No ombudsman	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Iceland	–	No	Yes	Yes	Yes	–	–	–	Yes	Yes
Ireland	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Israel	Yes	No strategy	No ombudsman	Yes	Yes	Yes	Yes	No	Yes	Yes
Italy	No	–	–	–	–	–	–	–	–	–
Kazakhstan	–	No	Yes	Yes	No	No	Yes	No	Yes	–
Kyrgyzstan	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes
Latvia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lithuania	No strategy	No strategy	Yes	Yes	Yes	Yes	–	–	–	No
Luxembourg	–	No strategy	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Malta	No	No	Yes	Yes	No	No	Yes	Yes	Yes	No
MKD[a]	Yes	No strategy	Yes	Yes	Yes	Yes	Yes	–	Yes	No
Monaco	–	–	–	–	–	–	–	–	–	–
Montenegro	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Netherlands	No strategy	No strategy	Yes	Yes	–	–	–	–	–	–
Norway	No	Yes	Yes	Yes	Yes	–	–	No	Yes	Yes
Poland	Planned	No	Yes	Yes	No	Yes	Yes	–	No	No
Portugal	–	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Republic of Moldova	–	Yes	Yes	Yes	Yes	Yes	Yes	–	Yes	Yes
Romania	No	No strategy	No ombudsman	Yes	Yes	Yes	Yes	–	Yes	No
Russian Federation	–	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes
San Marino	–	–	–	–	–	–	–	–	–	–
Serbia	–	No	Yes	Yes	Yes	Yes	Yes	–	Yes	Yes
Slovakia	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Slovenia	–	No strategy	No ombudsman	Yes	–	–	Yes	–	–	–
Spain	Yes	No strategy	Yes	Yes	–	–	Yes	–	Yes	No
Sweden	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Switzerland	–	No strategy	No ombudsman	Yes	Yes	Yes	Yes	No	Yes	Yes
Tajikistan	–	Yes	Yes	Yes	Yes	Yes	Yes	–	No	No
Turkey	–	No	Yes	Yes	No	–	–	–	–	No
Turkmenistan	Yes	Yes	No ombudsman	Yes	No	Yes	Yes	Yes	No	No
Ukraine	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
United Kingdom	–	No strategy	No ombudsman	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Uzbekistan	–	Yes	No ombudsman	Yes	Yes	Yes	Yes	No	No	Yes

	Yes, (Planned), No, (No Strategy, No Ombudsman)																							
% Overall		33	15	24	15	44	29	25	71	2	27	98	0	77	17	75	13	73	8	44	25	67	21	48	44
% EU15	Yes, (Planned), No, (No Strategy, No Ombudsman)	17	0	33	50	38	31	31	92	0	8	92	0	85	0	69	15	54	15	77	8	85	0	54	31
% EU13	Yes, (Planned), No, (No Strategy, No Ombudsman)	33	25	25	17	46	23	23	62	0	38	100	0	69	23	85	8	85	8	54	8	54	23	38	54
% CIS	Yes, (Planned), No, (No Strategy, No Ombudsman)	43	14	14	0	73	27	0	55	9	36	100	0	73	27	82	18	100	0	36	45	55	45	36	55
% SEEHN	Yes, (Planned), No, (No Strategy, No Ombudsman)	57	0	29	0	38	13	50	63	0	38	100	0	100	0	100	0	88	13	13	25	75	13	50	50

[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

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6. Health in schools

Introduction

Schools are regarded as an important setting for the promotion of children's and adolescents' health and well-being which affects them currently and has consequences throughout their lives. This chapter summarizes the indicators included in the country profiles and baseline survey related to legislation on children's and adolescents' health in schools. The content relates to the strategy's second priority of transforming the governance of child and adolescent health – supporting early childhood development (ECD) and supporting growth during adolescence.

Key findings

- Almost all countries report having supporting policies for ECD. The range of elements reported by countries on support systems for ECD is broad.
- One in three countries does not have policies for health promoting schools.
- Almost half of the countries have no policy that affects the availability of unhealthy foods in school.
- Sexuality education in school curricula, including primary school, needs improvement in many countries to meet international standards.

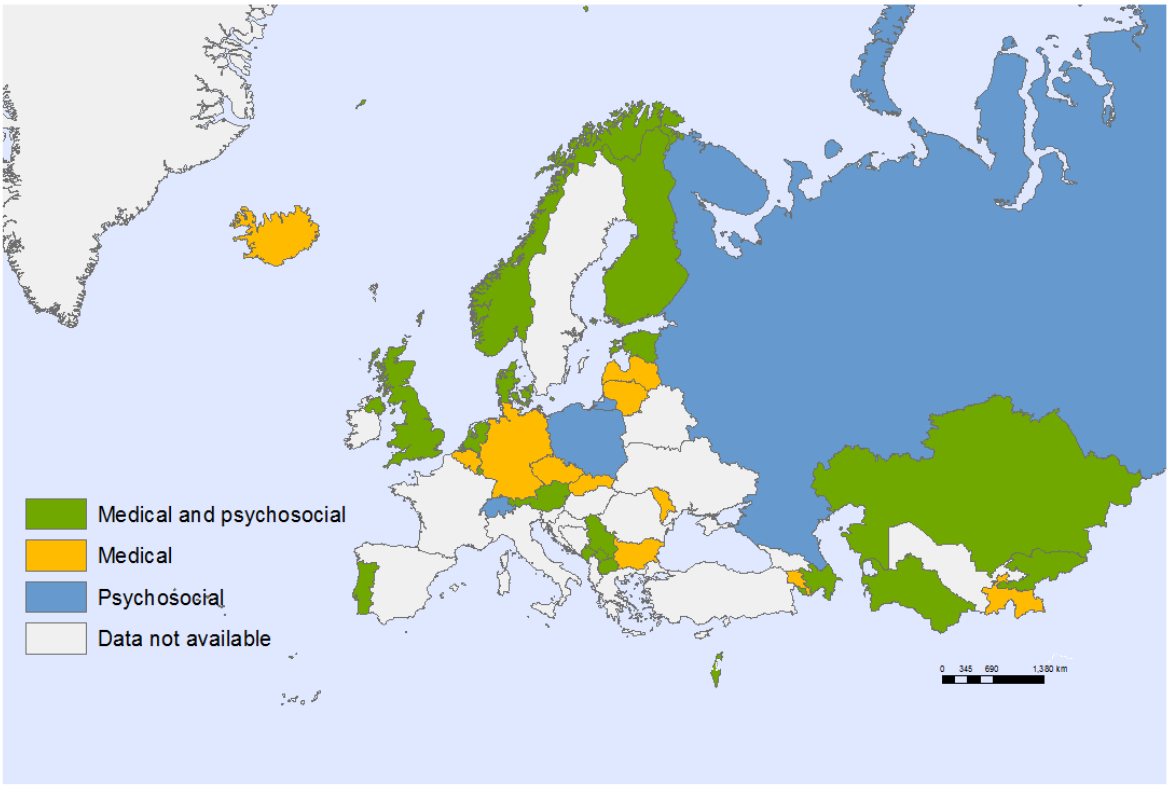
Findings

Supporting ECD

Healthy ECD is critical for children's developmental trajectories and life-course. Almost all countries reported having an ECD support system in place.

Countries were asked to provide additional information on the types of services provided through their ECD support systems. Seventeen (36%) reported having a system in place offering both medical treatment and psychosocial interventions, which include examination and monitoring of health, health care in preschools and schools, health promotion, and information for parents and families. Twelve (27%) reported having systems that offer medical treatment, which include examination of children, immunization and health clinics. Three (6%) have a system in place that offers only psychosocial interventions (such as neoparental consultations, compulsory preschool education and rehabilitation services (Fig. 6.1).

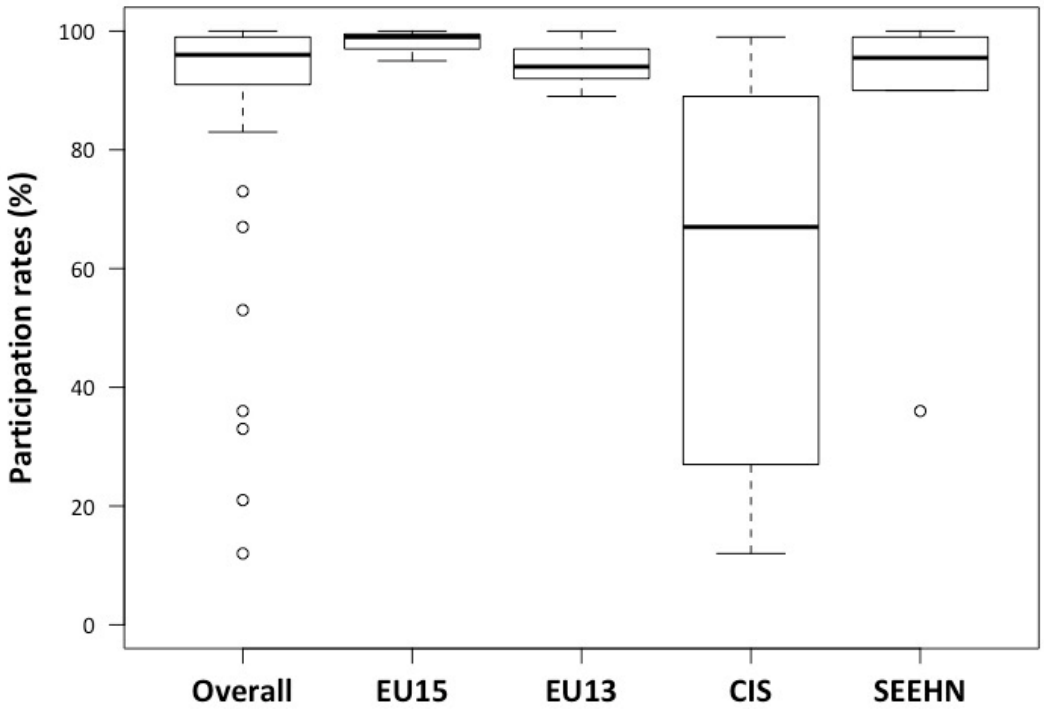
Fig. 6.1. Early childhood intervention types



Organized preschool learning

Participation in organized learning one year before the official primary school entry age in countries was on average 87%, with the lowest percentages in Tajikistan (12%), Azerbaijan (21%), Uzbekistan (33%) and the former Yugoslav Republic of Macedonia (36%) (Fig. 6.2).

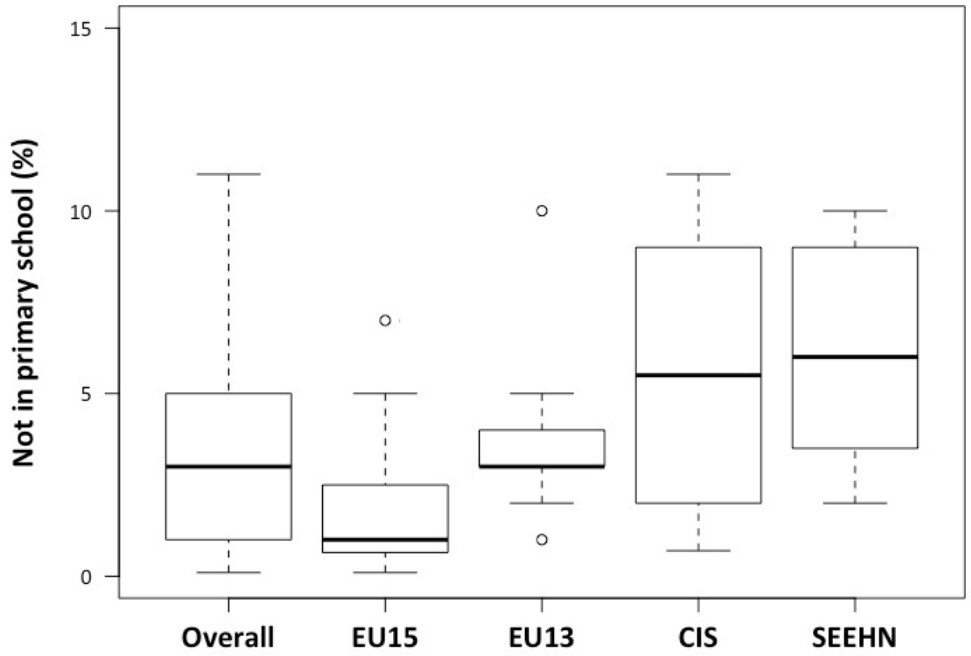
Fig. 6.2. Participation rate in organized learning, by country grouping



Children not enrolled in primary school

The subregional average of non-enrolment in primary school is 4%, with the lowest percentage in the United Kingdom (1%) and the highest reported in Azerbaijan (11%) (Fig. 6.3).

Fig. 6.3. Children not enrolled in primary school, by country grouping



School health services and health promotion

Policy for the provision of school health services

Forty-three countries (90%) reported having legislation, policies or regulations for the provision of school health services (Fig. 6.4 and 6.5).

Fig. 6.4. Legislation, policies or regulations for the provision of school health services in place (countries)

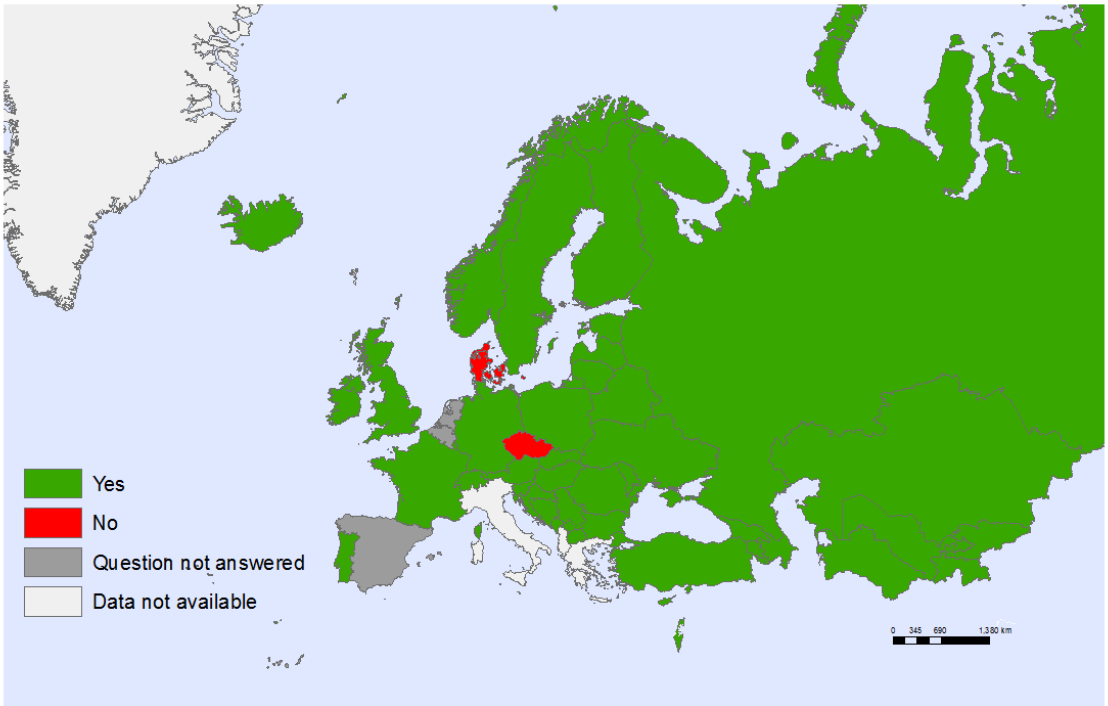
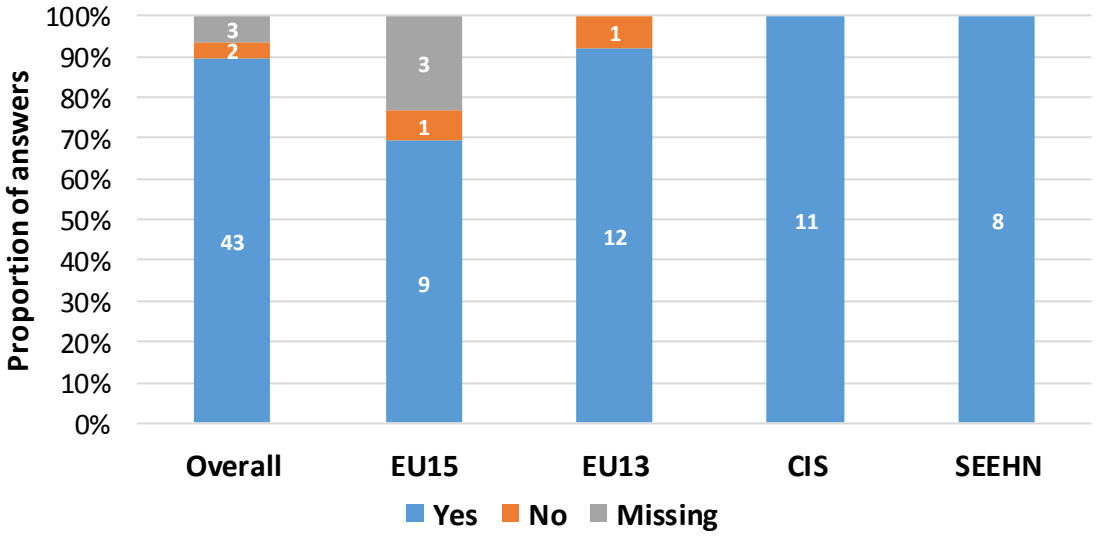


Fig. 6.5. Legislation, policies or regulations for the provision of school health services in place (country grouping)



Coordination of school-based services across government sectors

Forty countries (83%) reported coordinating school health services across government departments/sectors, while five (10%) reported not doing so (Fig. 6.6 and 6.7).

Fig. 6.6. School-based services coordinated across government departments/sectors (countries)

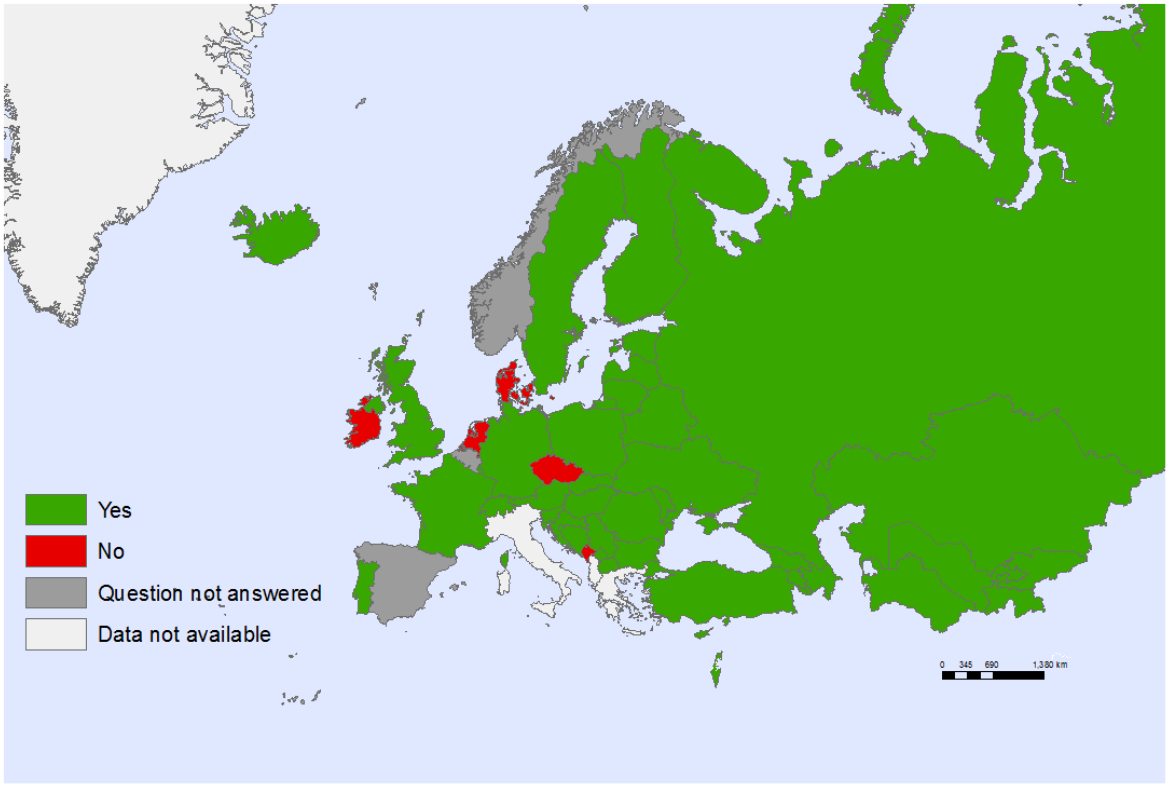
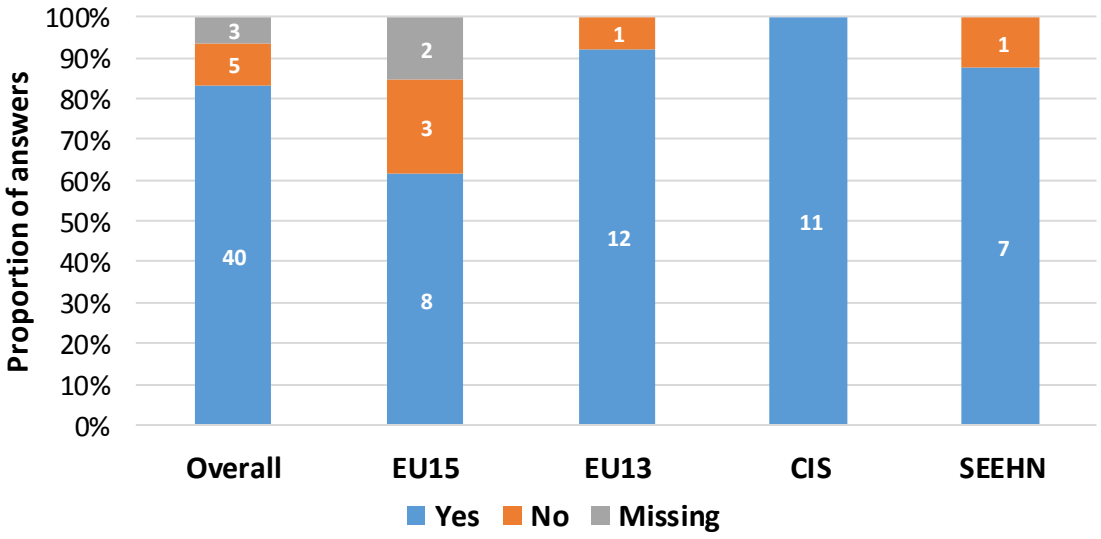


Fig. 6.7. School-based services coordinated across government departments/sectors (country grouping)



National strategy on health promoting schools

Twenty-eight countries (58%) reported having a national strategy on health promoting schools, while 16 (33%) have no such strategy (Fig. 6.8). This is less common among SEEHN countries, where five out of seven reported not having a strategy (Fig. 6.9).

Fig. 6.8. National strategy on health promoting schools in place (countries)

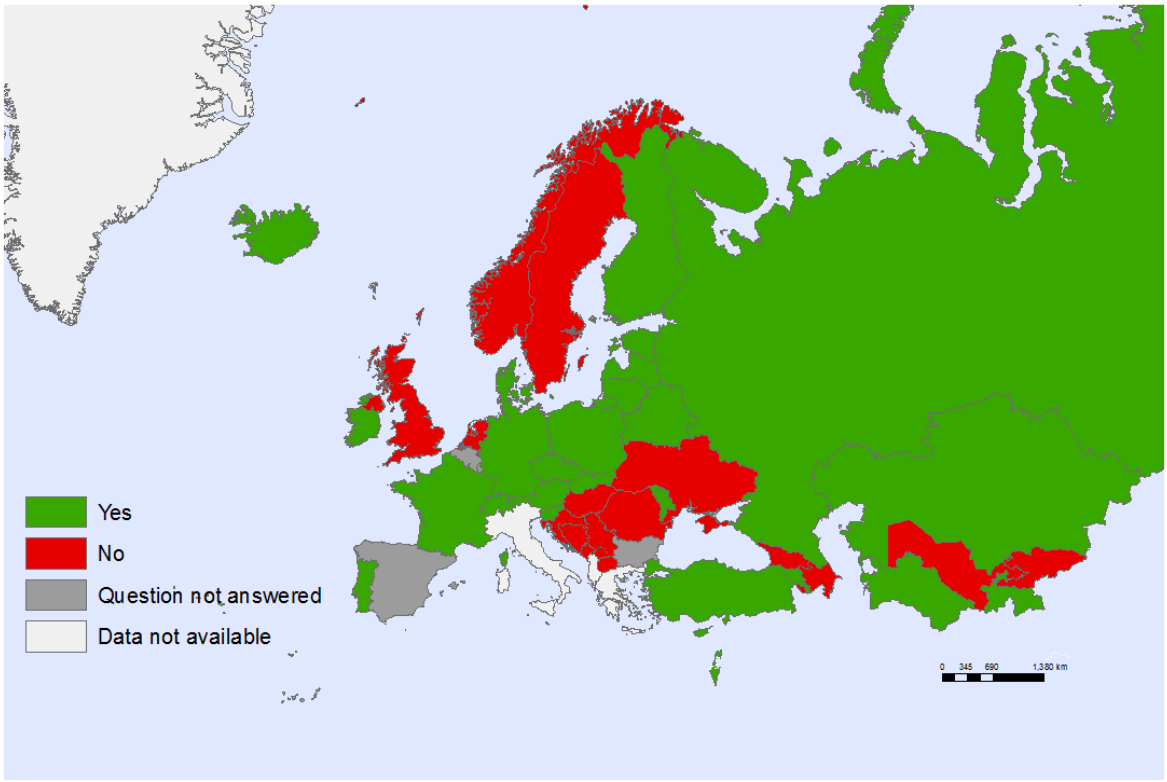
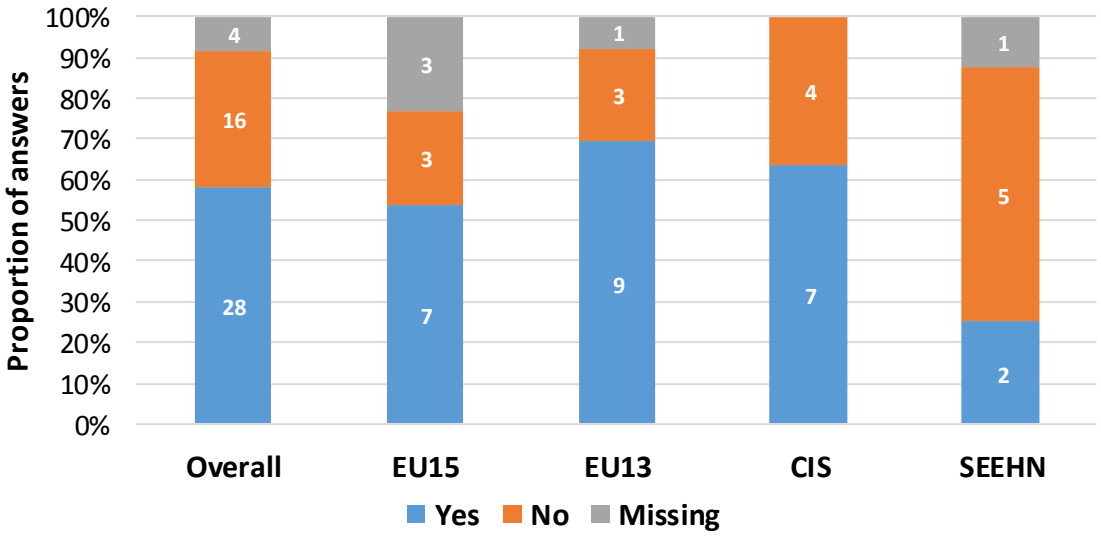


Fig. 6.9. National strategy on health promoting schools in place (country grouping)



Unhealthy food in schools

Twenty-eight countries (58%) reported having legislation in place that affects the availability of unhealthy foods at schools, 12 (25%) that they have plans to introduce such legislation before 2020, and eight (17%) do not have legislation in place and have no plans to introduce it before 2020 (Fig. 6.10 and 6.11).

Fig. 6.10. Legislation that affects the availability of unhealthy foods in schools in place (countries)

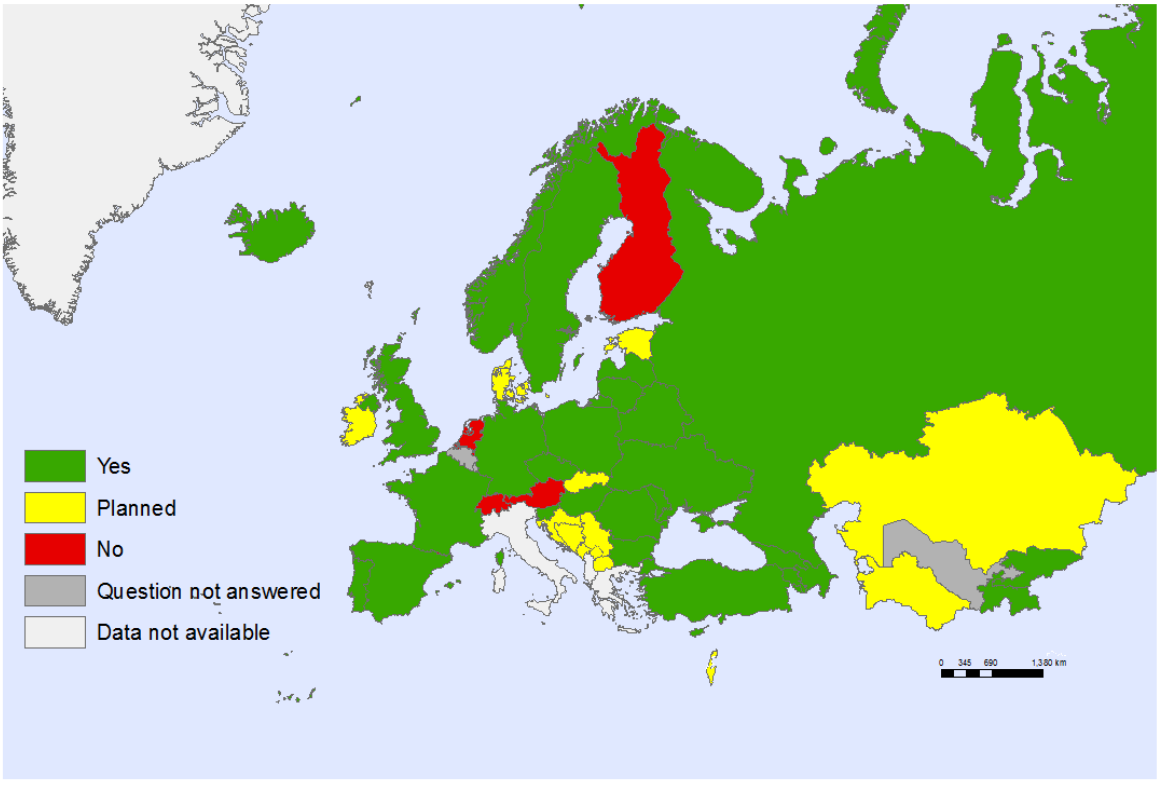
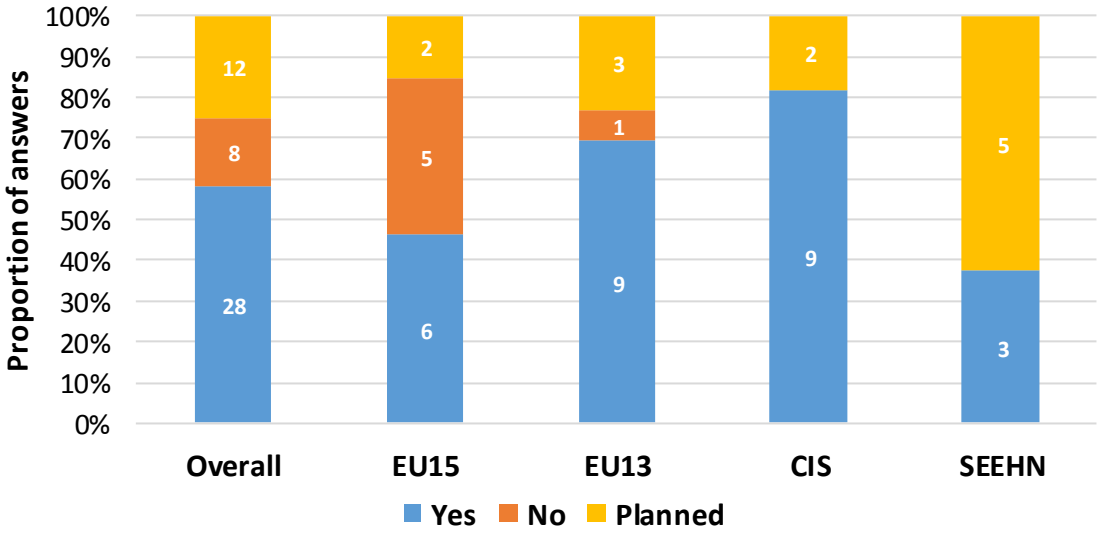


Fig. 6.11. Legislation that affects the availability of unhealthy foods in schools in place (country grouping)



Mental health

Twenty-nine countries (60%) reported that their national school policy includes adolescent mental health, while 13 (27%) reported that it does not (Fig. 6.12 and 6.13).

Fig. 6.12. National school policy includes adolescent mental health (countries)

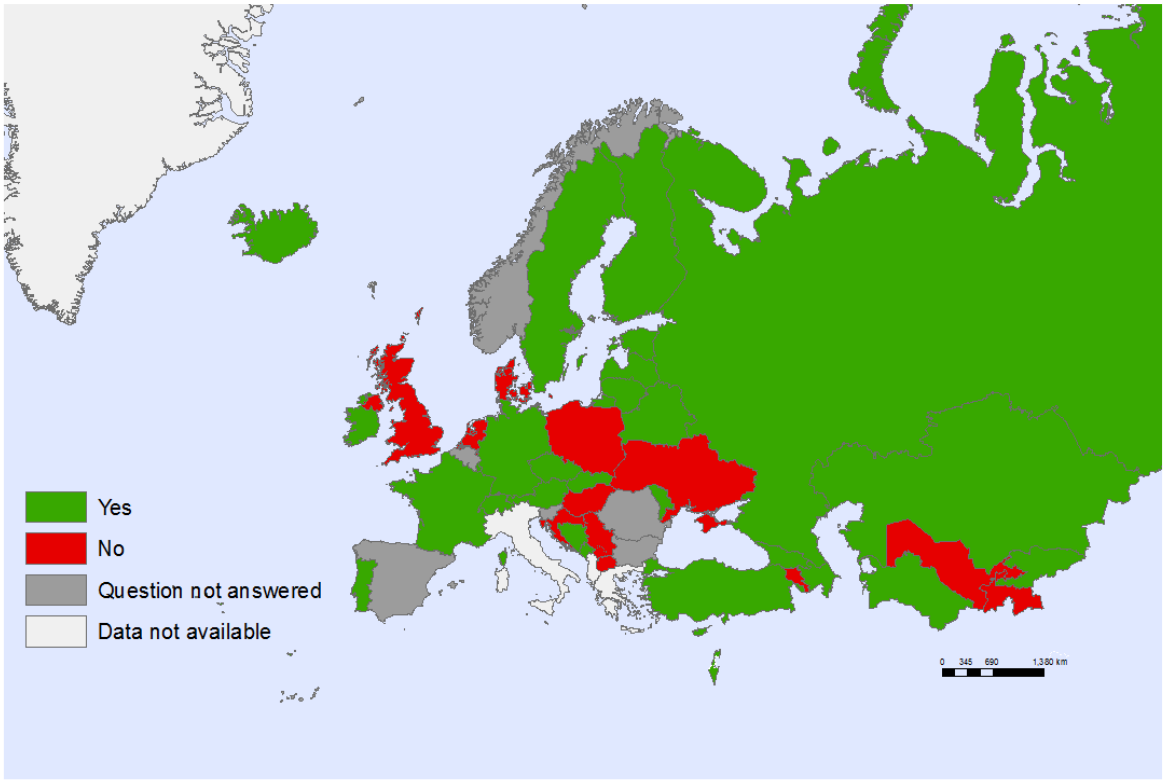
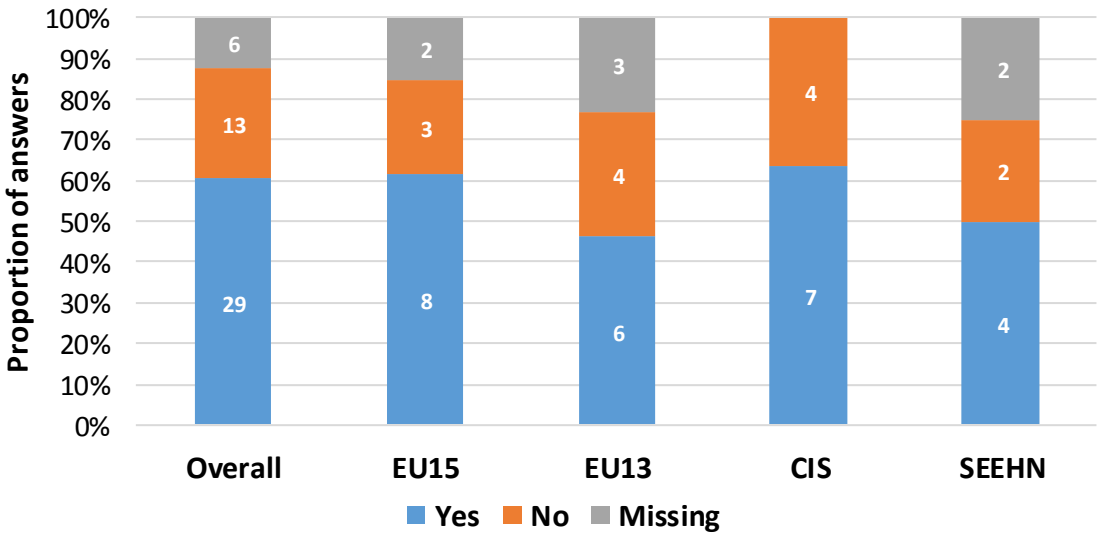


Fig. 6.13. National school policy includes adolescent mental health (country grouping)



Sexuality education

Twenty-three countries (55%) reported that they have a policy of having sexuality education in primary and secondary schools, eight (19%) only in secondary school, one (2.4%) (Denmark) only in primary school, and seven (17%) do not have a policy in place (Bosnia and Herzegovina, Georgia, Lithuania, Republic of Moldova, the former Yugoslav Republic of Macedonia, Romania and Serbia) (Fig. 6.14 and 6.15).

Fig. 6.14. Policy of having sexuality education in schools in place (countries)

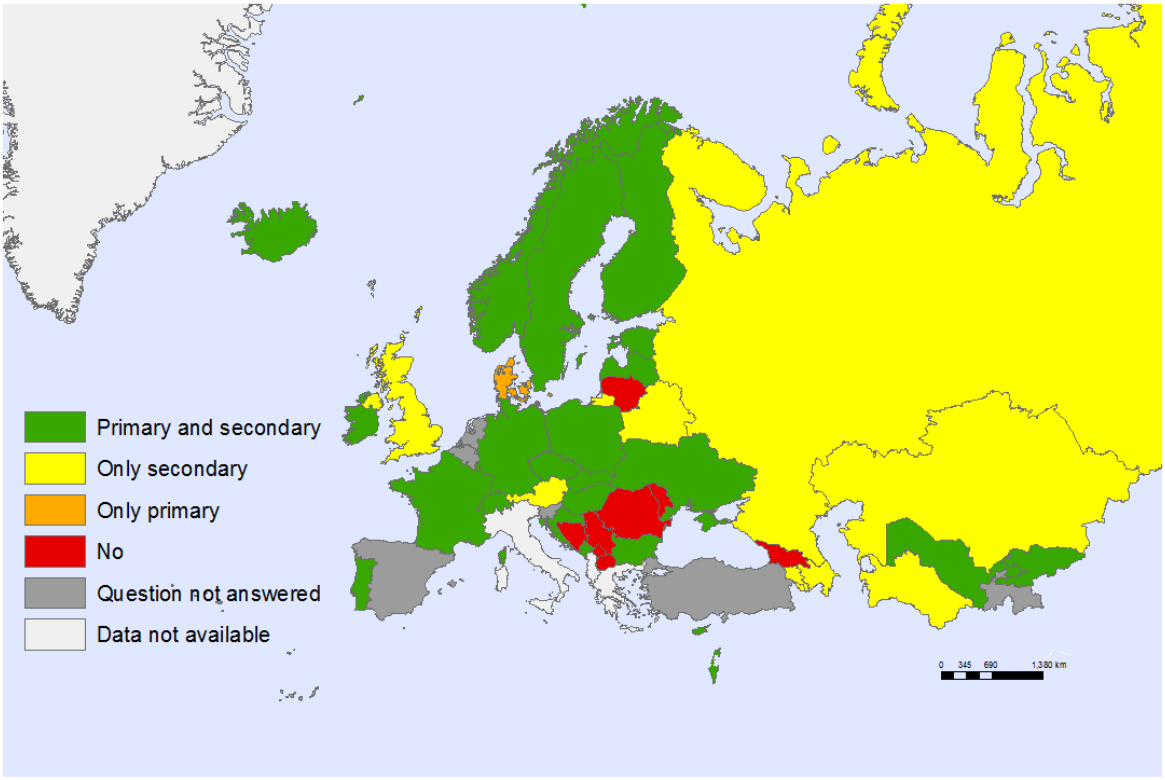
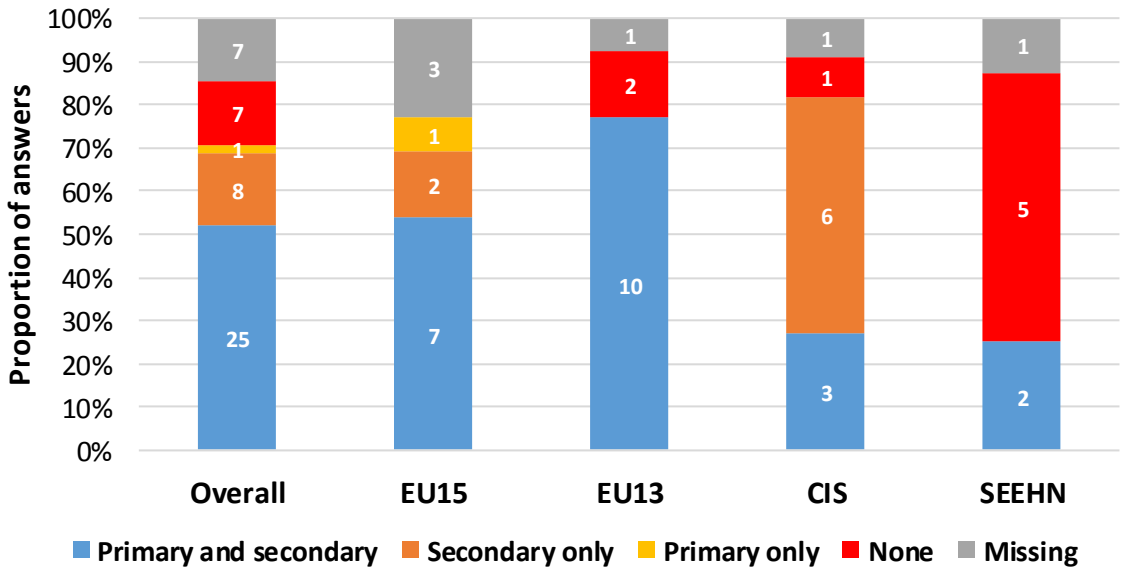


Fig. 6.15. Policy of having sexuality education in schools in place (country grouping)



Education addressing intimate-partner violence

Thirty countries (63%) reported undertaking age- and gender-appropriate education that addresses sexual/intimate-partner violence, while 12 (25%) reported providing no such education (Fig. 6.16 and 6.17).

Fig. 6.16. Country undertakes age- and gender-appropriate education that addresses sexual/intimate-partner violence (countries)

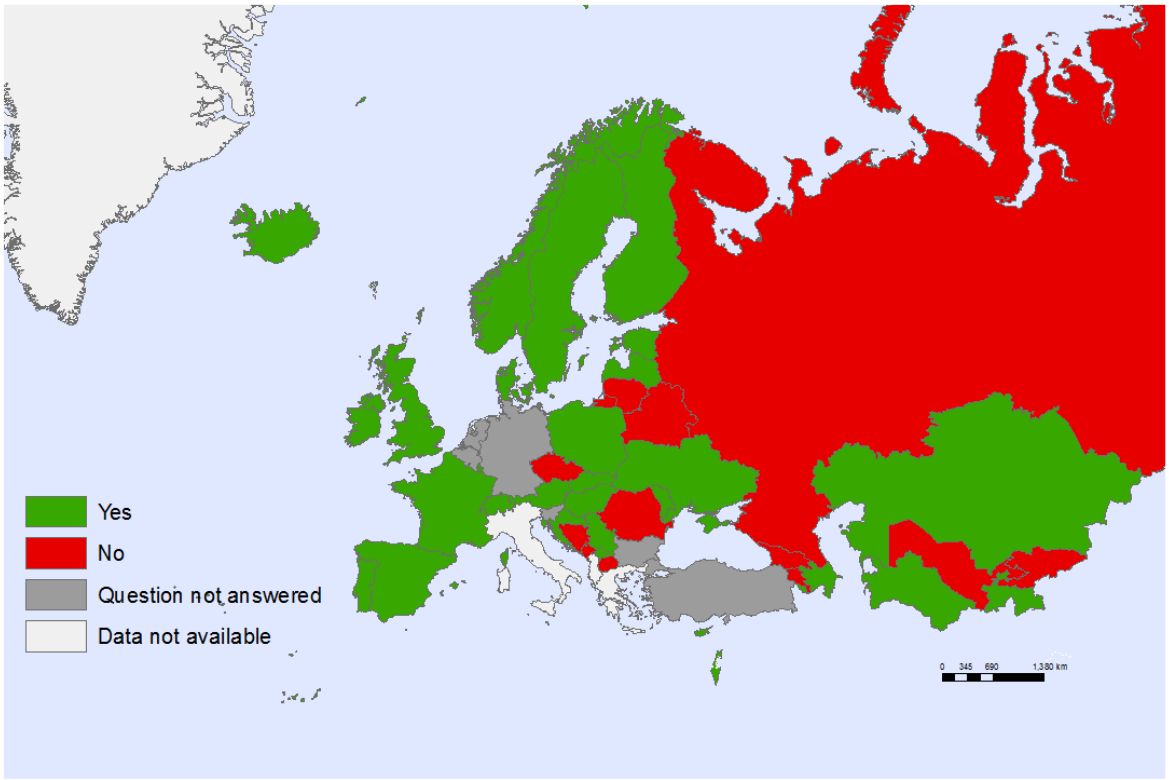
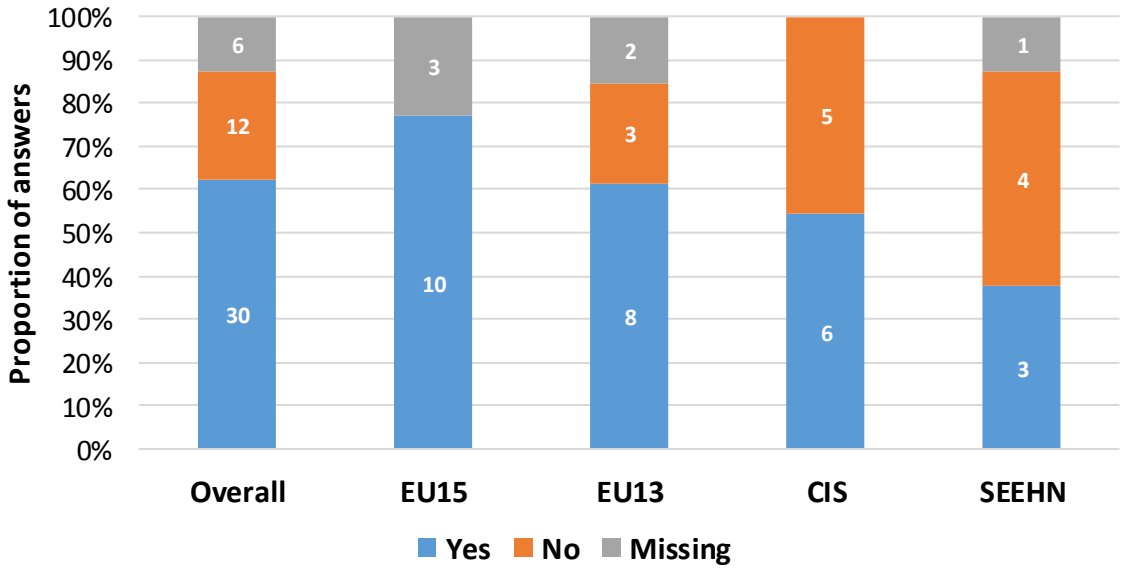


Fig. 6.17. Country undertakes age- and gender-appropriate education that addresses sexual/intimate-partner violence (country grouping)



Findings in perspective

ECD

The SDG target on ECD, care and education is to "ensure that by 2030, all boys and girls have access to quality early childhood development, care and pre-primary education so that they are ready for primary education". Despite the fact that all responding countries report having a support system for ECD, the details provided cast doubt that this is implemented comprehensively and effectively in all countries.

The range of support system elements reported by countries is broad and includes ECD policies and programmes, health check-ups, home visiting and educational standards for preschool children. Research has shown that having an integrated ECD system under one ministry or agency is associated with better ECD quality *(1),* as this will foster comprehensive interventions targeted at the main domains of ECD (such as nutrition, health, education, social support and child protection).

Data on participation rates in organized learning one year before the official primary education entry age are missing for 14 countries; this is an essential indicator for monitoring progress towards the SDG target on ECD. ECD, encompassing all domains of a child's development, is a classic area for cross-sectoral collaboration.

School health services and health promotion

School health services serve as a vital institution for reaching out to the majority of children and adolescents on an almost daily basis and are therefore well placed to deliver preventive interventions and enable easy access to care *(2)*. The Paris declaration on promoting intersectoral and interagency action for health and well-being in the WHO European Region emphasized the need to make every school in the European Region a setting that promotes health and well-being for all, provides and promotes school-based, adolescent-friendly health services and employs community-wide participatory approaches *(3)*. The Schools for Health in Europe (SHE) network encourages each member country to develop and implement a national policy on school health promotion by providing resource materials, guidance and an online manual *(4)*.

Most of the countries reported having a policy for providing school health services and that school-based services are coordinated across government sectors, yet data from Chapter 2 would suggest that this cross-government work around school health services does not translate to a whole-of-government approach. Only about two thirds of countries reported having a national strategy on health promoting schools, although some countries without such a strategy gave further descriptions on what is being done in the area. Norway and Sweden, for example, reported having education acts that mandate all schools to offer preventive and health promoting services. Germany has recommendations for health promotion and prevention in schools but no national strategy, as school policies are handled at federal-states level. The United Kingdom reported having school nurse services commissioned as part of local authority public health commissioning.

The idea that mental health is not addressed well in schools *(2)* is supported by findings from this survey, which found that only 29 countries (60%) reported having adolescent mental health included in national school policies.

Unhealthy food (food with high sugar, salt or fat content, particularly those high in saturated and trans fats) promote obesity. Targeted efforts to reduce their availability in schools will therefore be beneficial in curbing increasing rates of obesity in the Region and setting healthier lifelong habits. School food policies can improve knowledge, preferences, attitudes and behaviour towards food. Most of the countries without plans for developing legislation affecting the availability of unhealthy foods in schools are members of the EU. To support Member States, the WHO Regional Office for Europe has published guidance on the development of school food policies that are based on key steps to healthy eating *(5)*. Research has also pointed to the need for better connections between schools and homes in the fight against obesity in childhood, given the important role of parental involvement in this area *(6)*.

Education addressing sexuality and intimate-partner violence

Sexuality is a sensitive issue in many countries and populations. As highlighted by the WHO action plan for sexual and reproductive health *(7,8)*, comprehensive sexuality education throughout the life-course, involving parents, young people and professionals, should be addressed effectively. Only 23 countries have policies on sexuality education in both primary and secondary schools, and eight in secondary schools only. More effort is needed to create new policies and review existing ones to prepare children and adolescents for their sexuality and avoid them taking unnecessary risks.

Targeted age- and gender-appropriate comprehensive sexuality education also addresses the root causes of intimate-partner violence, such as gender inequality and sociocultural norms that tolerate violence *(7,8)*. Only about two thirds of countries in the Region report having age- and gender-appropriate education to address intimate-partner violence. Systematically including intimate-partner violence and other forms of sexual violence and exploitation in the education curricula of health-care professionals, teachers and social workers will help them to better address the issue and help to prevent violence *(7)*. More information on sexuality can be found in Chapters 3, 5 and 7.

Conclusion

Schools provide a unique setting for tackling lifelong trajectories for physical and mental well-being. Health and academic attainment need to go hand in hand but are often addressed separately. The perceived conflict gives rise to the challenge of effectively implementing health promotion interventions. The call for every school to be a health promoting school will require better connections between health and education sectors, and the application of research findings to schools.

Table 6.1 includes all indicators used in this chapter, and data from the country profiles and the survey displayed by country with summary statistics.

Table 6.1. Health in schools: summary table

Country	Support system for ECD	Policy for the provision of school health service	School-based services coordinated across government sectors	Policy affecting the availability of unhealthy food in schools	National strategy on health promoting schools	National school policy includes adolescent mental health	Education addressing intimate-partner violence	Children not enrolled in primary school	Participation rate in organized learning	Country code
Albania	–	–	–	–	–	–	–	9	98	**ALB**
Andorra	No	Yes	Yes	No	Yes	Yes	Yes	–	–	**AND**
Armenia	Yes	Yes	Yes	Yes	Yes	No	No	7	–	**ARM**
Austria	Yes	Yes	Yes	No	Yes	Yes	Yes	7	–	**AUT**
Azerbaijan	Yes	Yes	Yes	Yes	No	Yes	Yes	11	21	**AZE**
Belarus	Yes	Yes	Yes	Yes	Yes	Yes	No	7	99	**BLR**
Belgium	Yes	–	–	No	–	–	–	1	100	**BEL**
Bosnia and Herzegovina	Yes	Yes	Yes	P	No	Yes	No	–	–	**BIH**
Bulgaria	Yes	Yes	Yes	Yes	–	–	–	4	93	**BGR**
Croatia	Yes	Yes	Yes	P	No	No	Yes	1	99	**HRV**
Cyprus	Yes	Yes	Yes	Yes	Yes	Yes	Yes	2	92	**CYP**
Czechia	Yes	No	No	Yes	Yes	Yes	No	–	–	**CZE**
Denmark	Yes	No	No	P	Yes	No	Yes	2	99	**DNK**
Estonia	Yes	Yes	Yes	P	Yes	Yes	Yes	3	92	**EST**
Finland	Yes	Yes	Yes	No	Yes	Yes	Yes	0.9	100	**FIN**
France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	0.9	100	**FRA**
Georgia	Yes	Yes	Yes	Yes	No	Yes	No	3	53	**GEO**
Germany	Yes	Yes	Yes	Yes	Yes	Yes	–	0.9	–	**DEU**
Greece	–	–	–	–	–	–	–	0.2	95	**GRC**
Hungary	Yes	Yes	Yes	Yes	No	No	Yes	4	95	**HUN**
Iceland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	2	99	**ISL**
Ireland	Yes	Yes	No	P	Yes	Yes	Yes	0.3	96	**IRL**
Israel	Yes	Yes	Yes	P	Yes	Yes	Yes	3	100	**ISR**
Italy	–	–	–	–	–	–	–	2	99	**ITA**
Kazakhstan	Yes	Yes	Yes	P	Yes	Yes	Yes	1	95	**KAZ**
Kyrgyzstan	Yes	Yes	Yes	Yes	No	Yes	No	0.7	67	**KGZ**
Latvia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	3	97	**LVA**
Lithuania	Yes	Yes	Yes	Yes	Yes	Yes	No	3	97	**LTU**
Luxembourg	Yes	Yes	Yes	No	–	Yes	Yes	5	98	**LUX**
Malta	Yes	Yes	Yes	No	Yes	No	Yes	5	100	**MLT**
MKD[a]	Yes	Yes	Yes	P	No	No	No	8	36	**MKD[a]**
Monaco	–	–	–	–	–	–	–	–	–	**MCO**
Montenegro	Yes	Yes	No	P	No	Yes	No	2	–	**MNE**
Netherlands	Yes	–	No	No	No	No	–	3	–	**NLD**
Norway	Yes	Yes	–	Yes	No	–	Yes	0.3	99	**NOR**
Poland	Yes	Yes	Yes	Yes	Yes	No	Yes	3	89	**POL**
Portugal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4	96	**PRT**
Republic of Moldova	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9	–	**MDA**
Romania	Yes	Yes	Yes	Yes	No	–	No	10	90	**ROU**
Russian Federation	Yes	Yes	Yes	Yes	Yes	Yes	No	3	83	**RUS**
San Marino	–	–	–	–	–	–	–	7	95	**SMR**
Serbia	Yes	Yes	Yes	P	No	No	Yes	4	99	**SRB**
Slovakia	Yes	Yes	Yes	P	Yes	Yes	Yes	–	–	**SVK**
Slovenia	–	Yes	Yes	Yes	Yes	–	–	3	94	**SVN**
Spain	–	–	–	Yes	–	–	Yes	2	99	**ESP**
Sweden	Yes	Yes	Yes	Yes	No	Yes	Yes	0.4	98	**SWE**
Switzerland	Yes	Yes	Yes	No	Yes	Yes	Yes	1	100	**CHE**
Tajikistan	Yes	Yes	Yes	Yes	Yes	No	Yes	4	12	**TJK**
Turkey	Yes	Yes	Yes	Yes	Yes	Yes	–	5	73	**TUR**
Turkmenistan	Yes	Yes	Yes	P	Yes	Yes	Yes	–	–	**TKM**
Ukraine	Yes	Yes	Yes	Yes	No	No	Yes	2	–	**UKR**
United Kingdom	Yes	Yes	Yes	Yes	No	No	Yes	0.1	–	**GBR**
Uzbekistan	Yes	Yes	Yes	Yes	No	No	No	9	33	**UZB**

% Overall	Yes, (P), No	94	2	90	4	83	10	58	25	17	58	33	60	27	63	25	4	87	Average
% EU15	Yes, (P), No	92	0	69	8	62	23	46	15	38	54	23	62	23	77	0	11	100	Highest value
% EU13	Yes, (P), No	92	0	92	8	92	8	69	23	8	69	23	46	31	62	23	AZE		Highest country
% CIS	Yes, (P), No	100	0	100	0	100	0	82	18	0	64	36	64	36	55	45	0.1	12	Lowest value
% SEEHN	Yes, (P), No	100	0	100	0	88	13	38	62	0	25	63	50	25	38	50	GBR	TJK	Lowest country

P: planned.

[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

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7. Risk-taking and exploratory behaviours

Introduction

Adolescence is a time of exploring new behaviours, which often leads to taking risks. A main source for information on risk behaviours in adolescents in Europe is the HBSC survey *(1)*, results of which are presented in the country profiles in the European Health Information Gateway and through the HBSC smartphone app. Selected results are presented in this chapter, together with information on related policies.

Key findings

- Adolescence is a time of risk-taking, so countries need to understand what might be acceptable and what should be discouraged through legislation.
- Major insights into the risk-taking behaviours of adolescents come from the HBSC survey.
- Adolescent tobacco and alcohol use is prevalent across the Region.
- Cannabis use is more prevalent in EU countries than in eastern Europe, central Asia and the Balkans.
- Bullying and fighting are particularly high in 15-year-old boys in CIS countries.
- Two in five girls and one in three boys report having unprotected sex.

Findings

Alcohol

Lifetime drunkenness

Ever having been drunk at 15 years of age was reported on average by 31% of adolescents in the HBSC survey, with a range from 1% in Israel to 55% in Lithuania. On average, 34% of boys reported ever having been drunk, with a range of 1% in Iceland to 62% in Lithuania. Girls from EU13 countries reported higher rates than girls from EU15 or CIS countries (Fig. 7.1 and 7.2).

Fig. 7.1. Lifetime drunkenness in 15-year-old girls, by country grouping

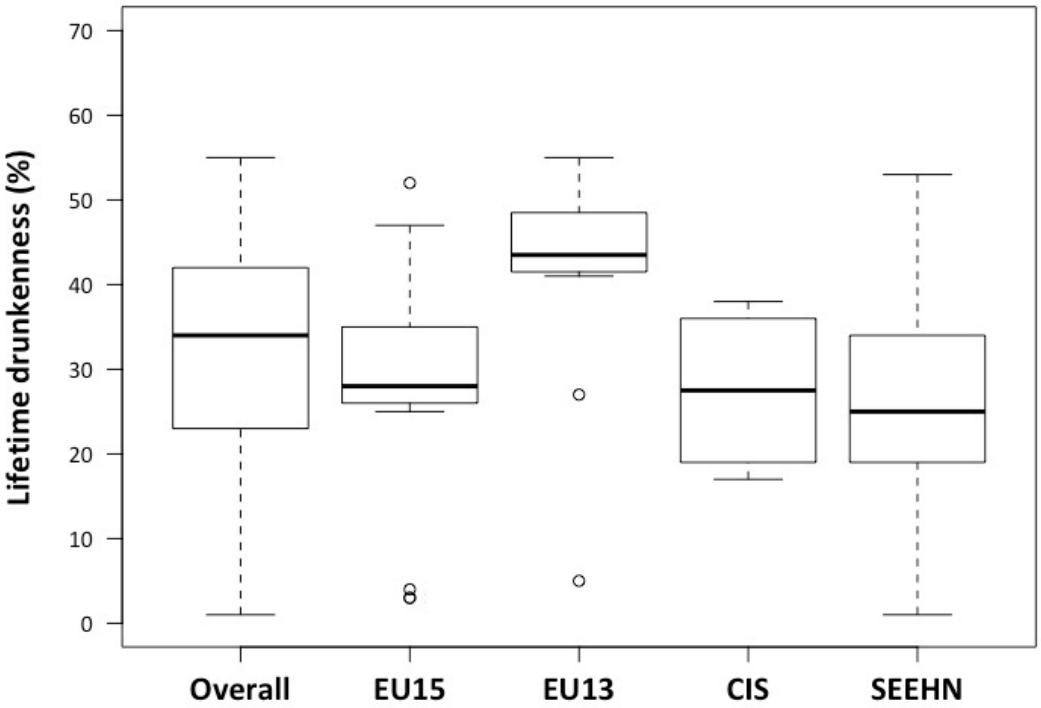
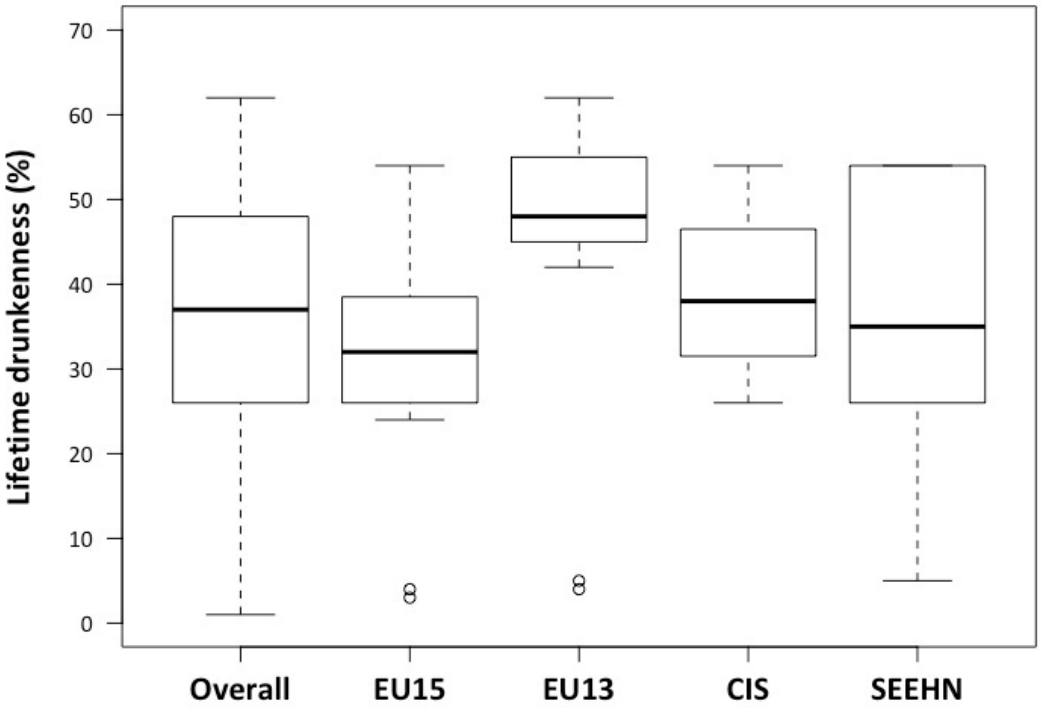


Fig. 7.2. Lifetime drunkenness in 15-year-old boys, by country grouping



Alcohol consumption

Drinking alcohol at least once a week was reported on average by 13% of 15-year-old girls, with a range of 1% in Finland, Latvia and Republic of Moldova to 29% in Denmark. On average, 18% of 15-year-old boys reported drinking alcohol at least once a week, with a range of 1% in Latvia to 34% in Malta. Girls from CIS countries reported lower rates than girls from EU15 and EU13 countries (Fig. 7.3 and 7.4).

Fig. 7.3. Drinking alcohol: 15-year-old girls, by country grouping

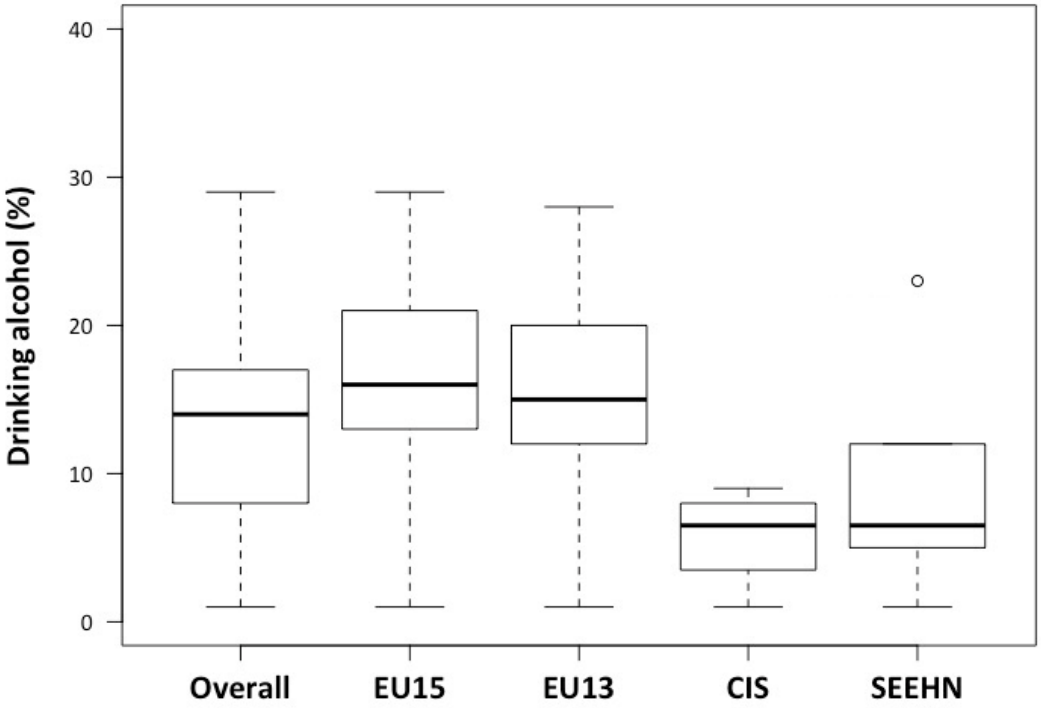
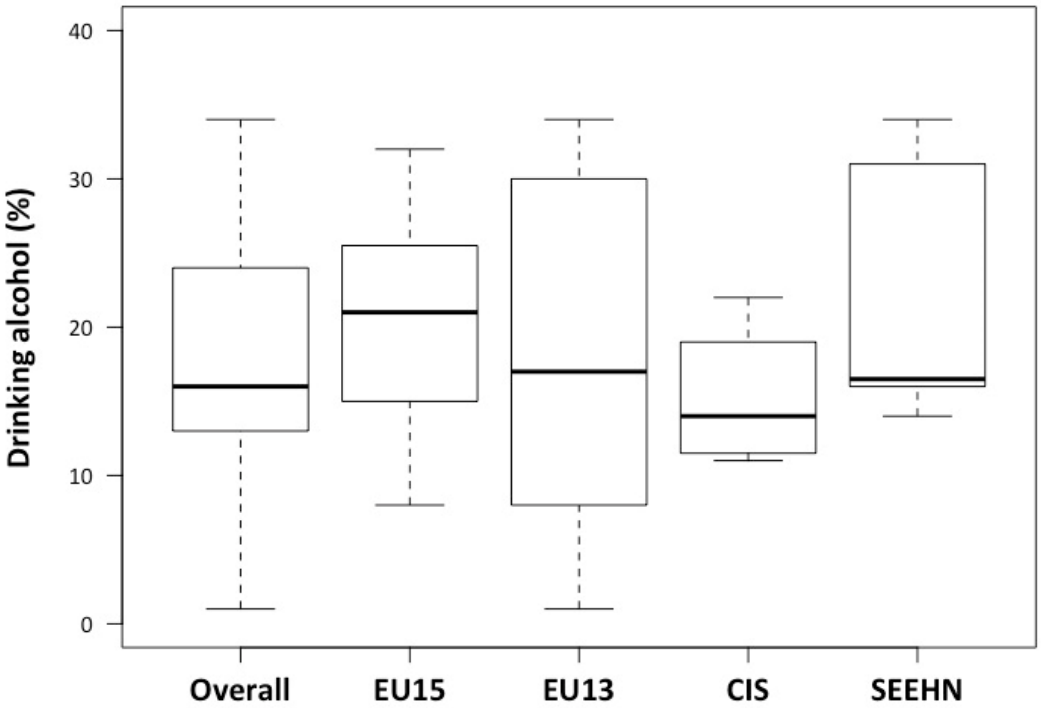


Fig. 7.4. Drinking alcohol: 15-year-old boys, by country grouping



Minimum age to purchase alcoholic beverages

Most countries have age limits for purchasing alcoholic drinks, often separating beer and wine from other alcoholic drinks.

Beer and wine

Most countries have a minimum age of 18 years for purchase of beer and wine, with Austria, Denmark, Germany, Luxembourg and Switzerland having a lower limit of 16 years, and Cyprus and Malta 17. Iceland has a limit of 20, and Kazakhstan and Uzbekistan of 21 (Fig. 7.5 and 7.6).

Fig. 7.5. Minimum age to purchase beer, by country

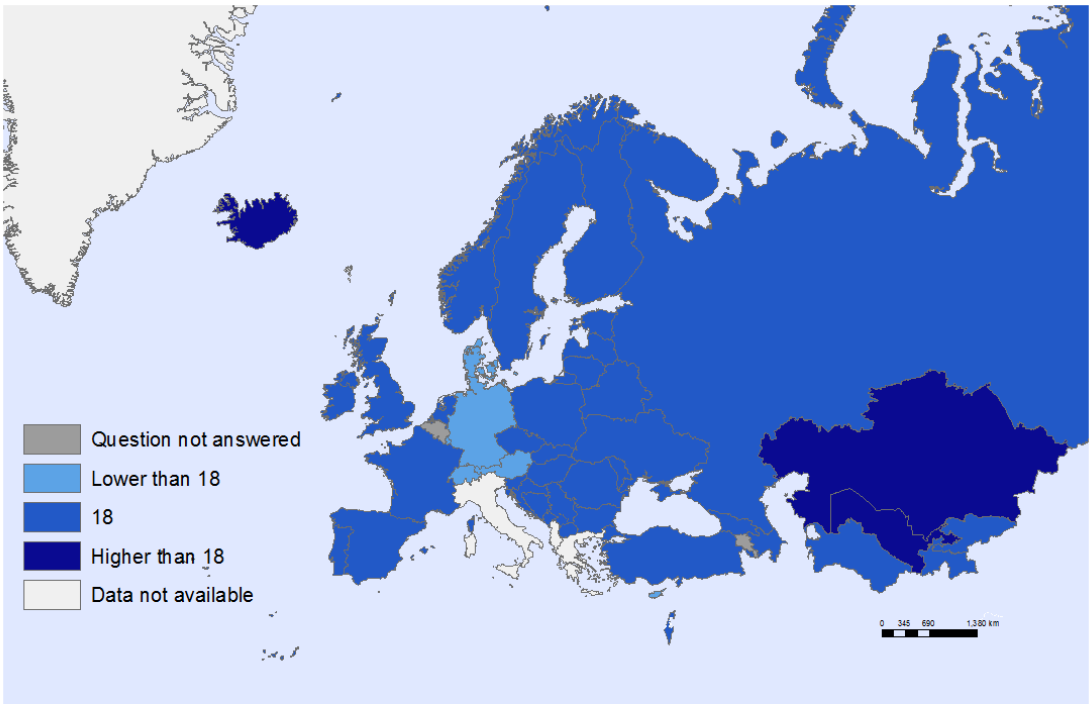
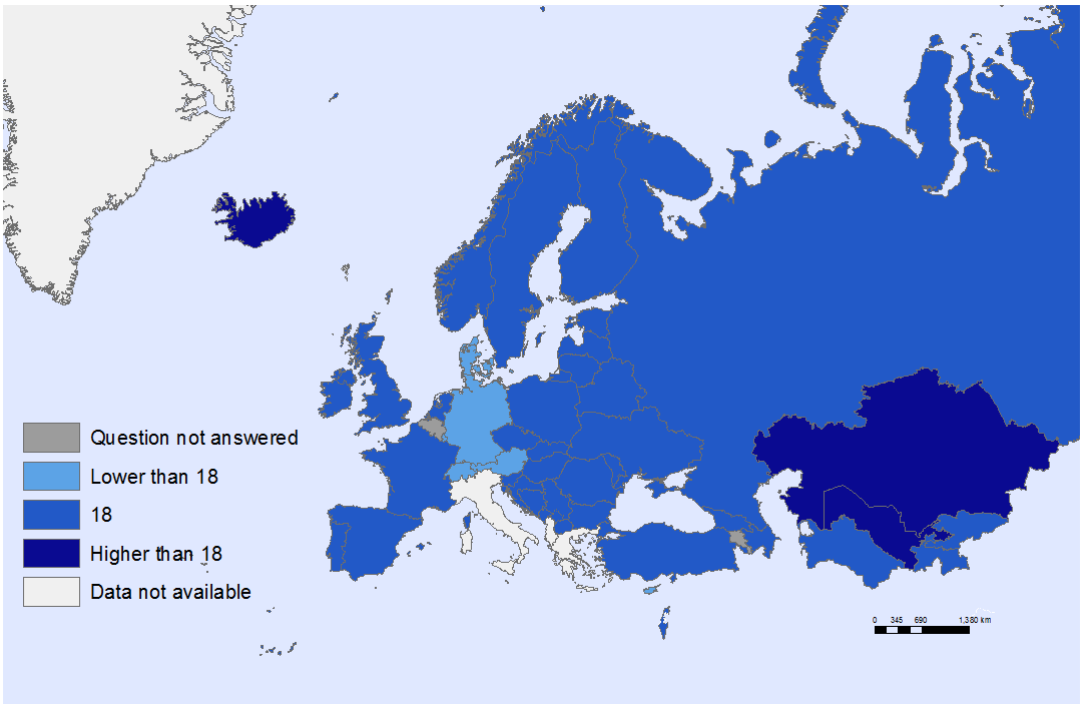


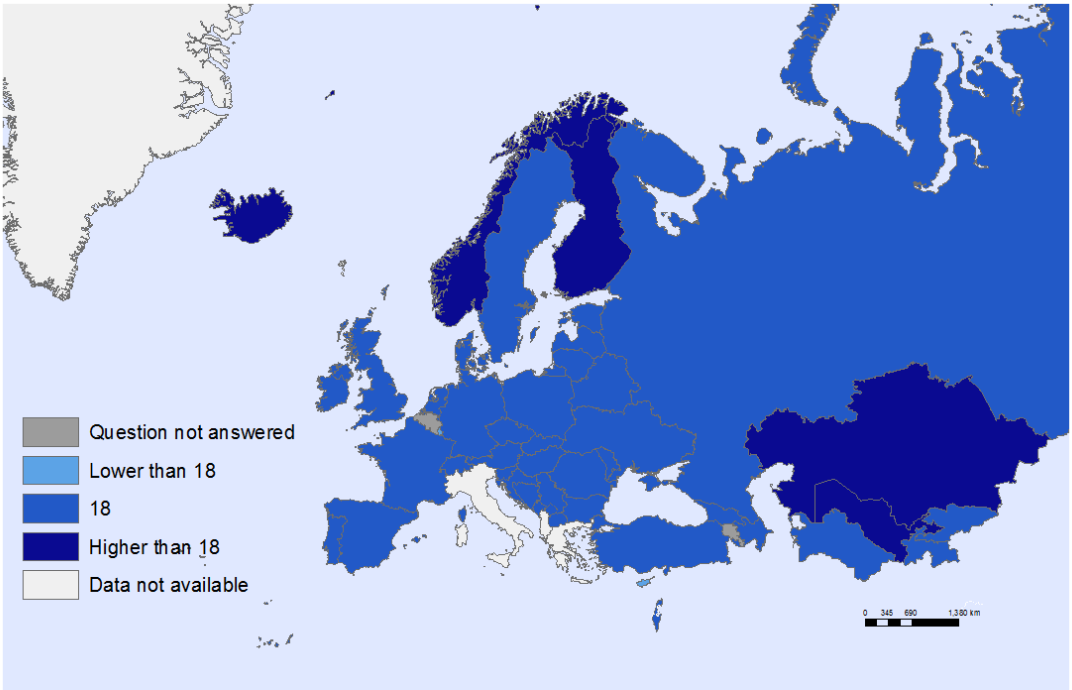
Fig. 7.6. Minimum age to purchase wine, by country



Spirits

Luxembourg allows the sale of spirits to children as young as 16, and Cyprus and Malta to 17-year-olds. Most countries have a legal limit of 18 years of age, with Finland, Norway and Iceland elevating it to 20, and Kazakhstan and Uzbekistan having 21 as the legal limit to purchase spirits (Fig. 7.7).

Fig. 7.7. Minimum age to purchase spirits, by country



Smoking

Smoking at least once a week was reported on average by 12% of 15-year-old girls in the HBSC survey, with a low of 1% in several countries to a high of 30% in Bulgaria. Thirteen per cent of boys reported smoking, with a low of 3% in Iceland and a high of 25% in Croatia. Girls from EU15 and EU13 countries reported higher rates of smoking than girls from CIS countries (Fig. 7.8). Boys from EU13 countries reported higher rates than boys from EU15 countries (Fig. 7.9).

Fig. 7.8. Smoking: 15-year-old girls, by country grouping

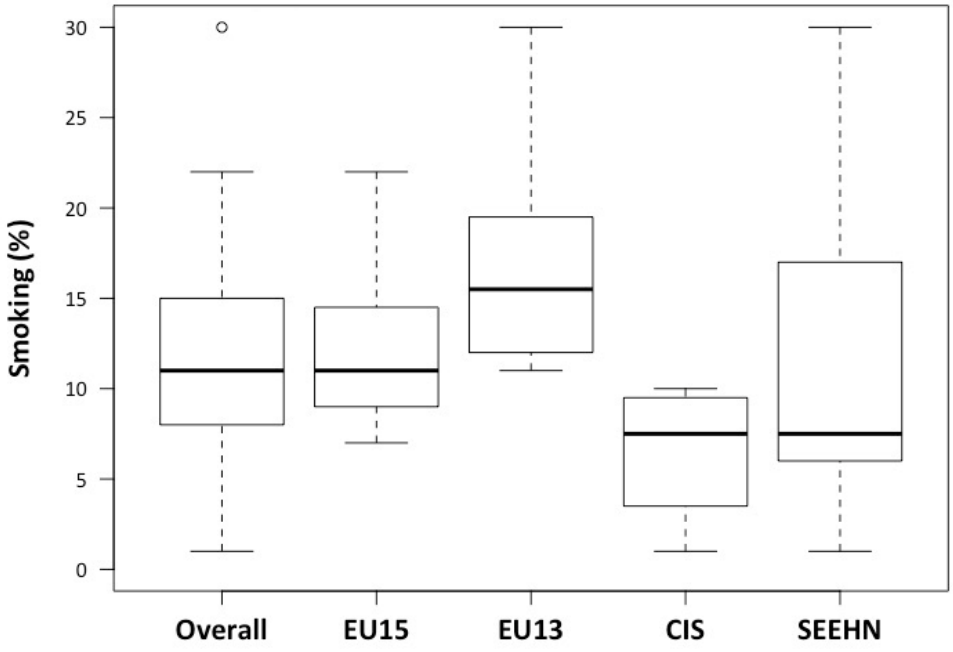
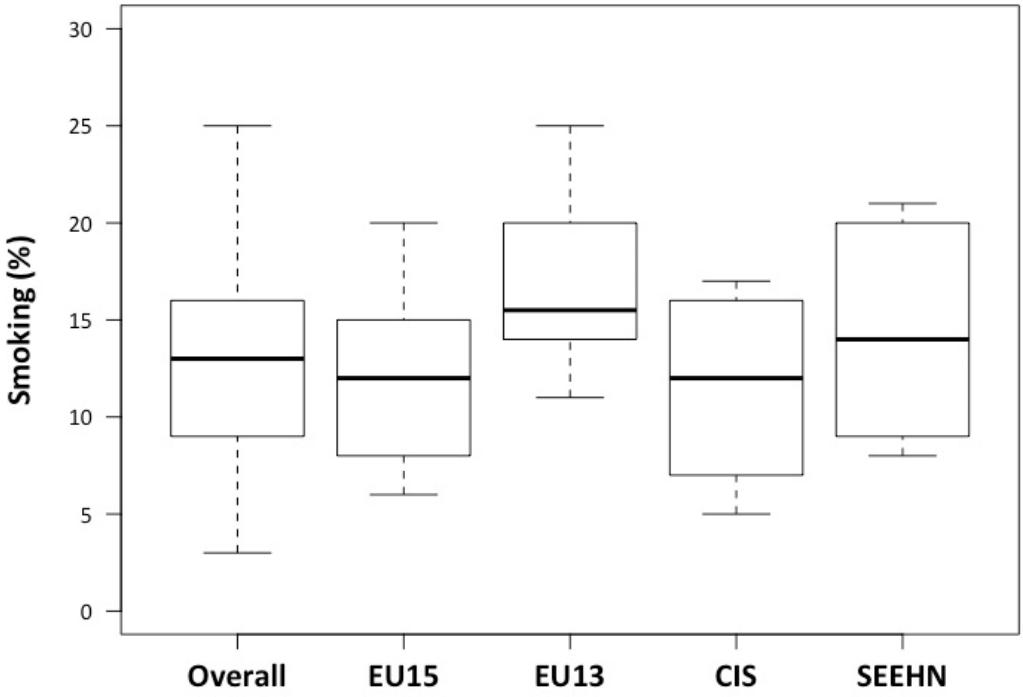


Fig. 7.9. Smoking: 15-year-old boys, by country grouping



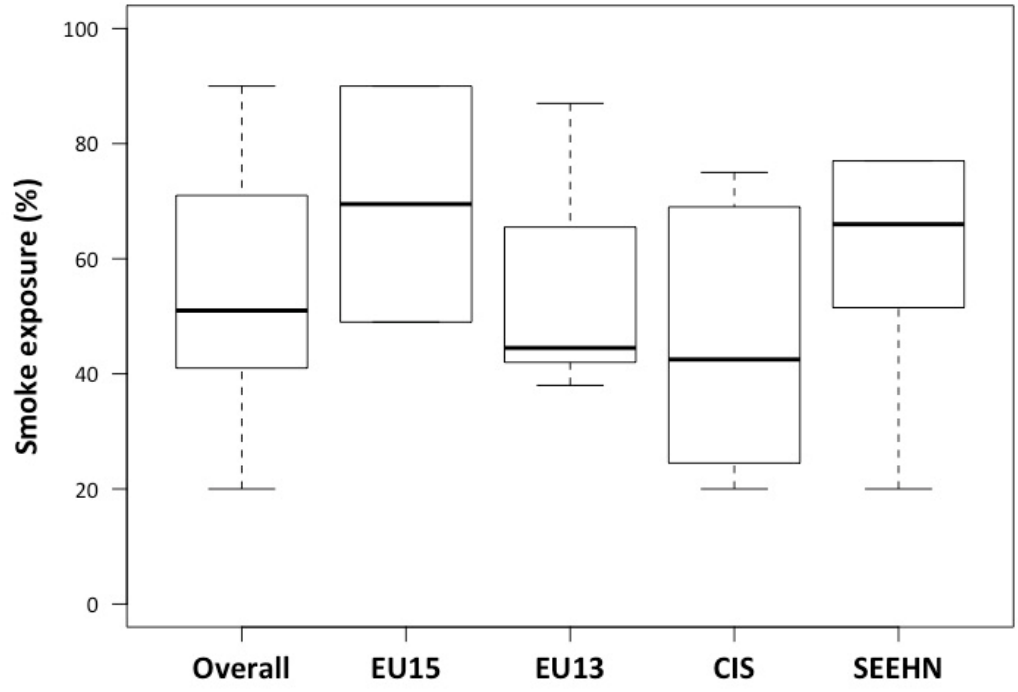
Public places included in smoke-free legislation

On average, 56% of public places are included in smoke-free legislation, with a regional range of 0–100%.

Smoke exposure of 13–15-year-olds

The Global Youth Tobacco Survey *(2)*, a school-based survey of 13–15-year-olds, provides information on adolescents' smoke exposure (latest data from 2012). With many missing values, the average is 55%, with a range of 20% in the Republic of Moldova to 90% in Greece (Fig. 7.10).

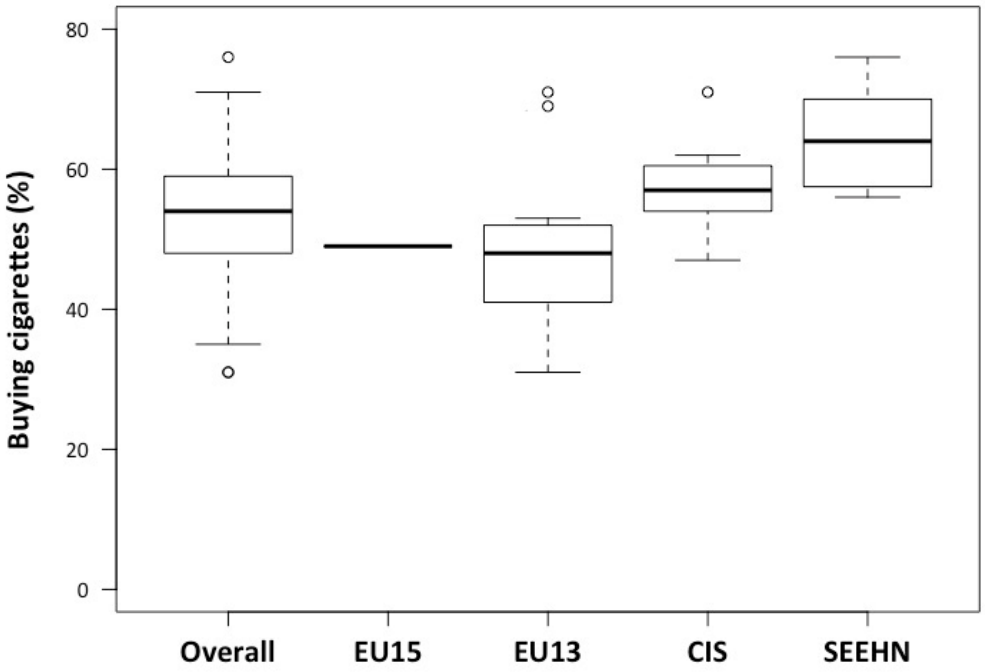
Fig. 7.10. Being exposed to smoke: 13–15-year-olds, by country grouping



Ability to buy cigarettes in stores (13–15-year-olds)

With much missing information, on average 53% of children reported being able to buy cigarettes in stores, with a range from 31% in Estonia and Latvia to 76% in Serbia. A closer look reveals significant differences between EU13 countries and those of the CIS and SEEHN, with young people having a higher ability to buy cigarettes in the CIS and SEEHN (Fig. 7.11).

Fig. 7.11. Ability to buy cigarettes: 13–15-year-olds, by country grouping



Lifetime cannabis use

Having ever used cannabis was reported on average by 12% of 15-year-old girls, with a low of 0% in Armenia and a high of 26% in France. For boys, the average was 17%, with a range of 4% to 29%. Independent of gender, significantly more cannabis use is present in EU13 and EU15 countries than in CIS and SEEHN countries (Fig. 7.12 and 7.13).

Fig. 7.12. Cannabis use: 15-year-old girls, by country grouping

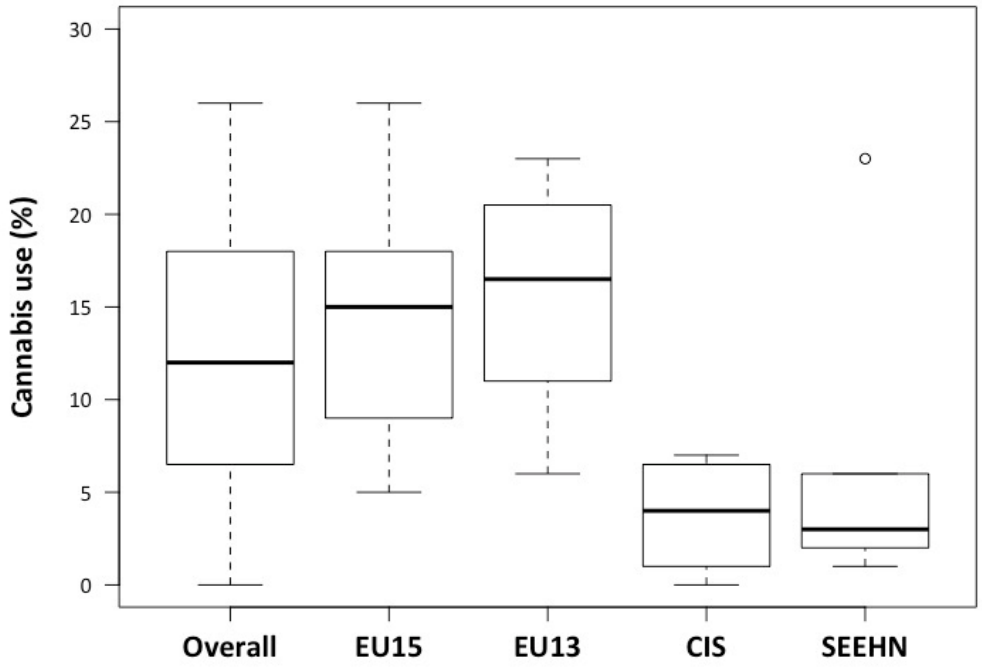
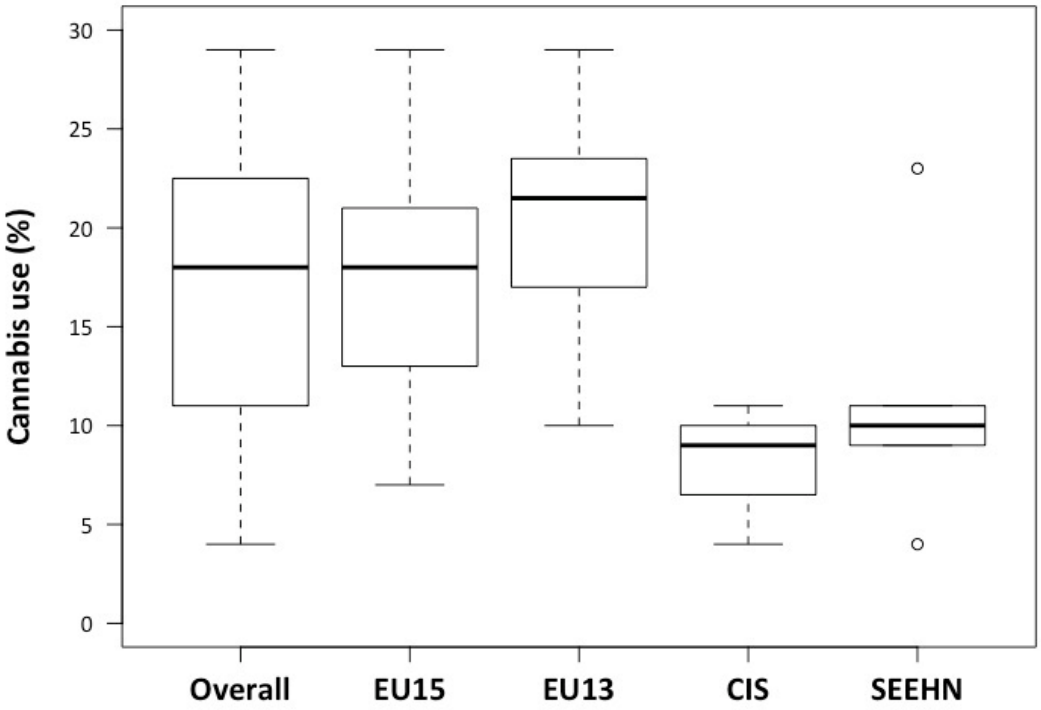


Fig. 7.13. Cannabis use: 15-year-old boys, by country grouping



Violence and bullying

Bullying others

The average rate for bullying others reported by 15-year-old girls in the HBSC survey was 6%, with a high of 19% in Latvia and a low of 1% in the United Kingdom. Rates for boys are considerably higher, with an average of 12% and a high of 34% in Lithuania and a low of 3% in Iceland and Sweden. For boys and girls, there is a significant difference between EU15 and SEEHN countries (Fig. 7.14 and 7.15).

Fig. 7.14. Bullying others: 15-year-old girls, by country grouping

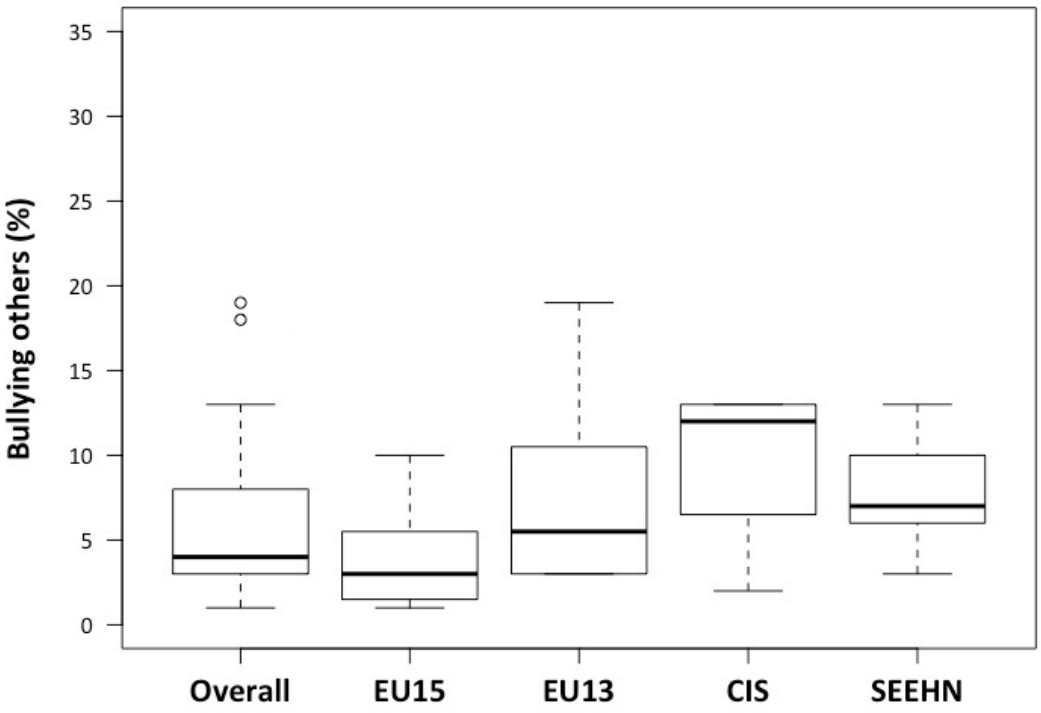
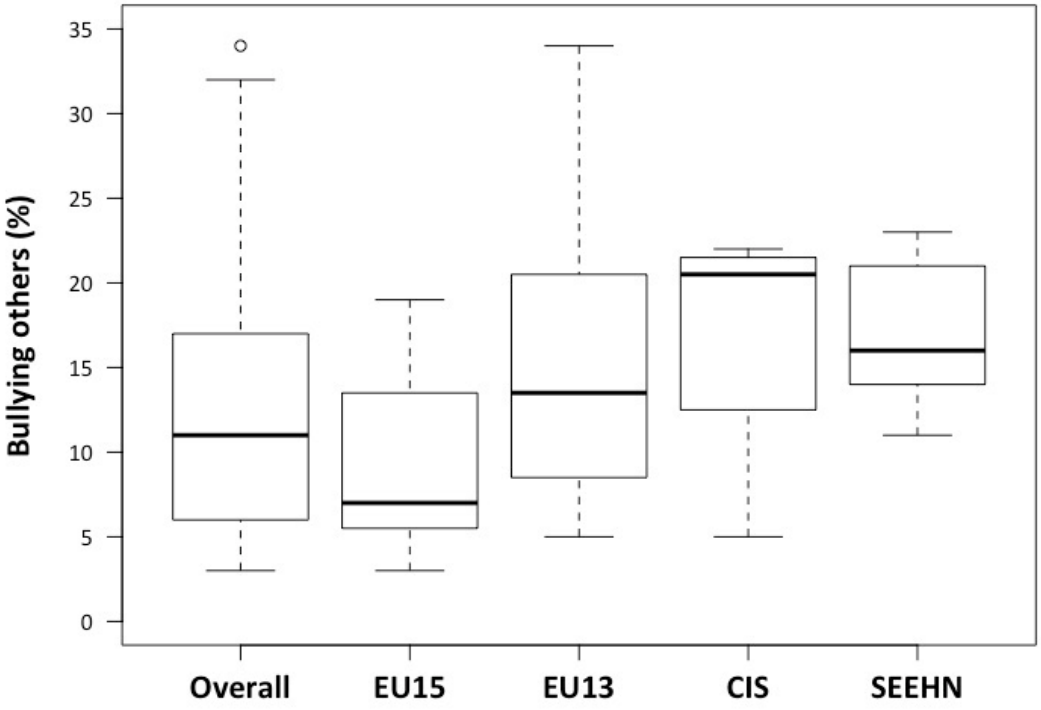


Fig. 7.15. Bullying others: 15-year-old boys, by country grouping



Being bullied

In the same age group, 7% of girls on average report being bullied, with a high of 22% in Lithuania and a low of 1% in Iceland (Fig. 7.16). For boys, the average is 9%, with a high also in Lithuania of 29% and a low of 2% in Armenia and Iceland (Fig. 7.17).

Fig. 7.16. Being bullied: 15-year-old girls, by country grouping

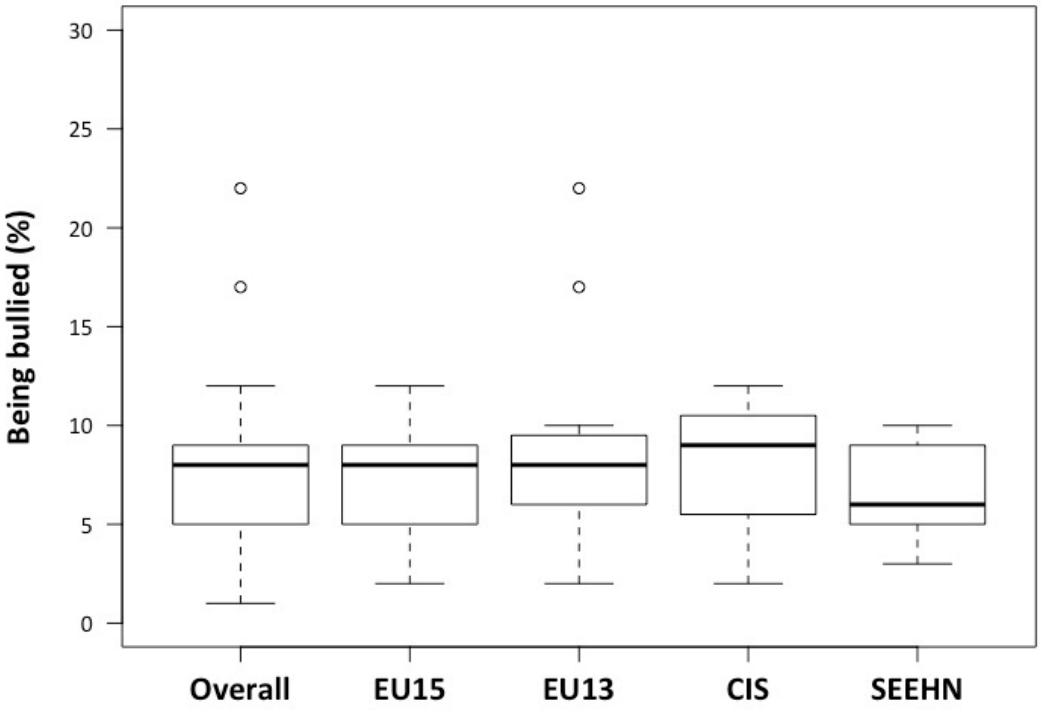
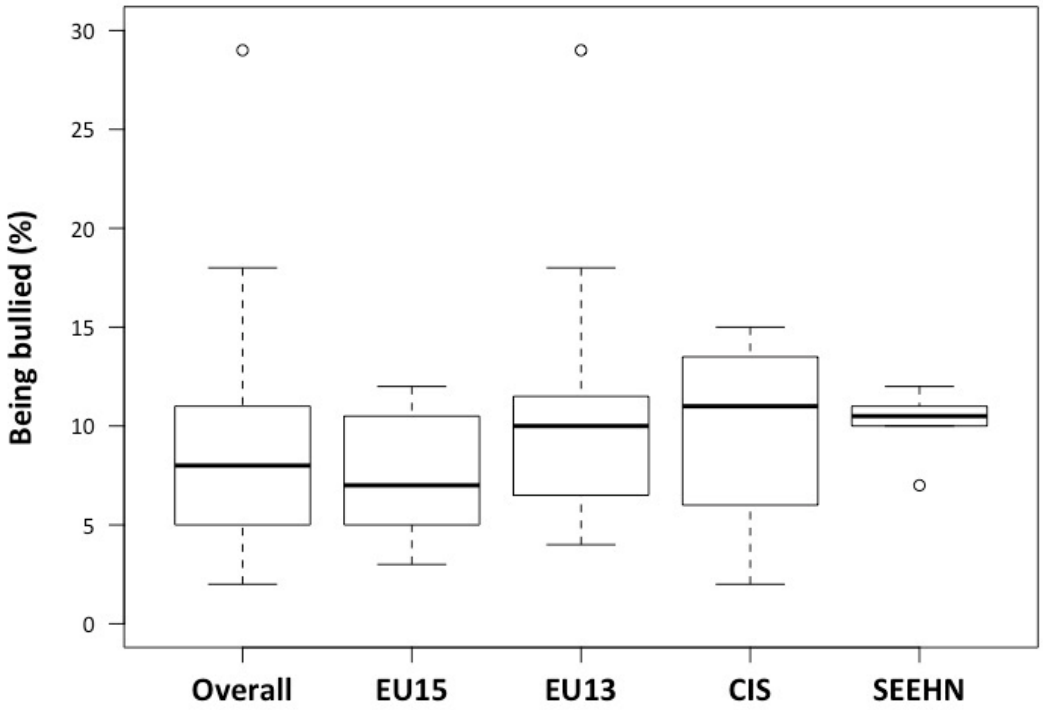


Fig. 7.17. Being bullied: 15-year-old boys, by country grouping



Fighting

On average, 4% of girls in the HBSC survey reported having been involved in fighting, with a low of 2% and a high of 8% (Fig. 7.18). Rates for boys were considerably higher, with an average of 14%, and a range of 7% in Finland, Iceland, Sweden and Switzerland to 36% in Armenia. For boys, EU15 countries reported significantly lower rates than all other country groups (Fig. 7.19).

Fig. 7.18. Physical fighting: 15-year-old girls, by country grouping

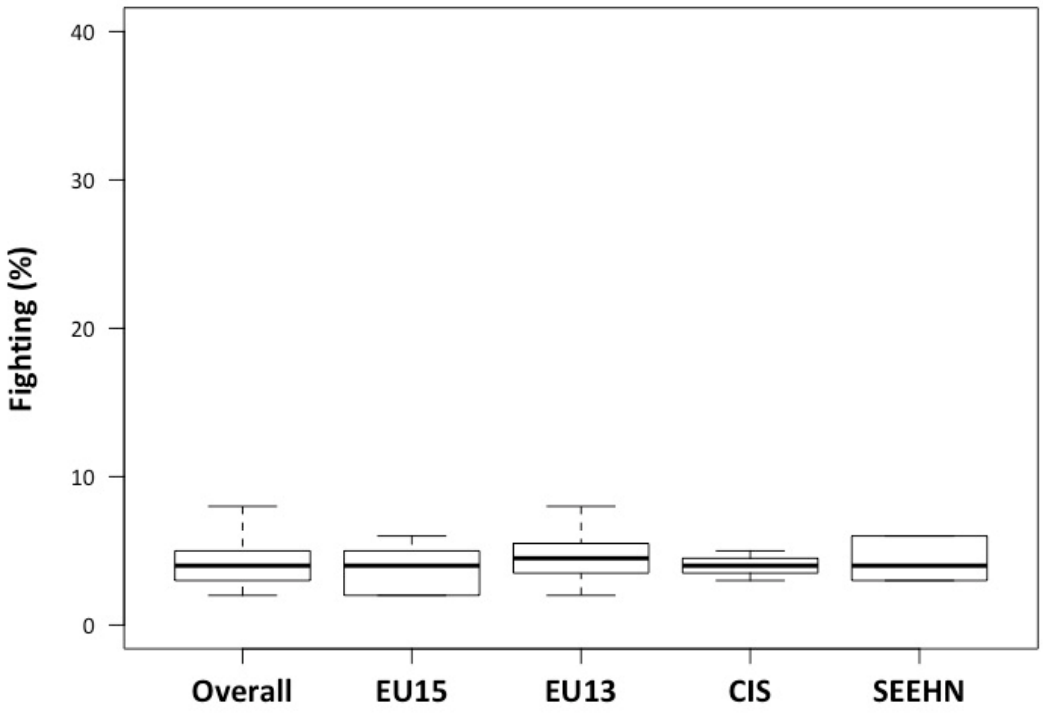
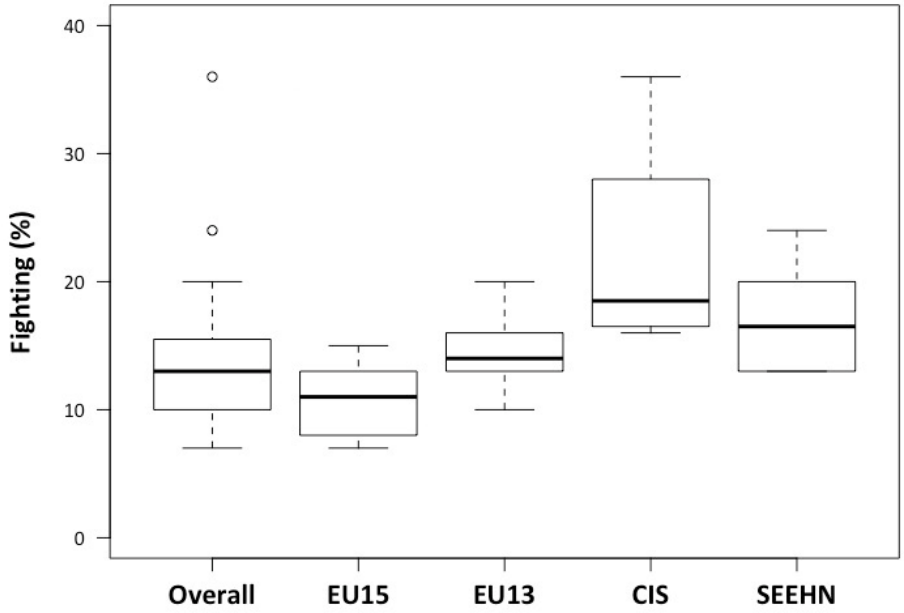


Fig. 7.19. Physical fighting: 15-year-old boys, by country grouping



Minimum age of criminal responsibility

Several countries did not answer this question. For those that did, the lowest age is 10 years in the United Kingdom, and the highest 18 in Belgium, Luxembourg and France.

Child homicide rates

Reported rates vary widely, with several countries having reported rates below one per million. The highest reported rates are in Belgium with nine per million and 10 per million in Serbia.

Medically attended injuries

Thirty-six per cent of girls on average reported having had medically attended injuries in the previous year, with a range of 14–54%. Boys had higher rates, with an average of 46% and a range of 23–66%. Significantly more girls in the European Region overall and EU countries reported medically attended injuries than girls from SEEHN countries (Fig. 7.20 and 7.21).

Fig. 7.20. Medically attended injuries: 15-year-old girls, by country grouping

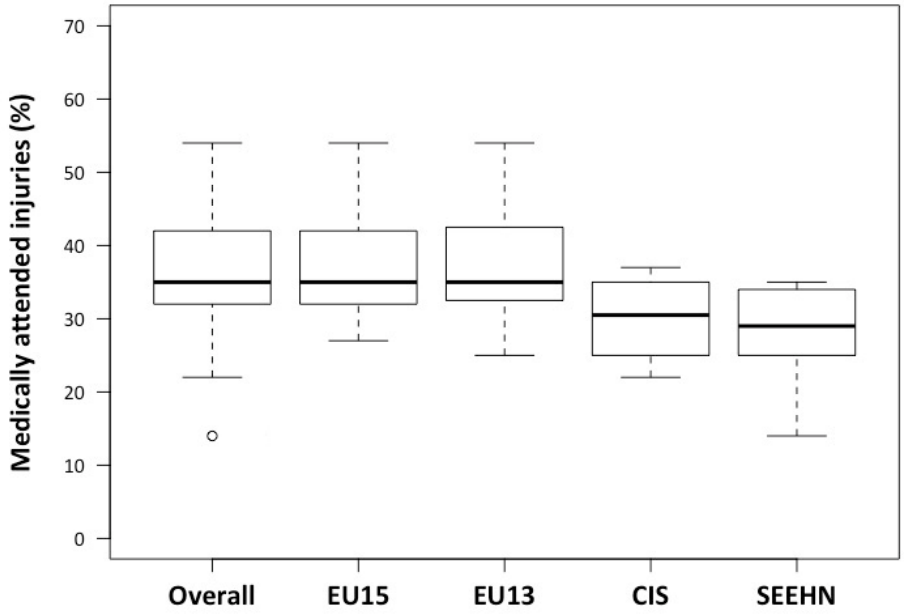
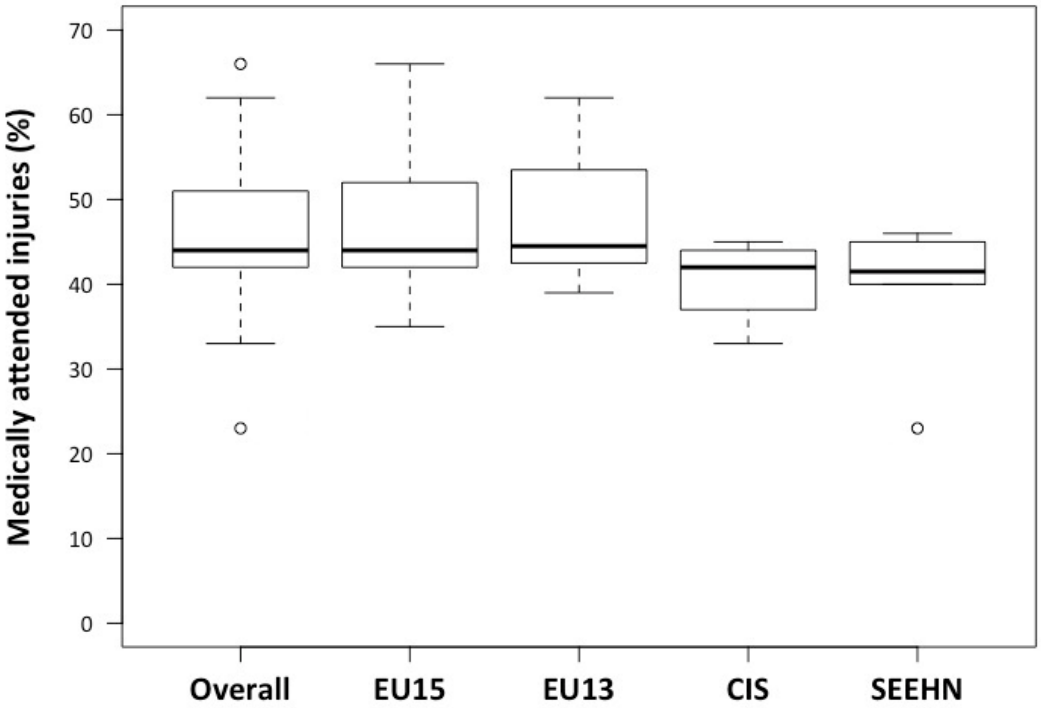


Fig. 7.21. Medically attended injuries: 15-year-old boys, by country grouping



Sexual health

Condom use at last intercourse

The HBSC survey found that the average rate of condom use among girls was 59%, with Switzerland reporting 80% and Armenia 0%. For boys, the average was 68%, with Greece reporting 83% and the lowest rate in Poland with 28% (Fig. 7.22 and 7.23).

Fig. 7.22. Condom use at last intercourse: 15-year-old girls, by country grouping

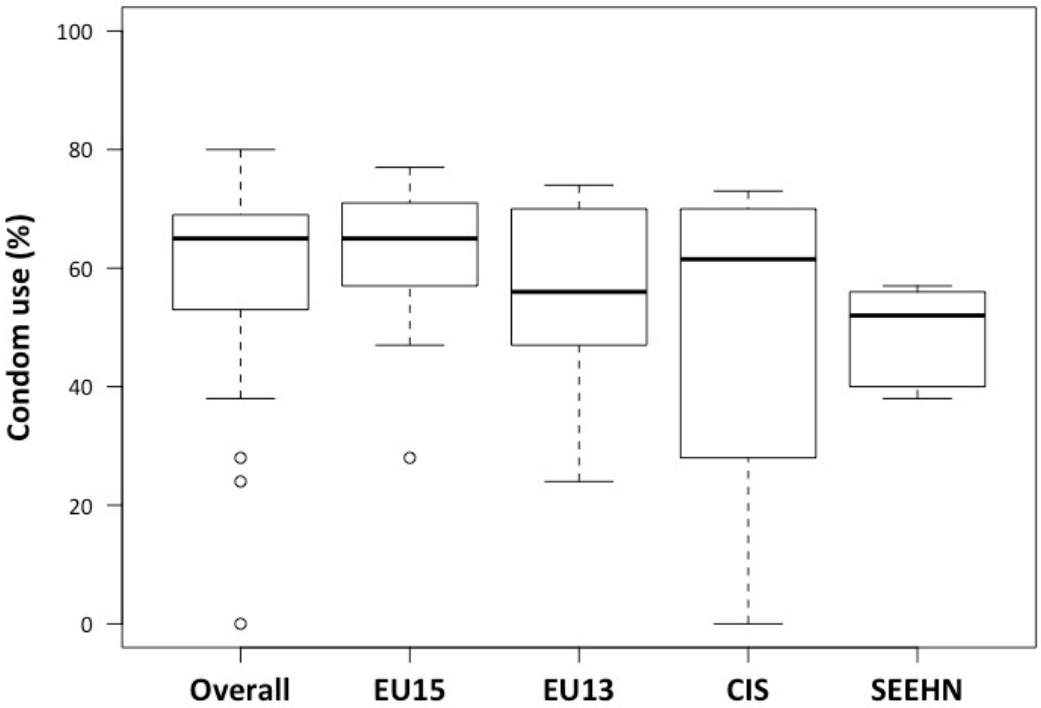
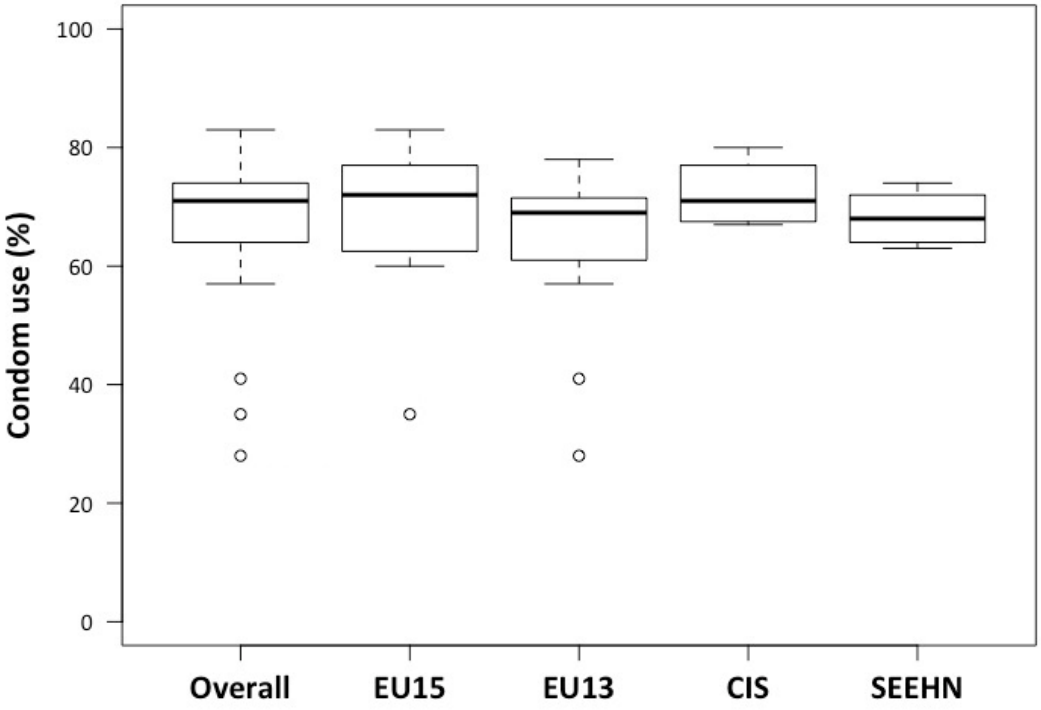


Fig. 7.23. Condom use at last intercourse: 15-year-old boys, by country grouping



Findings in perspective

Adolescence is a time of exploration, so it is inevitable that young people will take risks. HBSC *(1)* is an important research collaboration that provides regionally comparable data on risk-taking and exploratory behaviours in different European countries. What is acceptable and unacceptable risk-taking is to some extent country-specific. Data from individual countries available in the European Health Information Gateway should be used by countries for supporting individual analysis, monitoring trends, and promoting national dialogue and policy-making.

A wide spectrum on the age of criminal responsibility is reported by countries. Adolescence is an age of transition, meaning that adolescents often cannot fully understand the consequences of what they do: criminal justice systems need to be able to reflect this. The UNCRC *(3)* is the guiding document for supporting countries not to impose unduly harsh sentences for misdeeds in this age group.

Tobacco

Efforts are needed to enact tobacco legislation and create an environment in which children and adolescents are less likely to take up smoking. Industry endeavours to market to children need to be countered, ensuring that the principles of the WHO Framework Convention on Tobacco Control *(4)* are implemented in countries (see Chapter 9 for other industry efforts influencing national practices). Schools can play an important role in these efforts, but they need to be supported and encouraged to become health promoting spaces (see Chapter 6).

Alcohol

Only selected aspects of policies related to alcohol and tobacco are presented here. More is available from specific reports *(5)*.

Alcohol use continues to be common among adolescents, especially in western European countries, and the gender gap in adolescent alcohol use has become narrower. Alcohol use during this period is important for two main reasons. First, alcohol seems to have considerably more adverse consequences

at this age than later in life in terms of neural and endocrine development; and secondly, the earlier adolescents start drinking, the more likely they are to experience alcohol-related injury and alcohol dependence later in life. Increased understanding of the negative effects of alcohol on adolescent development and enforcement/enhancement of compliance with the legal age limit for alcohol sales is key to success. Continuous monitoring and evaluation of the effectiveness of legislation in terms of behaviour change will help understanding of the impact of policy measures: legislation against alcopops in some countries in response to increasing consumption by adolescents provides a good example *(6,7)*.

Nutrition and physical activity, which are determinants of current well-being and risk factors for future adult health, are discussed in Chapter 10.

Bullying and fighting

The school environment is important for adolescents' behaviours, as much of the reported bullying and fighting happens in school. Fighting among boys is often seen as normal, and the higher rates of fighting among boys than girls in all countries attest to that. HBSC reports higher rates of bullying others and fighting in CIS countries, which indicates an important area for a national dialogue for action. The educational function of schools should be used in this context, and all schools should be health promoting and provide a safe and supportive environment; the SHE network *(8)* endeavours to promote this goal. Collaboration between the health and education sectors can also provide for a better environment *(9)*.

Sexual behaviours

Condom use is consistent across the countries of the Region, but HBSC reports rates of unprotected sex of 20–30%, which is worrying. This might indicate shortcomings in sexuality education or in accessibility of condoms for some adolescents. Curriculum-based comprehensive sexuality education, and policies to ensure adolescents are able to obtain contraception information, counselling and services, including laws and access to condoms, can play an important role in decreasing the rate of unprotected sex. Sexuality education is discussed further in Chapter 6 and access to sexual and reproductive services in Chapters 5 and 9.

Conclusion

Some degree of risk-taking and exploratory behaviours are normal in the adolescent age group, and surveys like HBSC will help understanding of trends over time and allow comparisons among countries. Findings need to be discussed in countries among adolescents, parents, teachers and policy-makers, to enable a consensus to emerge on what is normal variation and tolerable, what is worrying, and what action might need to be taken. Behaviours that are likely to result in long-term harm, such as unprotected sex, need to be addressed through educational and supportive measures, rather than through punitive actions.

Table 7.1 includes all indicators used in this chapter, and data from the country profiles and the survey displayed by country with summary statistics.

Table 7.1. Risk-taking and exploratory behaviour: summary table

Country	Country code	Minimum age to purchase beer	Minimum age to purchase wine	Minimum age to purchase spirits	Minimum age of criminal responsibility	Child homicide rate per million (0–14 years old)	Condom use at last intercourse, girls 15 (%)	Condom use at last intercourse, boys 15 (%)	Bullying others, girls 15 (%)	Bullying others, boys 15 (%)	Being bullied, girls 15 (%)	Being bullied, boys 15 (%)	Fighting, girls 15 (%)	Fighting, boys 15 (%)
Albania	ALB	–	–	–	–	0	38	63	8	14	5	7	6	24
Andorra	AND	18	18	18	–	–	–	–	–	–	–	–	–	–
Armenia	ARM	–	–	–	–	0	0	68	2	5	2	2	3	36
Austria	AUT	16	16	18	14	1	74	77	10	19	8	12	4	14
Azerbaijan	AZE	18	18	18	–	0	–	–	–	–	–	–	–	–
Belarus	BLR	18	18	18	–	3	–	–	–	–	–	–	–	–
Belgium	BEL	–	–	–	18	9	28	35	5	10	11	12	5	11
Bosnia and Herzegovina	BIH	18	18	18	–	0	–	–	–	–	–	–	–	–
Bulgaria	BGR	18	18	18	14	5	56	66	6	18	10	12	6	20
Croatia	HRV	18	18	18	14	3	53	65	4	10	8	7	3	14
Cyprus	CYP	17	17	17	14	7	–	–	–	–	–	–	–	–
Czechia	CZE	18	18	18	15	5	66	74	3	5	4	4	5	16
Denmark	DNK	16	16	18	15	1	57	60	2	4	4	4	–	–
Estonia	EST	18	18	18	14	5	71	72	3	12	8	10	2	11
Finland	FIN	18	18	20	15	0	57	73	3	7	8	8	2	7
France	FRA	18	18	18	18	4	65	79	7	13	9	11	6	12
Georgia	GEO	18	18	18	–	2	–	–	–	–	–	–	–	–
Germany	DEU	16	16	18	14	4	67	72	6	16	8	6	3	11
Greece	GRC	–	–	–	15	1	75	83	4	14	6	7	4	14
Hungary	HUN	18	18	18	14	5	72	78	3	6	6	5	8	13
Iceland	ISL	20	20	20	–	0	65	72	4	3	1	2	3	7
Ireland	IRL	18	18	18	12	1	65	64	1	6	7	7	5	15
Israel	ISR	18	18	18	–	3	57	72	3	14	3	11	3	13
Italy	ITA	–	–	–	14	1	68	72	1	5	2	3	2	10
Kazakhstan	KAZ	21	21	21	–	6	–	–	–	–	–	–	–	–
Kyrgyzstan	KGZ	18	18	18	–	3	–	–	–	–	–	–	–	–
Latvia	LVA	18	18	18	14	3	69	71	19	32	17	18	4	14
Lithuania	LTU	18	18	18	16	5	56	57	18	34	22	29	3	13
Luxembourg	LUX	16	16	16	18	0	66	77	8	16	12	10	6	13
Malta	MLT	17	17	17	14	0	41	41	3	8	2	8	5	14
MKD[a]	MKD	18	18	18	–	0	48	64	6	11	6	11	3	13
Monaco	MCO	–	–	–	–	–	–	–	–	–	–	–	–	–
Montenegro	MNE	18	18	18	–	0	–	–	–	–	–	–	–	–
Netherlands	NLD	18	18	18	12	5	65	78	3	6	7	5	4	9
Norway	NOR	18	18	20	–	1	63	75	1	5	5	4	3	10
Poland	POL	18	18	18	17	2	24	28	7	15	8	11	4	14
Portugal	PRT	18	18	18	16	3	75	73	4	10	9	12	2	8
Republic of Moldova	MDA	18	18	18	–	3	56	74	13	21	9	10	4	17
Romania	ROU	18	18	18	14	6	40	70	10	23	6	10	4	16
Russian Federation	RUS	18	18	18	–	8	67	67	13	22	12	15	5	16
San Marino	SMR	–	–	–	–	0	–	–	–	–	–	–	–	–
Serbia	SRB	18	18	18	–	10	–	–	–	–	–	–	–	–
Slovakia	SVK	18	18	18	14	0	53	68	11	17	9	10	6	19
Slovenia	SVN	18	18	18	14	0	74	71	5	9	6	6	5	10
Spain	ESP	18	18	18	14	3	77	63	3	6	3	5	3	8
Sweden	SWE	18	18	18	15	3	47	61	1	3	3	3	2	7
Switzerland	CHE	16	16	18	–	4	80	82	5	17	9	8	2	7
Tajikistan	TJK	18	18	18	–	0	–	–	–	–	–	–	–	–
Turkey	TUR	18	18	18	–	2	–	–	–	–	–	–	–	–
Turkmenistan	TKM	18	18	18	–	3	–	–	–	–	–	–	–	–
Ukraine	UKR	18	18	18	–	4	73	80	11	20	9	12	4	20
United Kingdom	GBR	18	18	18	10	2	57	62	1	5	9	10	4	11
Uzbekistan	UZB	21	21	21	–	3	–	–	–	–	–	–	–	–
Average		18	18	18	15	3	59	68	6	12	7	9	4	14
Highest value		21	21	21	18	10	80	83	19	34	22	29	8	36
Highest country						SRB	CHE	GRC	LVA	LTU	LTU	LTU		ARM
Lowest value		16	16	16	10	0	0	28	1	3	1	2	2	7
Lowest country				LUX	GBR		ARM	POL	GBR		ISL			

[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

Table 7.1 contd

Medically attended injuries, girls 15 (%)	Medically attended injuries, boys 15 (%)	Lifetime drunkenness, girls 15 (%)	Lifetime drunkenness, boys 15 (%)	Alcohol consumption, girls 15 (%)	Alcohol consumption, boys 15 (%)	Lifetime cannabis use, girls 15 (%)	Lifetime cannabis use, boys 15 (%)	Smoking, girls 15 (%)	Smoking, boys 15 (%)	% public places included in nationnal smoke-free legislation	Smoke exposure, 13–15 years (%)	Ability to buy cigarettes in store, 13–15 years (%)	Country code	Country
30	42	23	43	5	14	1	10	1	8	100	50	59	ALB	Albania
–	–	–	–	–	–	–	–	–	–	100	–	–	AND	Andorra
22	33	17	37	6	22	0	4	1	5	38	71	62	ARM	Armenia
38	44	35	45	21	23	7	13	14	15	13	–	–	AUT	Austria
–	–	–	–	–	–	–	–	–	–	38	27	59	AZE	Azerbaijan
–	–	–	–	–	–	–	–	–	–	0	75	47	BLR	Belarus
42	51	34	37	23	27	16	22	10	11	100	–	–	BEL	Belgium
–	–	–	–	–	–	–	–	–	–	0	77	63	BIH	Bosnia and Herzegovina
25	40	53	54	23	31	23	23	30	21	89	64	69	BGR	Bulgaria
32	45	41	56	15	3	11	19	21	25	75	67	53	HRV	Croatia
–	–	–	–	–	–	–	–	–	–	75	81	47	CYP	Cyprus
40	43	49	48	16	2	23	23	16	11	38	43	48	CZE	Czechia
46	53	52	54	29	32	12	21	8	7	13	–	–	DNK	Denmark
46	54	44	48	14	15	19	29	11	13	13	41	31	EST	Estonia
35	43	37	43	1	13	7	13	11	15	13	–	–	FIN	Finland
42	53	3	3	15	21	26	29	20	18	100	–	–	FRA	France
–	–	–	–	–	–	–	–	–	–	38	63	57	GEO	Georgia
51	61	34	39	16	24	15	18	15	13	0	–	–	DEU	Germany
27	38	4	4	21	26	–	–	13	16	89	90	49	GRC	Greece
36	39	5	56	22	29	14	12	21	20	88	43	48	HUN	Hungary
48	53	12	1	3	3	5	7	3	3	13	–	–	ISL	Iceland
34	51	27	28	8	8	9	12	8	8	89	–	–	IRL	Ireland
35	46	1	27	5	17	3	11	6	17	13	–	–	ISR	Israel
32	43	3	34	15	29	17	27	22	20	100	49	49	ITA	Italy
–	–	–	–	–	–	–	–	–	–	75	67	54	KAZ	Kazakhstan
–	–	–	–	–	–	–	–	–	–	50	33	58	KGZ	Kyrgyzstan
54	62	47	48	1	1	19	23	13	15	63	45	31	LVA	Latvia
45	54	55	62	11	13	10	19	12	20	63	38	35	LTU	Lithuania
32	35	27	26	15	18	18	18	18	13	63	–	–	LUX	Luxembourg
30	53	42	4	28	34	11	15	12	11	89	–	–	MLT	Malta
14	23	19	26	8	16	3	4	9	11	88	68	65	MKD	MKD[a]
–	–	–	–	–	–	–	–	–	–	100	–	–	MCO	Monaco
–	–	–	–	–	–	–	–	–	–	50	77	56	MNE	Montenegro
36	41	28	28	23	25	15	18	11	11	0	–	–	NLD	Netherlands
45	51	27	3	8	8	–	–	3	5	78	–	–	NOR	Norway
38	44	42	42	15	18	22	26	15	15	38	87	51	POL	Poland
35	43	25	26	11	15	10	13	10	12	38	–	–	PRT	Portugal
28	41	34	54	1	16	2	9	6	9	38	20	56	MDA	Republic of Moldova
34	45	27	5	12	34	6	10	17	20	13	53	71	ROU	Romania
37	45	21	26	7	11	7	11	10	17	100	–	71	RUS	Russian Federation
–	–	–	–	–	–	–	–	–	–	100	33	36	SMR	San Marino
–	–	–	–	–	–	–	–	–	–	63	77	76	SRB	Serbia
33	42	43	48	12	16	14	20	18	16	38	44	47	SVK	Slovakia
33	43	48	49	18	21	19	24	12	15	100	41	50	SVN	Slovenia
54	66	35	32	17	17	18	20	10	8	89	–	–	ESP	Spain
28	36	28	24	8	8	5	7	7	6	0	–	–	SWE	Sweden
44	51	23	29	13	16	19	29	9	11	0	–	–	CHE	Switzerland
–	–	–	–	–	–	–	–	–	–	0	52	–	TJK	Tajikistan
–	–	–	–	–	–	–	–	–	–	89	47	54	TUR	Turkey
–	–	–	–	–	–	–	–	–	–	100	–	–	TKM	Turkmenistan
33	43	38	39	9	12	6	9	9	15	88	22	54	UKR	Ukraine
32	47	47	38	17	15	18	19	8	6	89	–	–	GBR	United Kingdom
–	–	–	–	–	–	–	–	–	–	13	–	–	UZB	Uzbekistan
36	46	31	34	13	18	12	17	12	13	56	55	53		Average
54	66	55	62	29	34	26	29	30	25	100	90	76		Highest value
	ESP	LTU	LTU	DNK	MLT	FRA		BGR	HRV		GRC	SRB		Highest country
14	23	1	1	1	1	0	4	1	3	0	20	31		Lowest value
MKD	MKD	ISR	ISL			ARM			ISL		MDA			Lowest country

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8. Mental health and well-being

Introduction

Mental ill health is the leading cause of disability in the WHO European Region *(1)*. It is estimated that one in four people will experience a mental health condition at some point in their life, with about half of all mental health problems having their onset before the age of 14 *(2)*. Good mental health enables adolescents to deal with the challenges of adolescence and eases their transition into adulthood. Mental health problems, however, influence adolescents' social, intellectual and emotional development and have been linked to psychiatric disorders throughout adulthood *(3)*. This chapter presents indicators related to mental health and well-being of children and adolescents in the European Region that have been identified as relevant to the European child and adolescent health strategy, especially to priority 3c on reducing exposure to violence and shifting societal approaches from criminal justice to preventive and therapeutic services.

Key findings

- More than half of the countries report having a mechanism to assess the quality of mental health services for children and adolescents.
- Data on the number of child and adolescent mental health practitioners and on children treated by a mental health professional for attention deficit hyperactivity disorder (ADHD) or autism spectrum disorders are scarce, with reported rates varying widely.
- Reported rates of child suicide differ widely across the Region, with a number of countries reporting zero cases, which calls for more consistent and reliable reporting across the Region.
- About two thirds of reporting countries have community services available for providing early interventions for adolescents with a first episode of a mental health problem.

Findings

Mental health services and staff

Assessment of quality of mental health services for children and adolescents

Twenty-eight countries (58%) reported that they have a mechanism in place to assess the quality of mental health services for children and adolescents (Fig. 8.1 and 8.2), while 15 (31%) reported that they do not.

Fig. 8.1. Mechanism in place to assess the quality of mental health services for children and adolescents (countries)

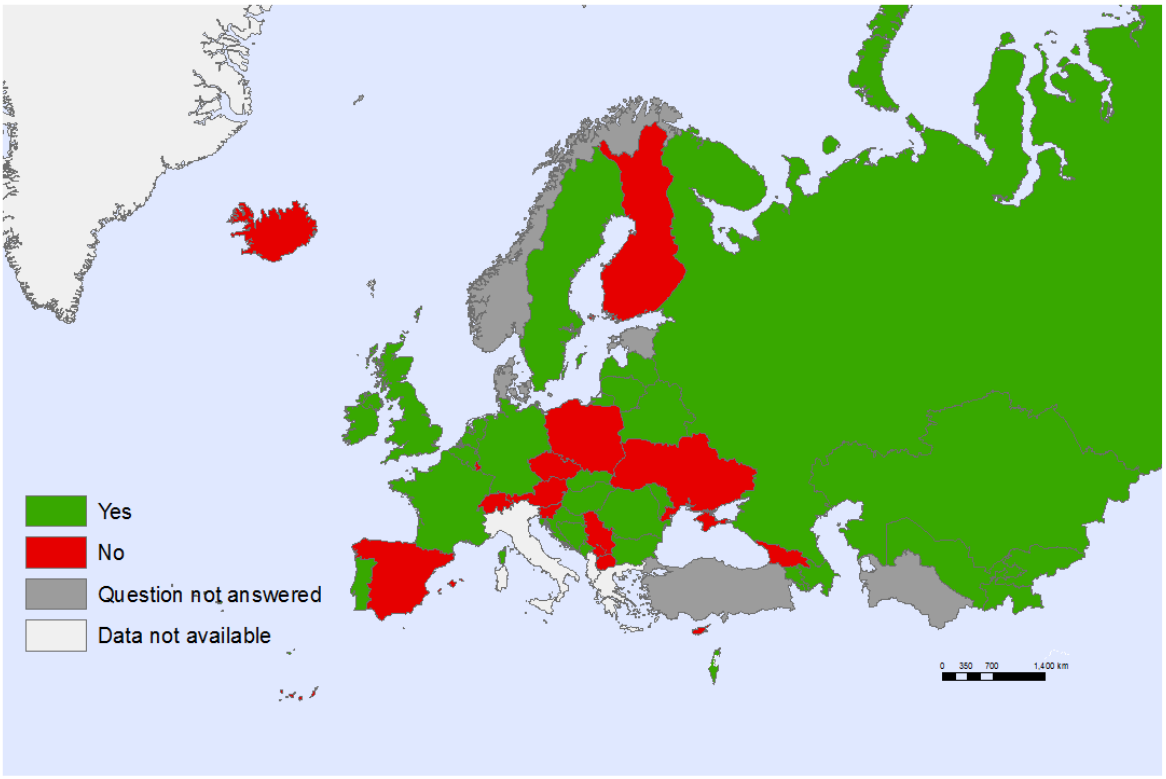
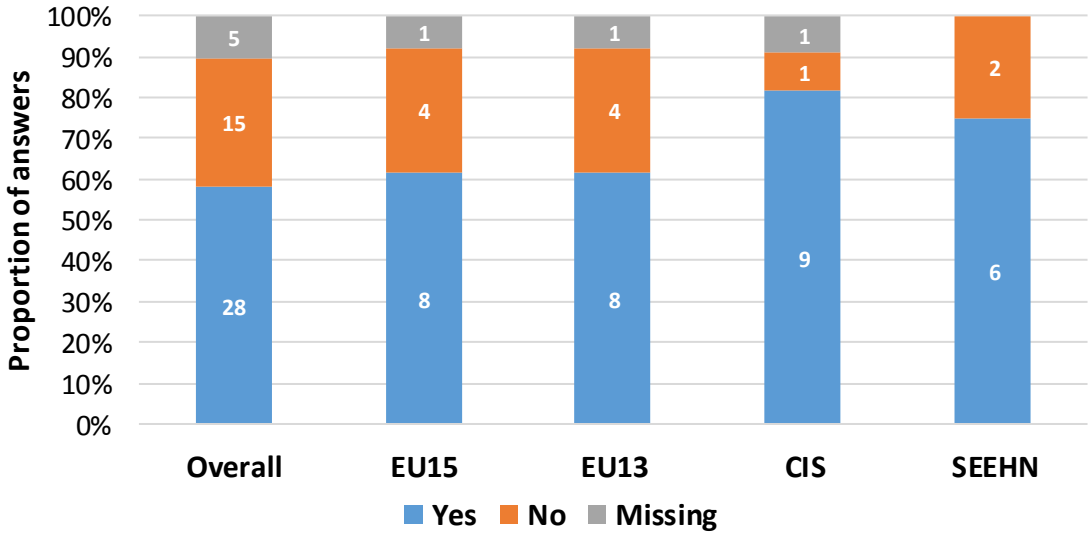


Fig. 8.2. Mechanism in place to assess the quality of mental health services for children and adolescents (country grouping)



Transition from child to adult mental health services

Twenty-five countries (52%) reported that they have guidance in place for facilitating the transition from child to adult mental health services, while 18 (38%) do not (Fig. 8.3). A closer look revealed that this was particularly low in EU13 countries compared to other subregions (Fig. 8.4).

Fig. 8.3. Guidance in place for facilitating the transition from child to adult mental health services (countries)

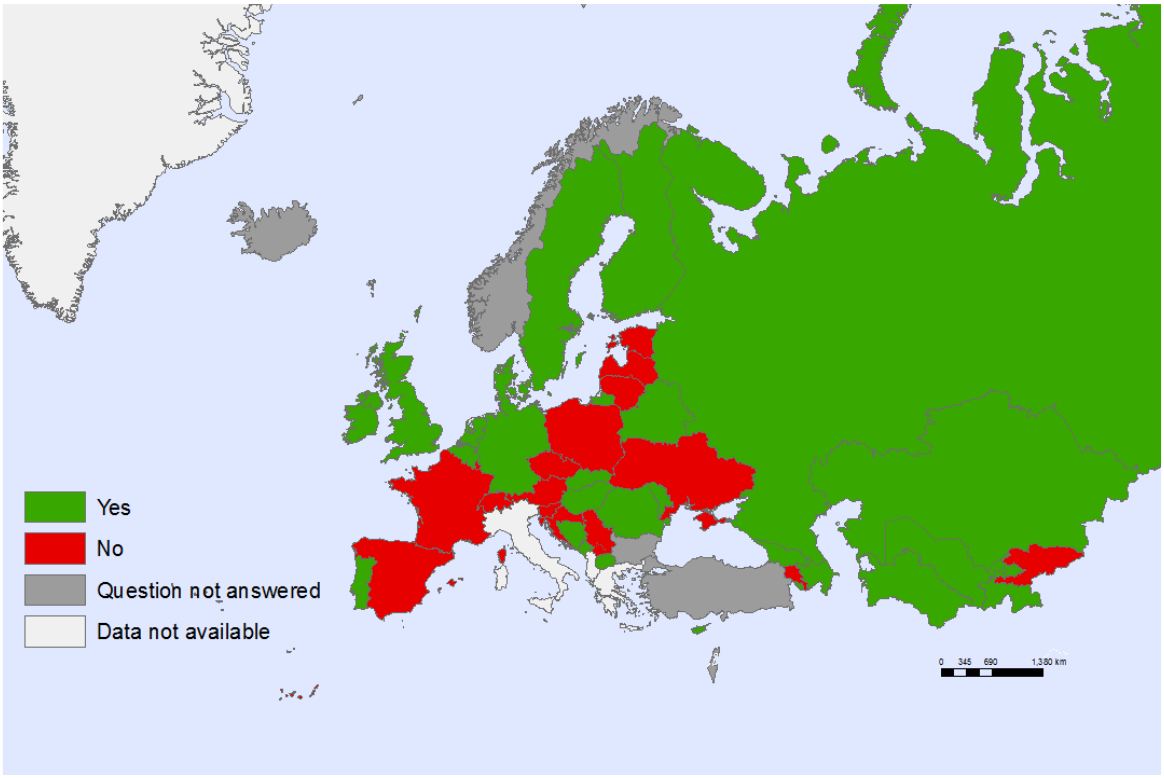
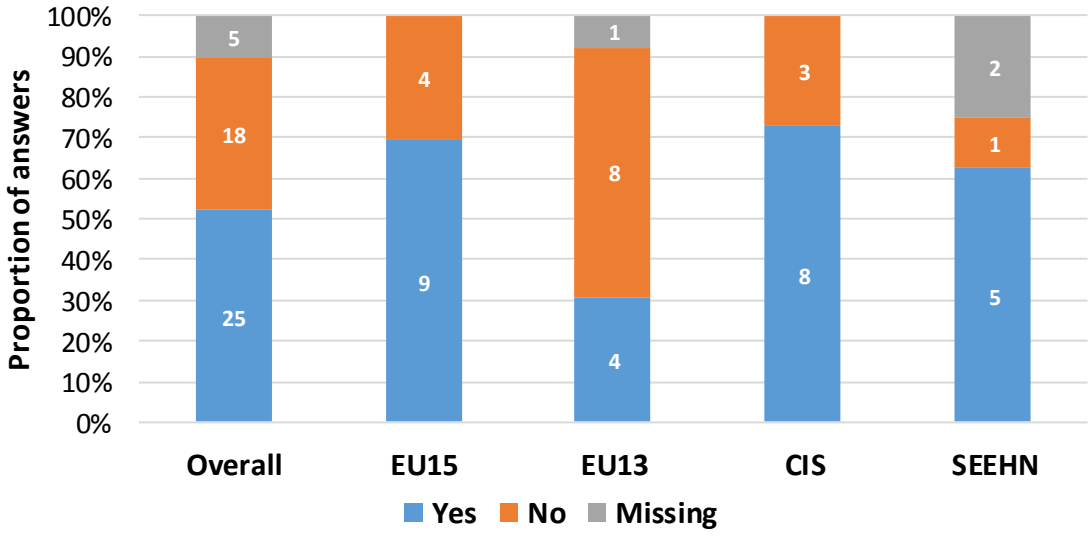


Fig. 8.4. Guidance in place for facilitating the transition from child to adult mental health services (country grouping)



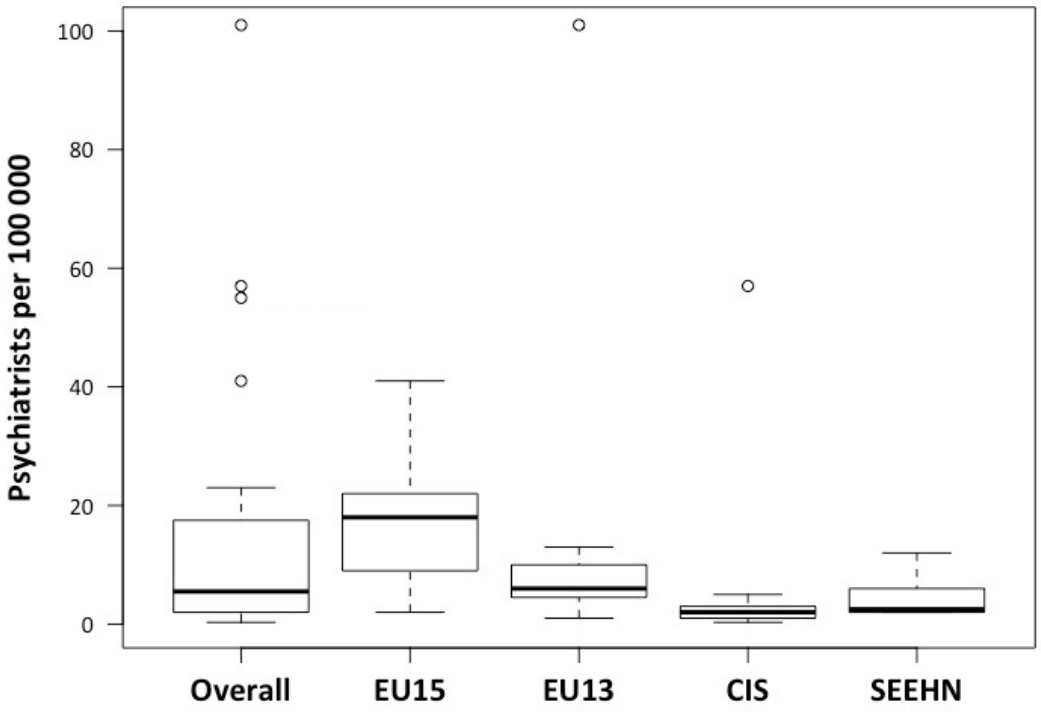
Age of transfer from child to adult mental health services

Thirty-six countries (75%) reported that the usual age cut-off for the transition from child to adult mental health services is 18 years. Four (8%) reported a transition period below 18 years (Croatia (14 years), Estonia (14–16 years), France (16 years) and Cyprus (17 years)), while another four (8%) reported above 18 years (Lithuania (18–19 years), Serbia (19 years), Germany (18–21 years) and the former Yugoslav Republic of Macedonia (23 years)).

Child psychiatrists and child psychologists

Data provided by countries about the number of child psychiatrists per 100 000 population under the age of 14 years ranged broadly within the WHO European Region, from 101 in Estonia to one in Tajikistan and Turkmenistan. The median rate of child psychiatrists per 100 000 in the 36 countries that provided information was six. A closer look revealed that EU15 countries reported statistically significantly higher rates of child psychiatrists than CIS countries (Fig. 8.5). The number of child psychologists per 100 000 child population in the European Region ranged from 172 in Finland to two in Romania, but only 10 countries provided the relevant information.

Fig. 8.5. Psychiatrists per 100 00 children age 0–14, by country grouping



Community services for early mental health problems

Most countries in the Region (29, 60%) reported that they have community services available for providing early intervention for adolescents with a first episode of a mental health problem, with EU15 countries reporting the highest number. Sixteen countries (33%) do not have such support services (Fig. 8.6 and 8.7).

Fig. 8.6. Community services for providing early intervention for adolescents with a first episode of a mental health problem in place (countries)

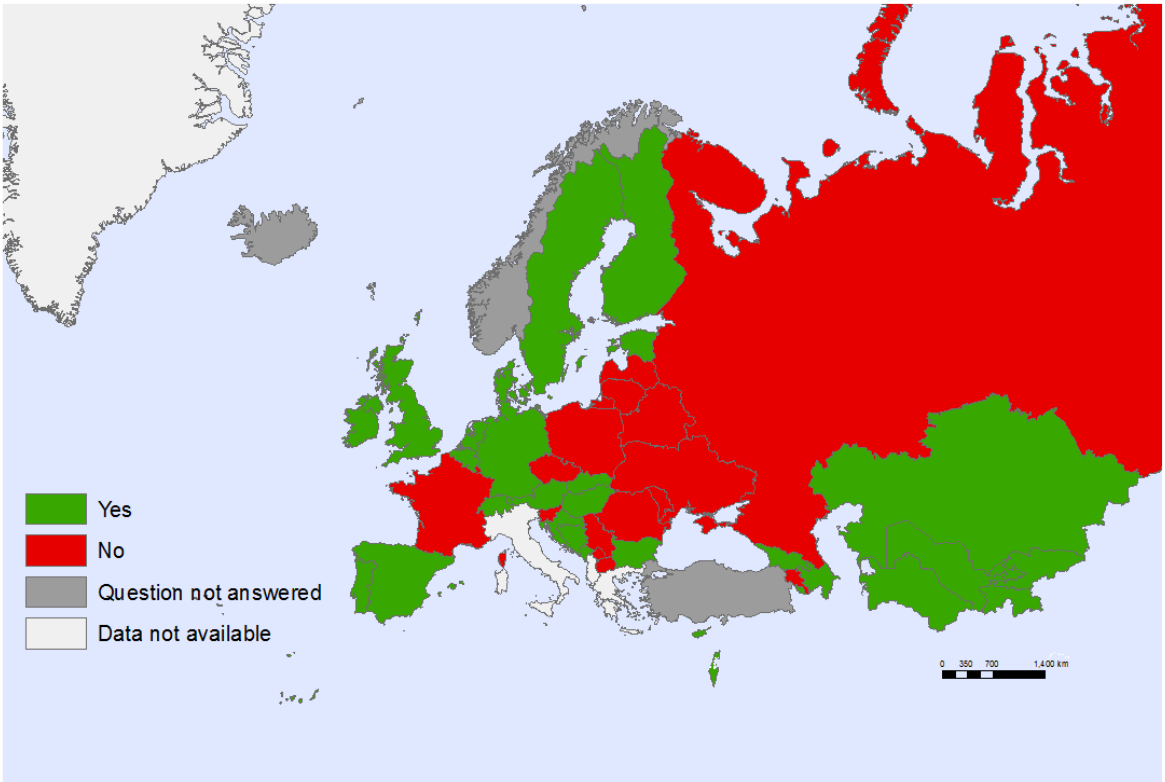
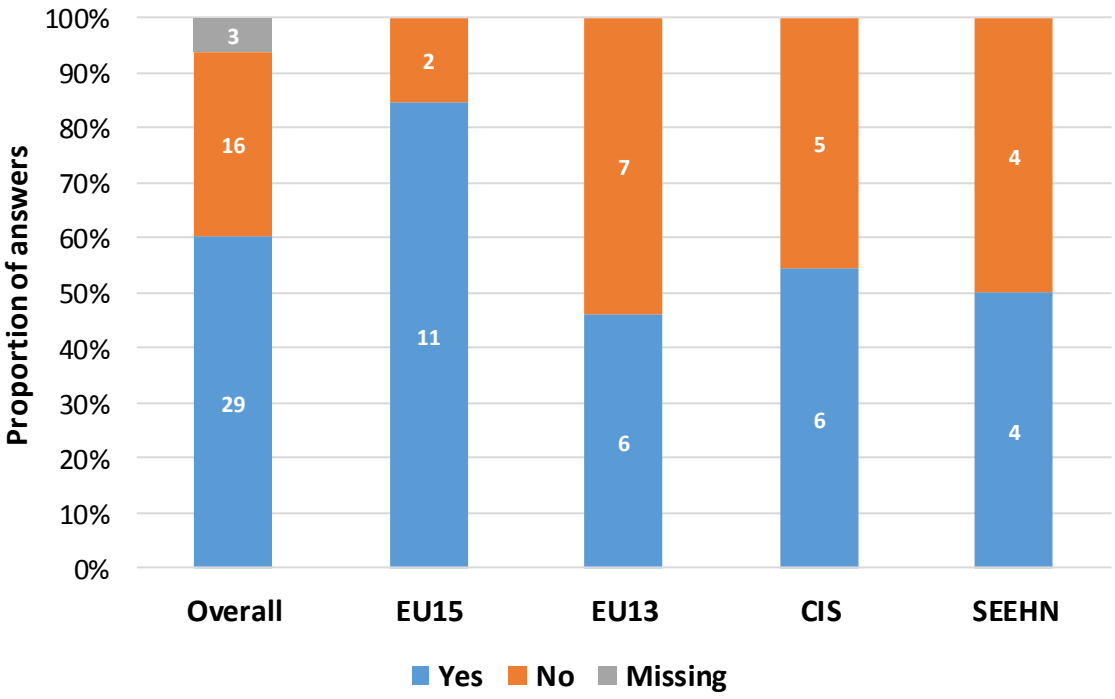


Fig. 8.7. Community services for providing early intervention for adolescents with a first episode of a mental health problem in place (country grouping)



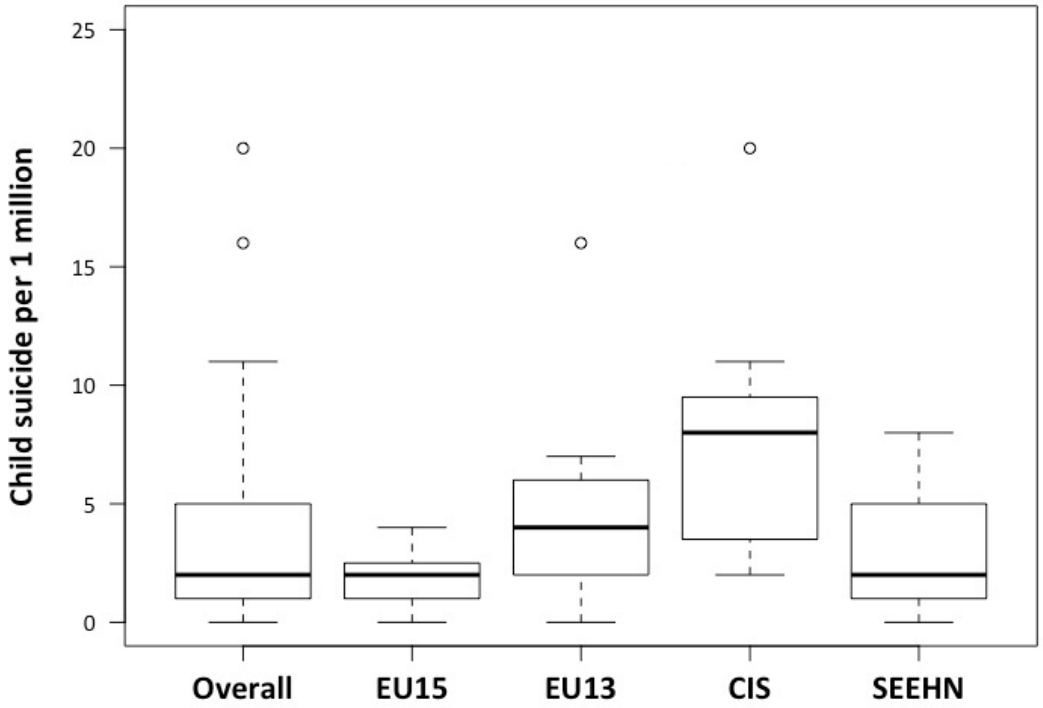
Treatment of ADHD and autism spectrum disorders

The reported rate of children and adolescents under 18 years per 100 000 who are treated by a mental health professional for ADHD ranged from one in Austria to 4899 in Slovakia, with a median of 162. The number of children and adolescents under 18 years per 100 000 who are treated by a mental health professional for autism spectrum disorder ranged from 11 in Bulgaria to 533 in Slovakia, with a median of 77. Both of these rates were reported in the survey by only 16 countries.

Child suicide

Data from the WHO European Mortality Database show that the number of child suicides per million child population in the WHO European Region ranges from 0.6 in Greece to 20.4 in Kyrgyzstan. Nine countries reported the number of child suicides per million child population as zero (Albania, Bosnia and Herzegovina, Cyprus, Estonia, Georgia, Iceland, Luxembourg, Portugal and San Marino). The median of child suicides per million in the 51 reporting countries is two. A closer examination revealed CIS countries to have higher rates of child suicide than those in the EU15 (Fig. 8.8).

Fig. 8.8. Child suicide per million children aged 0–14, by country grouping



Adolescent mental health

Life satisfaction

According to the HBSC survey, children's levels of life satisfaction decline between the ages of 11 and 15 *(4)*. Clear gender differences are seen at age 15, with girls reporting lower life satisfaction than boys (Fig. 8.9 and 8.10). No significant differences across country groupings were found.

Fig. 8.9. High life satisfaction: 15-year-old girls, by country grouping

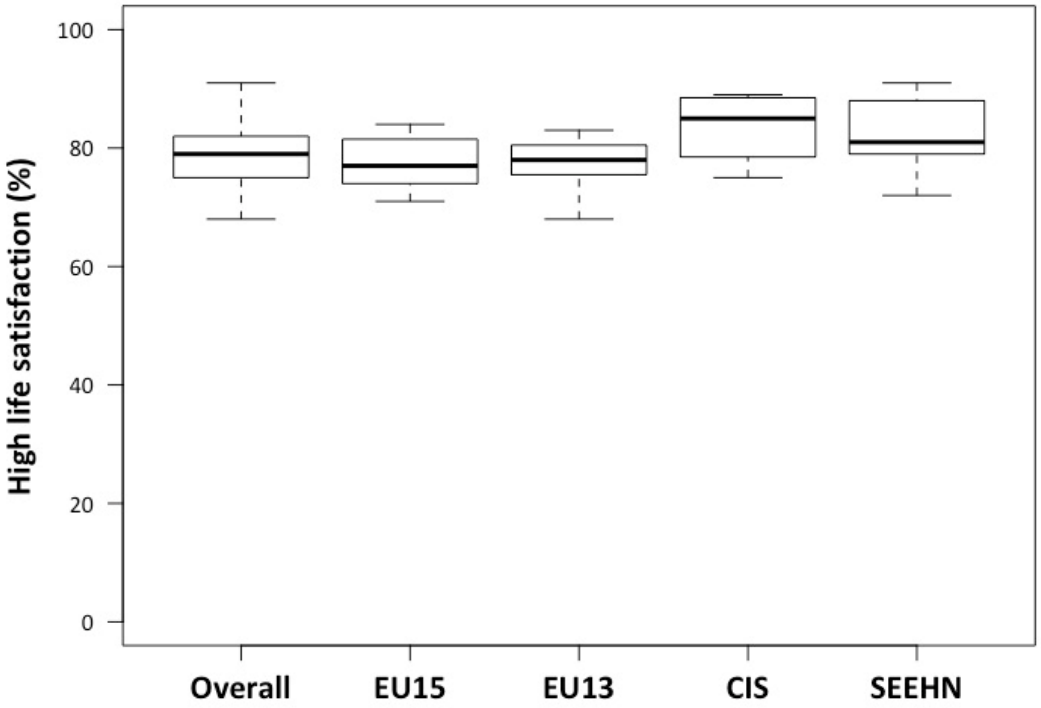
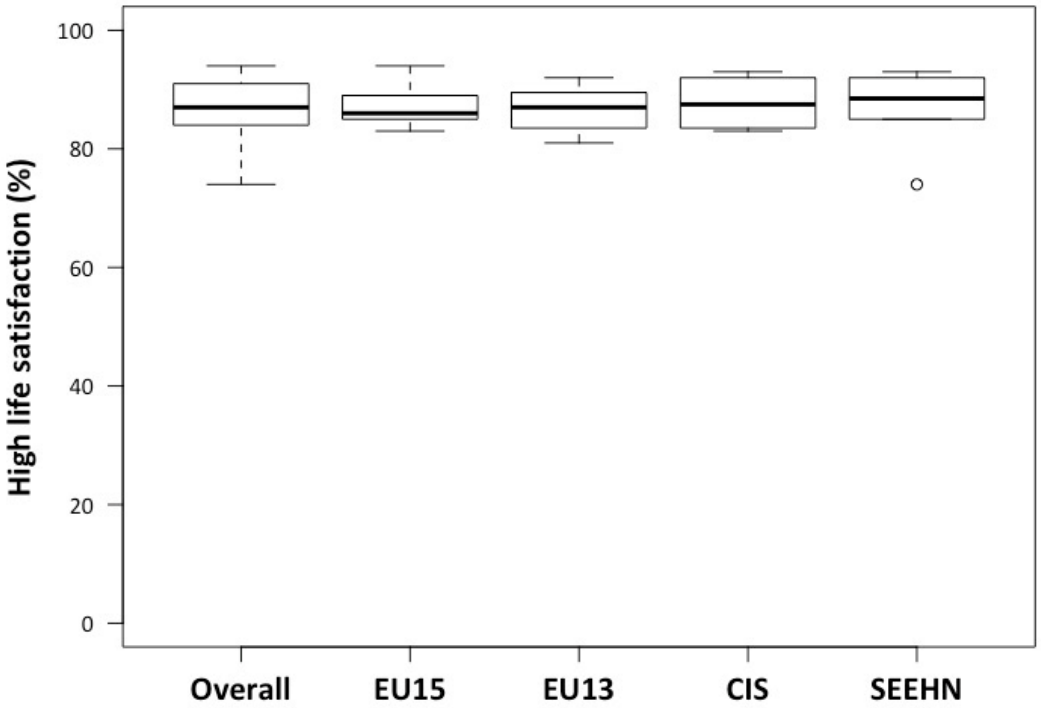


Fig. 8.10. High life satisfaction: 15-year-old boys, by country grouping



Self-rated health

The HBSC study shows that older adolescents, especially girls, report poor or fair health more often than younger adolescents *(4)*. Clear gender differences were found, with 15-year-old girls reporting fair or poor health more frequently than 15-year-old boys. Data show that 15-year-old girls from CIS countries reported higher rates of fair or poor health than those from EU15 countries (Fig. 8.11), and 15-year-old boys from SEEHN countries reported lower rates of fair or poor health than those from EU13 and CIS countries (Fig. 8.12).

Fig. 8.11. Fair or poor health: 15-year-old girls, by country grouping

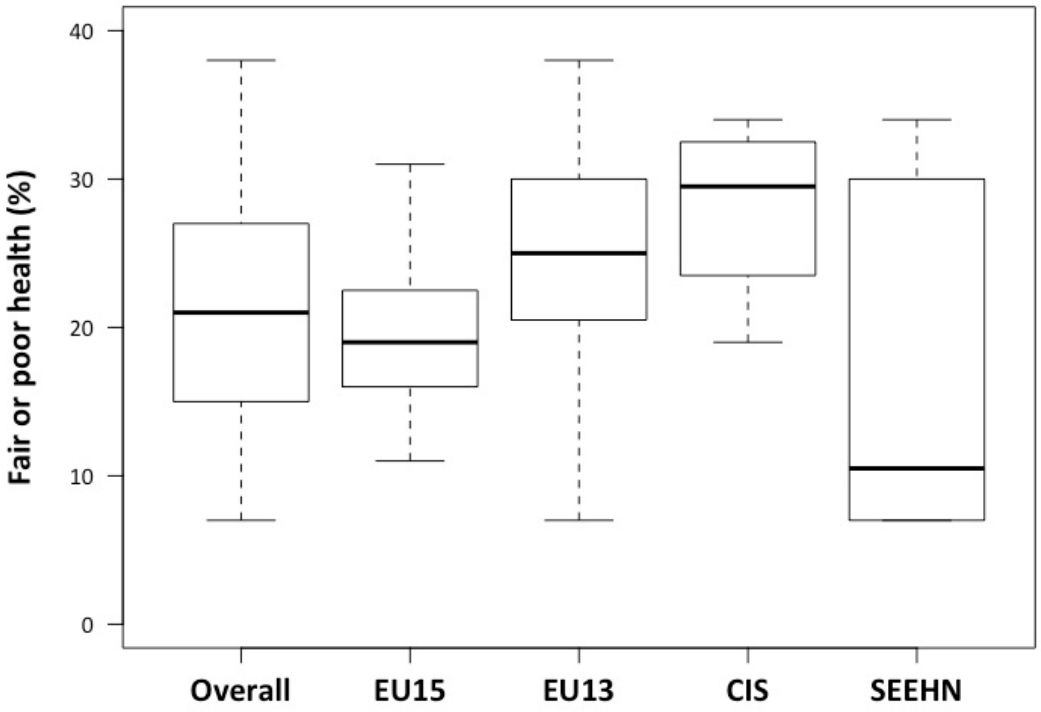
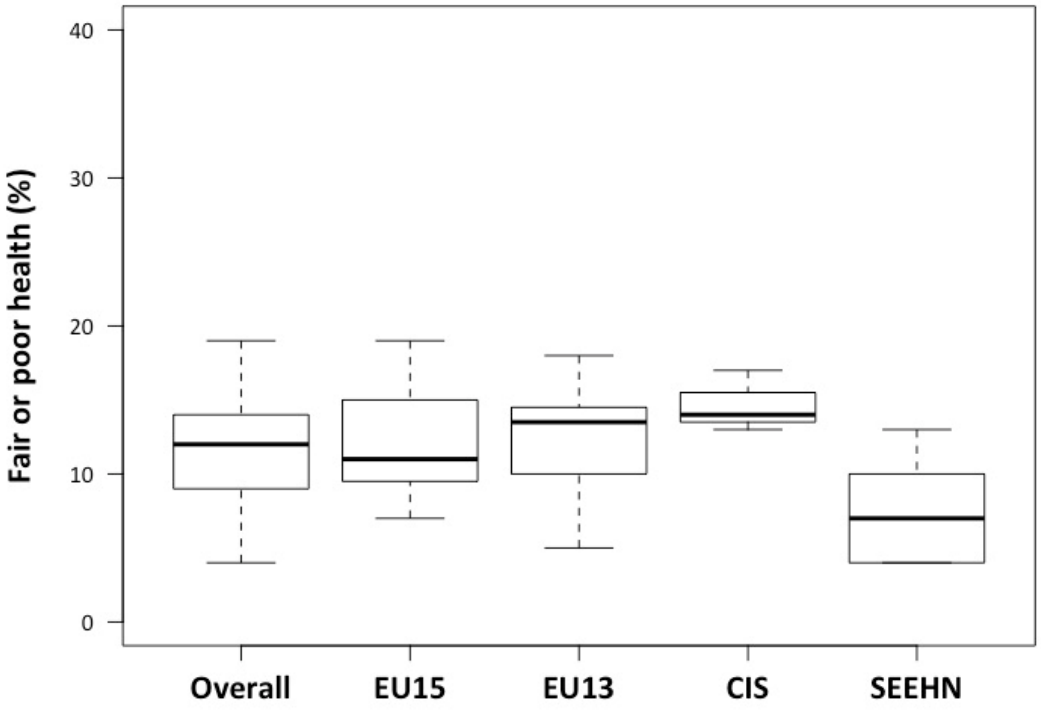


Fig. 8.12. Fair or poor health: 15-year-old boys, by country grouping



Multiple health complaints

Data from HBSC show that 15-year-old girls reported more multiple health complaints than 15-year-old boys. Since the previous HBSC study in 2009/2010, the group of 15-year-old girls increasingly reported multiple health complaints *(4)*. Fifteen-year-old girls from SEEHN countries reported higher rates of multiple health complaints than those from CIS countries (Fig. 8.13). Multiple health complaints did not differ across subregions for 15-year-old boys (Fig. 8.14).

Fig. 8.13. Multiple health complaints: 15-year-old girls, by country grouping

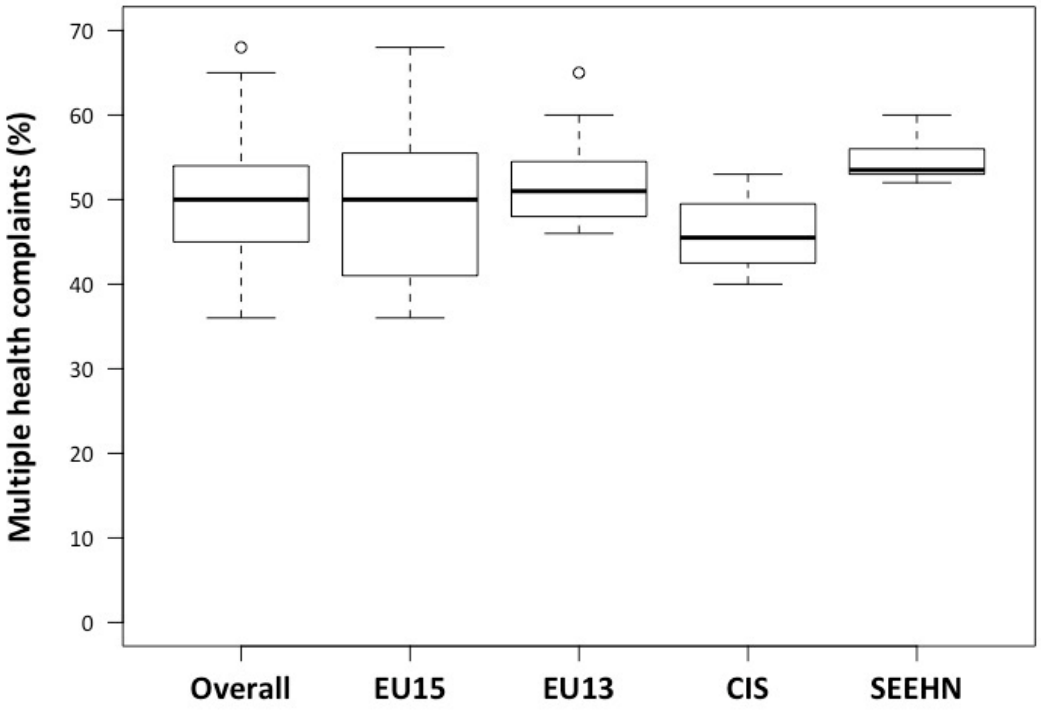
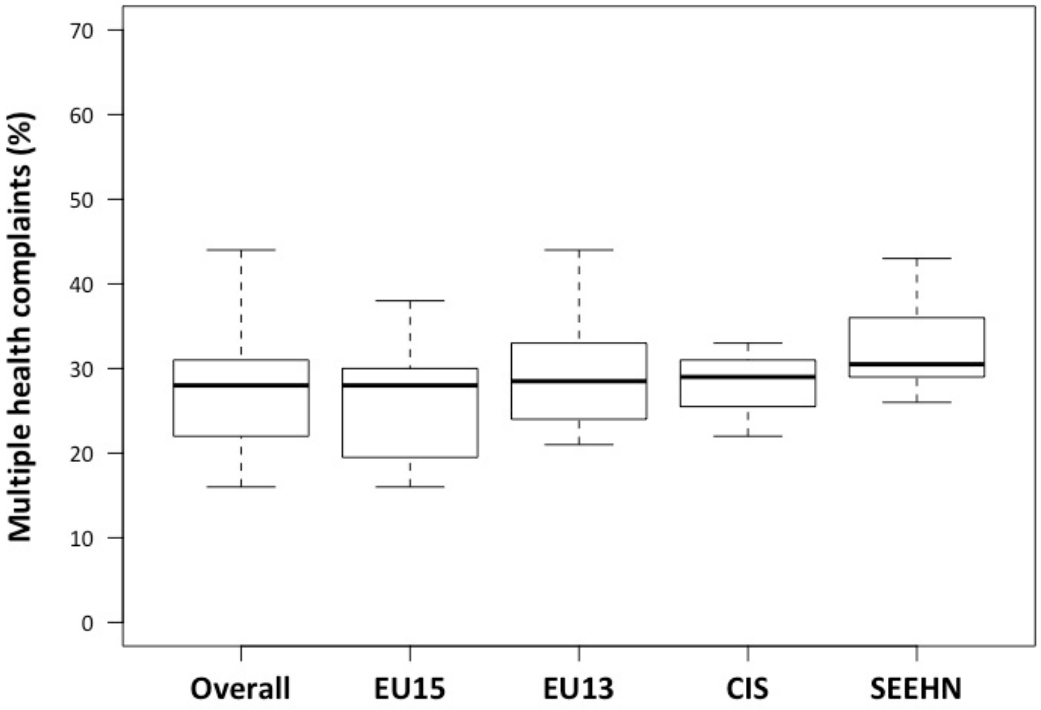


Fig. 8.14. Multiple health complaints: 15-year-old boys, by country grouping



Classmate support

HBSC survey data show no effect of gender regarding the rate of adolescents who agree that their classmates are kind and helpful. In most countries, classmate support decreased from age 11 to age 15 independent of gender (*4*). For both genders, 15-year-olds from EU13 countries reported a lower amount of classmate support than 15-year-olds from EU15 countries (Fig. 8.15 and 8.16). More information on indicators linked to health in schools can be found in Chapter 6.

Fig. 8.15. Classmate support: 15-year-old girls, by country grouping

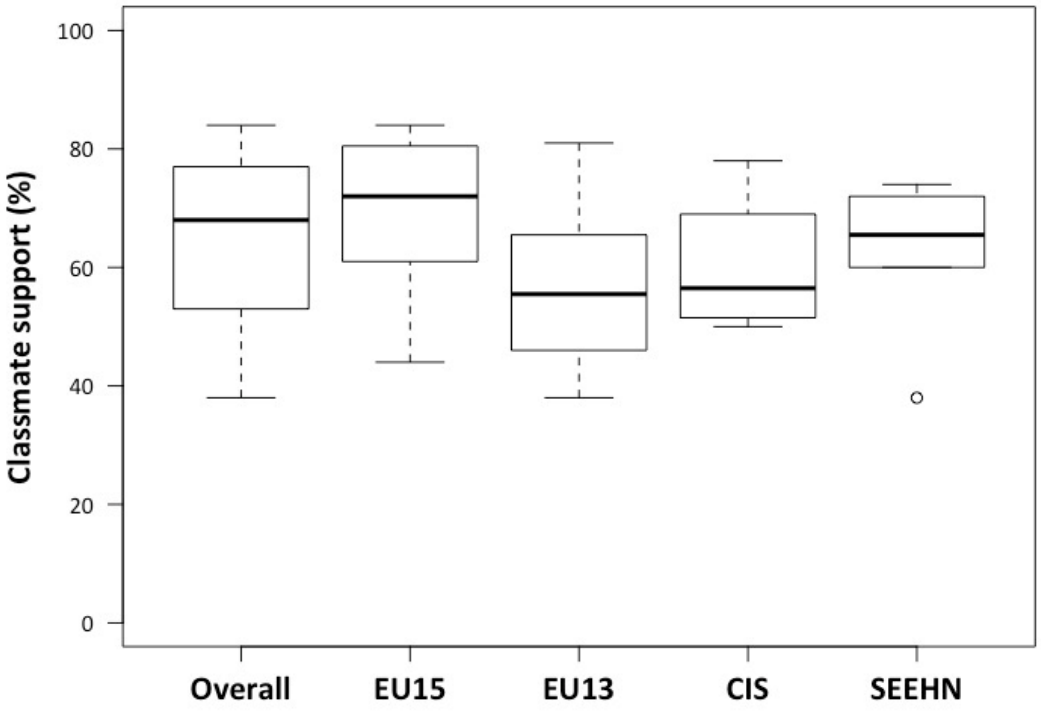
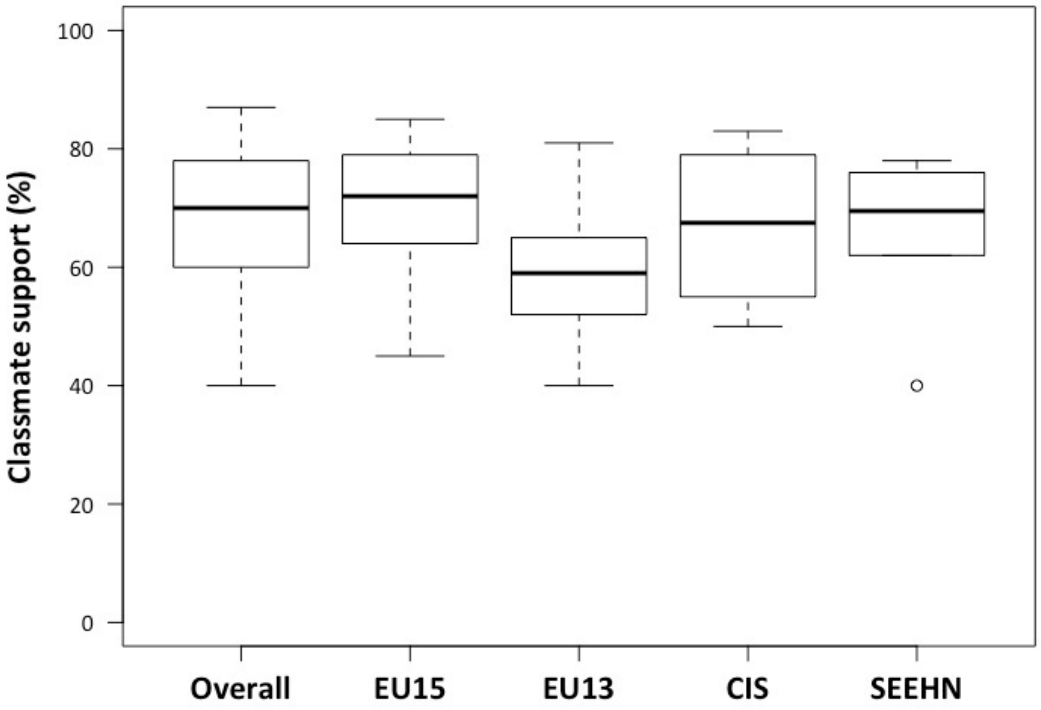


Fig. 8.16. Classmate support: 15-year-old boys, by country grouping



Findings in perspective

With three quarters of all psychiatric disorders beginning before age 18, there is a clear need to invest in better child and adolescent mental health. Self-reported data from surveys like HBSC show that mental health problems are also a major concern for adolescents themselves *(4,5)*. Measuring the problem is one way to tackle it, but services and interventions are also necessary.

Understanding the scale of mental health problems among children and adolescents can guide countries in prioritizing initiatives to improve the situation. The European strategy provides a regional platform to raise awareness and facilitate action in this area, because child and adolescent mental health sits at the heart of its priorities *(6)*. WHO is also leading work globally towards improved measurement and harmonization *(5)* that can support investments in this area for children and adolescents.

Child and adolescent mental health services

Just over half of the Region's countries report that they assess the quality of mental health services for children and adolescents or have guidance in place for facilitating the transition from child to adult mental health services. This raises a concern about the lack of appropriate mechanisms for safeguarding the quality of care that children and adolescents receive in the remaining countries.

Possible barriers to adolescents receiving mental health services can be parental consent (see Chapter 5) or service charges. Adolescents have access to all services without paying in only about half of the countries (see Chapters 3 and 4). The European mental health action plan 2013–2020 *(1)* stresses the importance of community mental health services being accessible to the most vulnerable groups, including children and adolescents. Seven of the EU13 countries do not have community services for early intervention and continuing support for adolescents with a first episode of a severe mental health problem. Service provision by child psychiatrists varies widely in the Region, from 101 psychiatrists per 100 000 child population in Estonia to only one per 100 000 in Tajikistan. Chapter 4 addresses services more generally.

Mental health determinants among adolescents

Self-reported mental health declines with age and varies by gender; girls across the Region report less life satisfaction, more poor health and higher levels of multiple health complaints. Social support from classmates also declines with age, with the lowest rates of classmate support being reported in EU13 countries. As indicated in Chapter 6, only 60% of the countries report that their national school policy includes adolescent mental health. Schools can play an important role in addressing the documented poor self-reported mental health of adolescents at 15 through, for example, life-skills training programmes that promote social and emotional learning.

Lack of data collection of key indicators

Important mental health indicators were often missing or of questionable quality for too many countries. The survey found that only 10 countries provided information on the number of child psychologists, while 16 provided the number of children and adolescents under 18 years treated for ADHD and autism spectrum disorders. On the other hand, a number of countries reported zero cases of child suicide per million child population; it is very likely that this was not the case, possibly pointing to subregional problems in underreporting of child suicide rates. The high variance in these numbers brings into question the reliability of such data. Global work to develop an appropriate indicator for the prevalence of depression among adolescents and to test the validity of behaviour linked to suicide *(5)*, not just fatal attempts, can support improved surveillance of this growing public health problem.

Conclusion

Mental health problems are among the most significant public health challenges in the Region, with more than one third of the population affected each year. Most countries have mental health policies and legislation, and many are making progress with the implementation of community-based mental health services. Nearly half of the countries, however, neither assess the quality of mental health services for children and adolescents nor have guidance in place for the transition from child to adult mental health services. Given the lack of reported data by countries on mental health services and children's and adolescents' mental health, and the wide variation of reported rates, countries need to collect data more consistently and reliably, with reporting and follow up, to make international comparisons more meaningful and consequently lay a basis for improvement.

Table 8.1 includes all indicators used in this chapter, and data from the country profiles and the survey displayed by country with summary statistics.

Table 8.1. Mental health and well-being: summary table

Country	Assess the quality of mental health services	Transition guidance from child to adult mental health services	Community services for early intervenetions	Age of transfer from child to adult mental health services	Psychiatrists per 100 000 children aged 0–14	Psychologists per 100 000 children aged 0–14	15-year-old girls who report high life satisfaction (%)	15-year-old boys who report high life satisfaction (%)	Classmate support, girls 15 (%)	Classmate support, boys 15 (%)	Child suicide rate per million population (0–14)	Country code
Albania	–	–	–	–	–	–	91	89	74	76	0	ALB
Andorra	No	No	Yes	–	–	–	–	–	–	–	–	AND
Armenia	Yes	No	No	18	2	–	89	91	78	83	2	ARM
Austria	No	No	Yes	18	18	–	82	92	83	77	2	AUT
Azerbaijan	Yes	Yes	Yes	18	1	2	–	–	–	–	2	AZE
Belarus	Yes	Yes	No	18	–	–	–	–	–	–	8	BLR
Belgium	Yes	Yes	Yes	–	–	–	77	87	70	72	3	BEL
Bosnia and Herzegovina	Yes	Yes	Yes	18	–	–	–	–	–	–	0	BIH
Bulgaria	Yes	–	Yes	18	2	–	81	85	38	40	2	BGR
Croatia	Yes	No	Yes	14	10	–	79	87	66	71	2	HRV
Cyprus	No	Yes	Yes	17	9	11	–	–	–	–	0	CYP
Czechia	No	No	No	18	1	–	75	81	42	46	5	CZE
Denmark	–	Yes	Yes	18	2	–	82	93	81	81	1	DNK
Estonia	–	No	Yes	14–16	101	40	78	88	65	66	0	EST
Finland	No	Yes	Yes	18	41	172	84	91	76	76	2	FIN
France	Yes	No	No	16	22	–	71	86	52	55	3	FRA
Georgia	No	Yes	Yes	18	2	3	–	–	–	–	0	GEO
Germany	Yes	Yes	Yes	18–21	18	6	74	87	77	77	2	DEU
Greece	–	–	–	–	–	–	81	85	44	45	1	GRC
Hungary	Yes	Yes	Yes	18	10	–	77	83	53	51	1	HUN
Iceland	No	–	–	18	–	–	83	91	82	87	0	ISL
Ireland	Yes	Yes	Yes	18	9	–	76	86	72	70	4	IRL
Israel	Yes	–	Yes	18	12	–	79	88	69	64	3	ISR
Italy	–	–	–	–	–	–	79	85	61	65	1	ITA
Kazakhstan	Yes	Yes	Yes	18	3	–	–	–	–	–	11	KAZ
Kyrgyzstan	Yes	No	Yes	18	0.8	–	–	–	–	–	20	KGZ
Latvia	Yes	No	No	18	4	–	80	87	51	58	4	LVA
Lithuania	Yes	No	No	18–19	13	–	78	90	43	54	6	LTU
Luxembourg	No	No	No	18	17	–	74	83	68	70	0	LUX
Malta	Yes	No	No	18	5	14	76	89	71	64	16	MLT
MKD[a]	No	Yes	No	23	2	–	72	74	72	78	2	MKD[a]
Monaco	–	–	–	–	–	–	–	–	–	–	–	MCO
Montenegro	Yes	Yes	Yes	18	2	–	–	–	–	–	8	MNE
Netherlands	Yes	Yes	Yes	18	22	47	84	94	84	85	2	NLD
Norway	–	–	–	–	–	–	82	90	75	80	1	NOR
Poland	No	No	No	18	–	–	68	83	49	53	4	POL
Portugal	Yes	Yes	Yes	18	6	–	74	83	81	83	0	PRT
Republic of Moldova	Yes	Yes	No	18	3	–	88	93	60	75	5	MDA
Romania	Yes	Yes	No	18	6	2	81	92	62	62	5	ROU
Russian Federation	Yes	Yes	No	18	57	–	75	83	53	60	8	RUS
San Marino	–	–	–	–	–	–	–	–	–	–	0	SMR
Serbia	No	No	No	19	–	–	–	–	–	–	1	SRB
Slovakia	Yes	Yes	Yes	18	5	–	73	84	58	60	6	SVK
Slovenia	No	No	No	18	–	–	83	91	81	81	7	SVN
Spain	No	No	Yes	18	–	–	81	87	61	63	1	ESP
Sweden	Yes	Yes	Yes	18	23	–	73	85	80	82	3	SWE
Switzerland	No	No	Yes	18	55	56	84	91	78	81	2	CHE
Tajikistan	Yes	Yes	Yes	18	0.3	–	–	–	–	–	3	TJK
Turkey	–	–	–	–	–	–	–	–	–	–	2	TUR
Turkmenistan	–	Yes	Yes	18	1	–	–	–	–	–	10	TKM
Ukraine	No	No	No	18	5	–	82	84	50	50	9	UKR
United Kingdom	Yes	Yes	Yes	18	–	–	71	84	58	60	1	GBR
Uzbekistan	Yes	Yes	Yes	18	2	–	–	–	–	–	4	UZB

% Overall	Yes, No	58	31	52	38	60	33	18	14		79	87	65	68	4	Average
% EU15	Yes, No	62	31	69	31	85	15	23	101	172	91	94	84	87	20	Highest value
% EU13	Yes, No	62	31	31	62	46	54	MKD	EST	FIN	ALB	NLD	NLD	ISL	KGZ	Highest country
% CIS	Yes, No	82	9	73	27	55	45	14	0.3	2	68	74	38	40	0	Lowest value
% SEEHN	Yes, No	75	25	63	13	50	50	HRV	TJK	ROU	POL	MKD	BGR	BGR		Lowest country

[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

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9. Infectious diseases and environmental health

Introduction

The first priority of the European child and adolescent health strategy is to address the "unfinished agenda of preventable death and infectious disease" *(1)*. The focus stems from the Millennium Development Goals and is linked to the 2030 Agenda *(2–4)*. While infectious diseases rank relatively low as a cause of death and disability-adjusted life-years lost in the Region, they still result in significant cases of preventable illnesses and premature deaths *(5),* particularly in central Asian and eastern European countries. This chapter describes the state of child and adolescent health in the WHO European Region with regards to infectious disease burden and prevention, as well as some environmental health issues, using indicators from the country profiles *(6)* and the baseline survey *(7)*.

Key findings

- Reporting on new vaccines (rotavirus, pneumococcal conjugate vaccine (PCV) and human papillomavirus (HPV)) is low across the Region.
- Availability of HPV vaccination free of charge has been implemented in about half the countries.
- Information on sentinel infectious diseases in children and adolescents is not adequately reported in the Region, as illustrated by a high number of missing data for several key global indicators of child health.

Findings

Vaccine coverage

Diphtheria vaccination coverage in infants

The Region has high coverage of diphtheria vaccination (three doses of diphtheria, tetanus toxoid and pertussis vaccine (DTP3), or diphtheria and tetanus vaccine) in children before their first birthday, with a subregional average of 95%. Most countries reported over 90% coverage, but a number (including San Marino (76%), Ukraine (76%), Bosnia and Herzegovina (86%), Republic of Moldova (87%), Montenegro (89%) and Romania (89%)) reported lower.

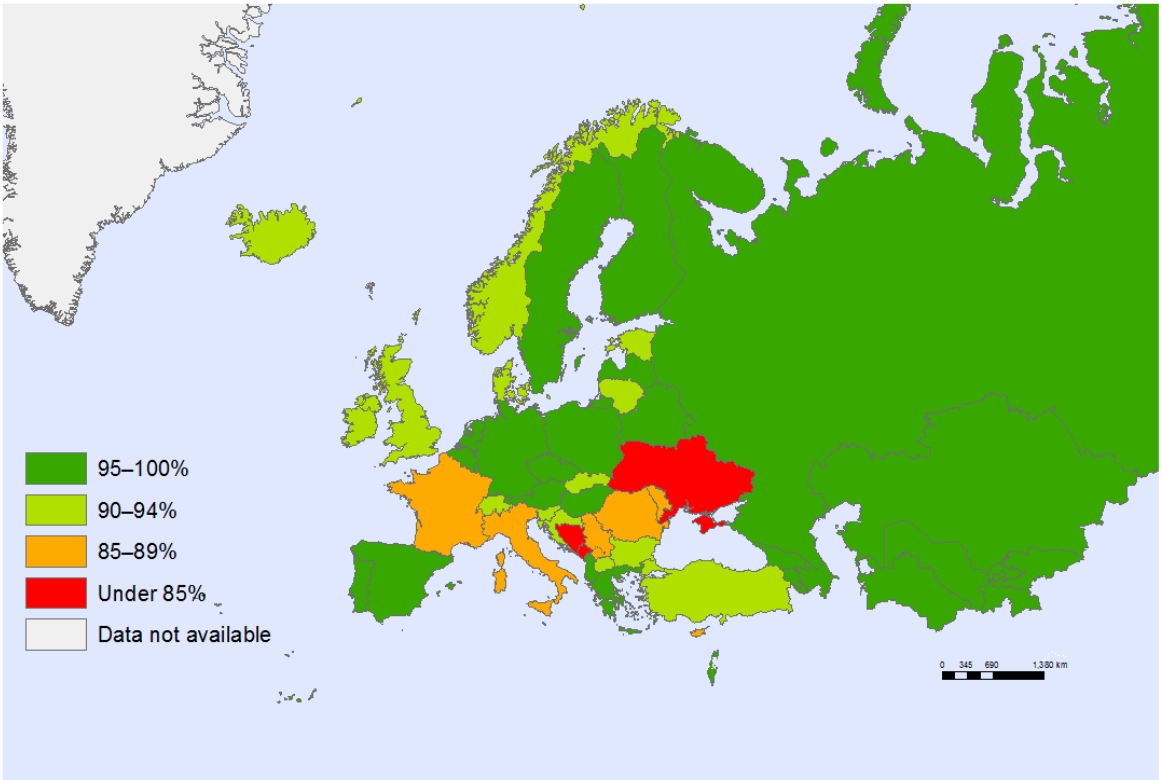
DTP3 immunization coverage in infants

The average percentage coverage of DTP3 vaccination in the Region is 95%. The lowest reported coverage was in Ukraine (23%), followed by Slovenia (76%), Bosnia and Herzegovina (82%), Netherlands (87%), Portugal (89%) and Serbia (89%). The remaining countries reported over 90% coverage.

Measles vaccination coverage in children under 2 years

On average, nine in every 10 children below 2 years in the Region (93%) have been vaccinated against measles. As Fig 9.1 shows, a number of countries, including San Marino (53%), Montenegro (64%), Ukraine (79%), Monaco (85%), Italy (86%), Romania (86%) and Serbia (87%), have rates below the subregional average.

Fig. 9.1. Measles vaccination for children under 2 years, by country



Haemophilus influenzae type B vaccination

Vaccination coverage of infants against invasive disease due to *Haemophilus influenzae* type b averages 95% in the Region. The lowest coverage rates were reported in Bosnia and Herzegovina (79%), San Marino (79%), Ukraine (83%), Bulgaria (87%), Republic of Moldova (87%), Georgia (89%) and Montenegro (89%).

Rotavirus vaccination coverage in infants (under 1 year)

Eight countries (15% of those in the Region) reported rotavirus vaccination coverage in infants: Armenia (with 33% coverage), Georgia (41%), Austria (61%), Republic of Moldova (65%), Belgium (86%), Luxembourg (89%), Finland (93%) and Israel (93%).

PCV vaccination coverage in infants

Estimates of PCV vaccination coverage in infants were available for 25 countries. While most reported over 90% coverage, the lowest reported rates were in the Republic of Moldova (28%), Italy (55%), Kazakhstan (58%), Azerbaijan (64%), Germany (68%), Switzerland (80%), Latvia (87%) and France (89%).

HPV vaccine

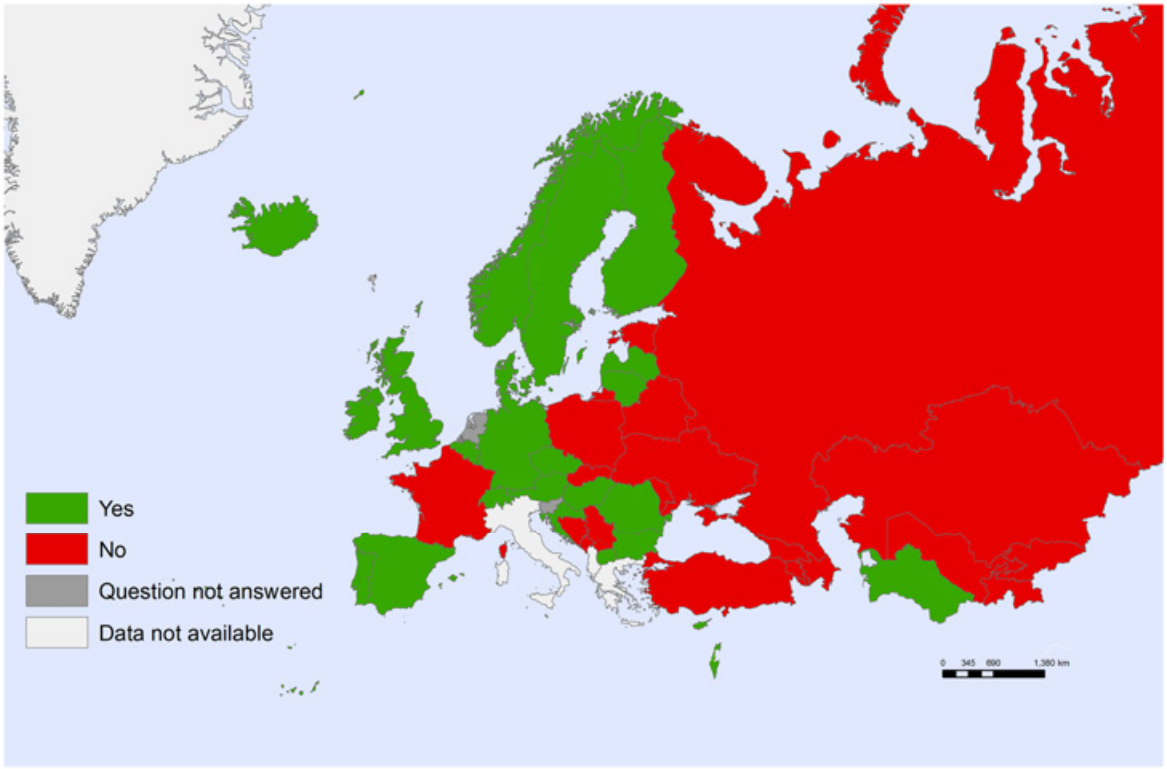
Adolescents who received third dose of HPV vaccination

Coverage data for the percentage of adolescents who received their third dose of the HPV vaccine were available only in 18 countries. The United Kingdom reported the highest rates, with 91% coverage, while Finland and Lithuania (each with 29%) had the lowest.

Free HPV vaccination in national vaccination programmes

Twenty-seven countries (56%), most of which are located in the western part of the Region (see Fig. 9.2), have successfully implemented free national HPV vaccination. Half of SEEHN and 91% of CIS countries do not offer free HPV vaccinations.

Fig. 9.2. HPV vaccination is available through national vaccination programmes free of charge



Pneumonia

Children with symptoms of pneumonia taken to a health-care provider

Pneumonia is a major killer of children, and therefore global monitoring efforts take pneumonia case management as a key indicator for child health-service provision *(3,4)*. The country with the highest percentage of children under 5 with symptoms of pneumonia taken to a health provider was Belarus (93%); the lowest percentages were Azerbaijan and Kyrgyzstan (33% each). Data for this indicator were available for only 13 countries.

Pneumonia hospitalization rate

Pneumonia hospitalization rates per 1000 children under 5 years is a key sentinel indicator, yet it was reported by only 22 countries (41%). The country with the highest hospitalization rate was the Republic of Moldova, with 65 hospitalizations per 1000 children, while Montenegro (with approximately one per 1000) was the lowest in the Region. The estimated subregional average stands at 15 hospitalizations per 1000 for the reporting countries. The rate in the Republic of Moldova is almost twice that of Romania (38 per 1000) and is the second highest in the Region.

HIV

Prevalence in children aged 0–14 years

Preventing mother-to-child transmission of HIV is a major global target that can be monitored through HIV infection rates in children. This indicator presents the estimated prevalence of HIV in children

aged 0–14 years per 100 000, and was available only for Kyrgyzstan, with 28 per 100 000, and the Republic of Moldova, with 35 *(6)*.

Prevalence in adolescents and young people aged 15–24 years

Data for this indicator were available for 16 countries and emerge from UNAIDS estimates for HIV in this age group *(6)*. The prevalence of HIV in adolescents and young people was highest for males in Georgia (0.3%) and for females in Ukraine (0.6%), with an average of 0.1% in both males and females.

Reported tuberculosis cases in children aged 0–14 years

Tuberculosis in children is difficult to diagnose and is neglected, compared to adults. Monitoring is therefore important. Data obtained from the European Centre for Disease Prevention and Control (tuberculosis, all cases, age below 15 – reported cases) *(6)* show that 30 countries reported on this indicator from 2012 to 2013. The highest rates in children of 0–14 years were reported in Romania, with 23 cases per 100 000 children, and lowest in Finland (0.2 cases per 100 000).

Children under 5 with diarrhoea receiving oral rehydration treatment with continued feeding

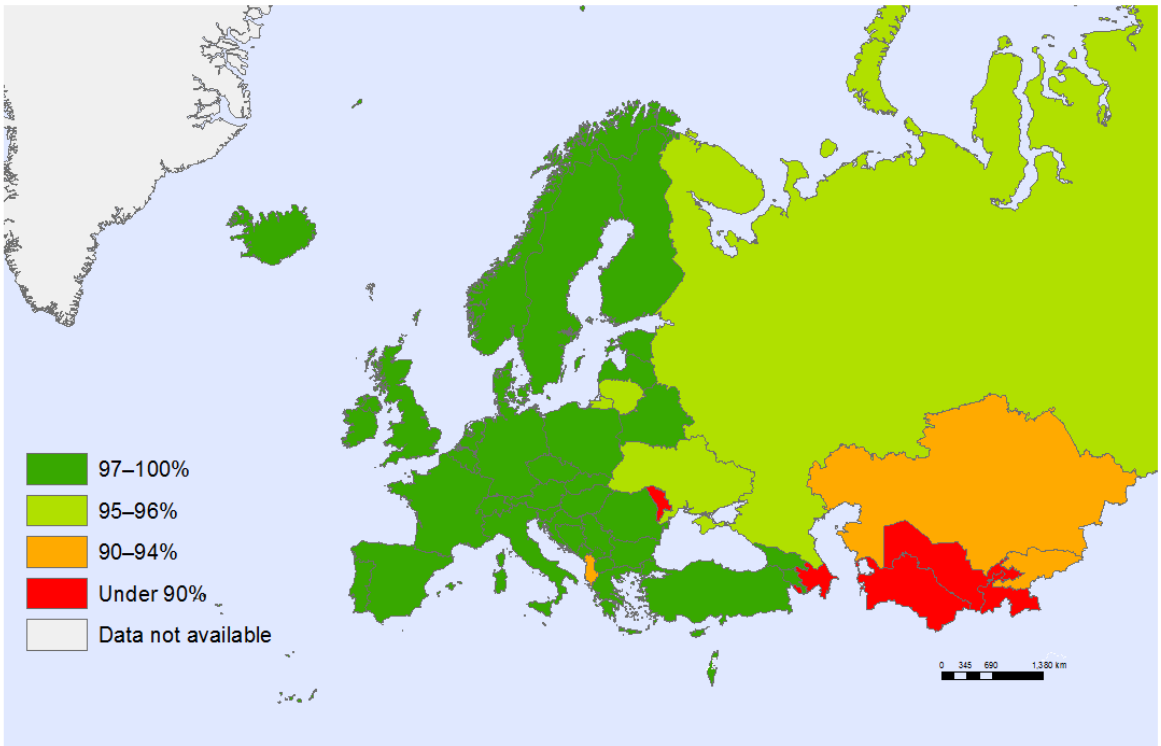
Diarrhoea is another important killer of children, and deaths can be prevented through oral rehydration and continued feeding (which is another global core indicator *(2,3)*). Sixteen countries reported the percentage of children with diarrhoea who received oral rehydration, the highest coverage rate being in Armenia (77%) and the lowest in Turkey (22%).

Water supply and sanitation

Populations with homes connected to the water supply system

Most countries in the Region have their homes connected to the water supply system, with a subregional average of 97%. Two out of three countries (35 of 53) reported 100% of their homes connected to the water supply system (Fig. 9.3), but a number of CIS countries reported the lowest subregional percentages.

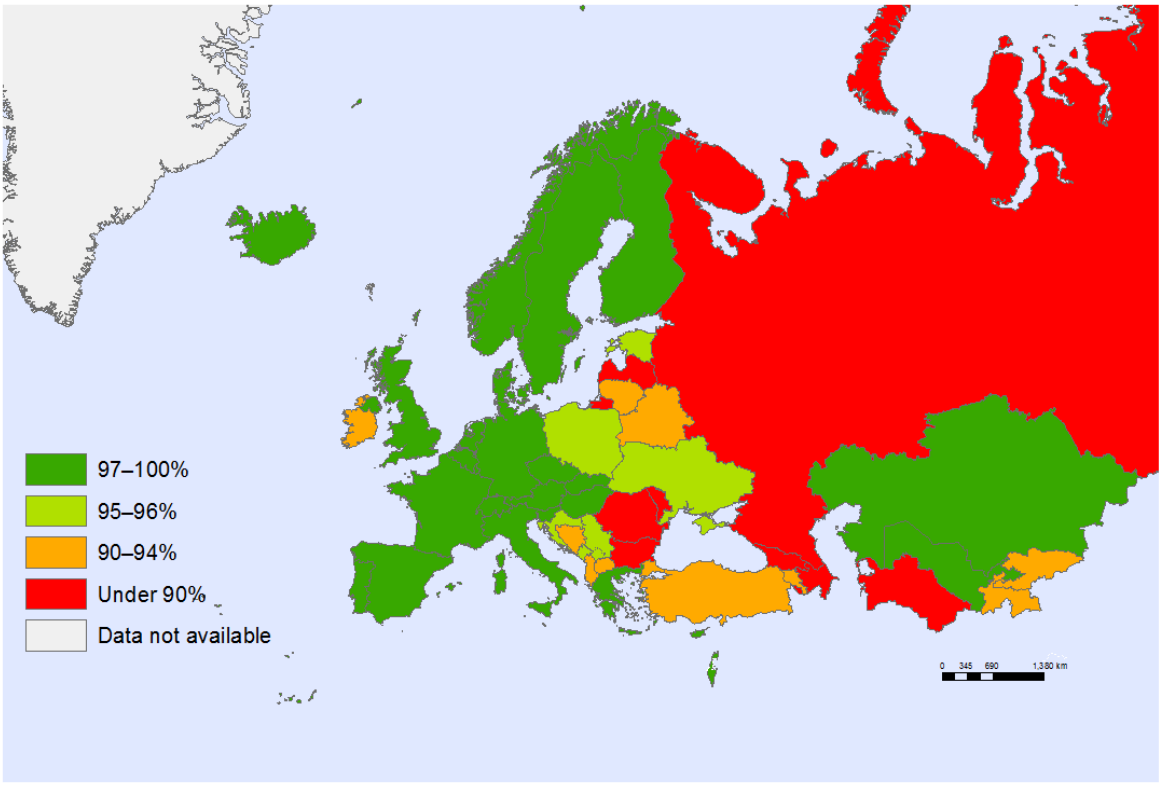
Fig. 9.3. Populations with homes connected to the water supply system



Populations with access to a sewage system, septic tank or other hygienic means of sewage disposal

Most countries reported a high percentage of their population having access to sewage systems, with a subregional average of 95% (Fig. 9.4). The following countries reported having less than 80% of their population with access to a hygienic sewage system: Turkmenistan (63%), Russian Federation (72%), Republic of Moldova (76%) and Romania (79%).

Fig. 9.4. Populations with access to a sewage system, septic tank or other hygienic means of sewage disposal



Findings in perspective

Vaccine coverage

Vaccines remain among the most cost-effective interventions for reducing the burden of avoidable disease and mortality in children and adolescents *(8)*. The introduction of new vaccines can offer an opportunity to reinforce and scale-up interventions of proven efficacy to prevent pneumonia, cervical cancer and diarrhoea. WHO recommends the inclusion of PCV in all childhood immunization programmes worldwide because it protects against diseases caused by the bacterium *Streptococcus pneumoniae*. HPV is a main cause of cervical cancer *(9)*, but only about half of the Region's countries provide free access to HPV vaccination through their national programme. WHO recommends that girls aged 9–14-years, prior to sexual debut, should be primary targets of national vaccination programmes. The HPV vaccine is still relatively new and as such still expensive, but countries should strive to include HPV vaccines in national immunization programmes to foster immunization coverage and guarantee children's rights to the best possible health *(9)*.

Routine vaccine coverage has declined in the Region over the past five years, creating increased risk of new outbreaks of vaccine-preventable diseases. Some of the high vaccination rates are self-reported and may not be representative of the actual situation in countries. One of the goals of the European vaccine action plan 2015–2020 is to ensure that countries meet the regional vaccination coverage target at all administrative levels throughout the Region *(10)*.

A shift in the public's risk perception from the vaccine-preventable disease to the adverse events associated with vaccination has impacted negatively on infection control *(11)*. Pockets of susceptible children remain despite high vaccination coverage, resulting in the resurgence of previously controlled diseases: an example is the reported series of measles outbreaks in the Region in 2017 which resulted in over 3300 cases and about 35 deaths, with most cases and fatalities occurring in Romania *(11)*.

Missing data on infectious diseases

There is a dearth of up-to-date data on infectious diseases in children and adolescents in the Region (as illustrated by missing data for a number of key indicators in this chapter), which means that some of the subregional averages should be interpreted with caution. Pneumonia and diarrhoea nevertheless are still among the most common causes of death in children under 5 in the Region *(8)* and globally *(12)*. Complete and updated data are needed to better assess the burden in the Region and tackle it appropriately.

Data on children under 5 with pneumonia who are taken to a health-care provider are available only in 13 countries, and pneumonia hospitalization in children under 5 in 22. Only 16 countries reported on the treatment of diarrhoea with oral rehydration therapy. Indicators related to pneumonia and diarrhoea are included in monitoring of the global strategy for women's, children's and adolescents' health *(3)* (Annex 2). They are also critical for monitoring progress on the integrated global action plan for the prevention and control of pneumonia and diarrhoea targets *(12)*, one of which, the target of having over 90% of the population having access to a water supply and a hygienic sanitation facility, has been met by most countries in the Region; the countries with the lowest coverage rates are mostly in the CIS and SEEHN. WHO's IMCI recommends oral rehydration therapy, increased fluid intake and continuous feeding in the management of diarrhoea *(5)*. Efforts to increase rates of exclusive breastfeeding would also be beneficial in reducing the rates of childhood diarrhoea.

The lack of available data also affects:

- HIV, for which only two countries reported on prevalence in children aged 0–14 years and 16 on rates in adolescents;
- rotavirus infection, which causes more than 10 000 deaths in children under 5 in the Region and is a major cause of morbidity and mortality globally *(13)*, for which rates were reported in only eight countries;
- HPV vaccine coverage, which is available for only one third of countries;
- PCV, for which less than half of countries in the Region reported coverage rates; and
- tuberculosis prevalence in children under 14 years, which is available for just over half of the Region.

The European strategy *(1),* target 3 of the SDGs *(2)* and the global strategy for women's, children's and adolescents' health *(3)* rely on indicators such as these to meet agreed goals (Annex 2). Surveys such as USAID's Demographic and Health Survey (DHS) *(14)* and UNICEF's Multiple Indicator Cluster Survey (MICS) *(15)* provide systematic population-based information on vaccinations, pneumonia and diarrhoea for children under 5. Countries that do not participate in them should develop comparable means of collecting such data.

Conclusion

This chapter has highlighted the inadequacy of available data in tackling the first priority of the European child and adolescent health strategy and the subregional effort to meet the expected targets of the 2030 Agenda, including the SDGs and the global strategy for women's, children's and adolescents' health. Improving vaccine coverage, and the inclusion of critical vaccines to reduce preventable causes of under-5 mortality and cervical cancers in adulthood, must remain a regional priority. Adequate monitoring, surveillance and reporting of data are necessary.

Table 9.1 includes all indicators used in this chapter, and data from the country profiles and the survey displayed by country with summary statistics.

Table 9.1. Infectious diseases and environmental health: summary table

Country	Country code	Pneumonia hospitalization rate under 5 years per 1 000	Pneumonia symptoms under 5 years taken to health-care provider	Homes conected to water supply system (%)	Access to sewage system (%)	Measles vaccination under 2 years (%)	Hib vaccination under 1 year (%)	PCV vaccination under 1 year (%)	Rotavirus vaccination under 1 year (%)	Estimated child HIV rates per 100 000 (0–14 years)	Adolescent HIV rates (15–24 years) females (%)	Adolescent HIV rates (15–24 years) males (%)	Oral rehydration therapy for diarrhoea 0–4 years (%)	DTP3 immunization coverage among 1-year-olds (%)	Tuberculosis cases per 100 000 (0–14 years)	HPV vaccination 3rd dose young people (%)[c]	Country	HPV vaccinetion available free of charge
Albania	ALB	–	70	95	93	98	99	99	–	–	–	–	63	98	–	–	**Albania**	-
Andorra	AND	7	–	100	100	96	97	93	–	–	–	–	–	98	–	–	**Andorra**	Yes
Armenia	ARM	–	57	100	90	97	94	–	33	–	0.1	0.2	77	94	–	–	**Armenia**	No
Austria	AUT	5	–	100	100	96	98	–	61	–	–	–	–	87	2	–	**Austria**	Yes
Azerbaijan	AZE	–	33	87	89	98	96	64	–	–	0.1	0.1	30	97	–	–	**Azerbaijan**	No
Belarus	BLR	–	93	100	94	99	98	–	–	–	0.2	0.1	61	98	–	81	**Belarus**	No
Belgium	BEL	–	–	100	100	96	98	93	86	–	–	–	–	98	3	–	**Belgium**	Yes
Bosnia and Herzegovina	BIH	–	87	100	95	68	79	–	–	–	–	–	55	78	–	–	**Bosnia and Herzegovina**	No
Bulgaria	BGR	–	–	99	86	92	87	92	–	–	–	–	–	92	18	–	**Bulgaria**	Yes
Croatia	HRV	11	–	100	97	93	94	–	–	–	–	–	–	93	0.6	–	**Croatia**	Yes
Cyprus	CYP	4	–	100	100	90	97	–	–	–	–	–	–	97	2	–	**Cyprus**	Yes
Czechia	CZE	9	–	100	99	99	97	–	–	–	–	–	–	96	0.3	81	**Czechia**	Yes
Denmark	DNK	8	–	100	100	91	93	93	–	–	0.1	0.1	–	94	2	–	**Denmark**	Yes
Estonia	EST	–	–	100	97	93	93	–	–	–	–	–	–	93	0.5	–	**Estonia**	No
Finland	FIN	–	–	100	98	97	98	–	93	–	–	–	–	92	0.2	29	**Finland**	Yes
France	FRA	3	–	100	99	90	98	89	–	–	–	–	–	97	2	–	**France**	No
Georgia	GEO	26	–	100	86	96	89	–	41	–	0.1	0.3	37	92	–	36	**Georgia**	No
Germany	DEU	–	–	100	99	97	94	68	–	–	–	–	–	95	2	–	**Germany**	Yes
Greece	GRC	–	–	100	99	97	99	96	–	–	–	–	–	99	3	–	**Greece**	-
Hungary	HUN	10	–	100	98	99	99	93	–	–	–	–	–	99	0.6	88	**Hungary**	Yes
Iceland	ISL	–	–	100	99	93	92	90	–	–	–	–	–	91	2	84	**Iceland**	Yes
Ireland	IRL	–	–	98	91	93	95	92	–	–	0.1	0.1	–	95	2	–	**Ireland**	Yes
Israel	ISR	6	–	100	100	98	94	93	93	–	–	–	–	94	–	80	**Israel**	Yes
Italy	ITA	–	–	100	100	85	94	55	–	–	–	–	–	93	2	–	**Italy**	-
Kazakhstan	KAZ	22	81	93	98	99	95	58	–	–	0.1	0.1	54	82	–	–	**Kazakhstan**	No
Kyrgyzstan	KGZ	34	33	90	93	99	97	–	–	28	0.1	0.1	67	96	–	53	**Kyrgyzstan**	No
Latvia	LVA	15	–	99	88	96	94	87	–	–	–	–	–	98	20	–	**Latvia**	Yes
Lithuania	LTU	–	–	97	92	94	93	–	–	–	–	–	–	94	13	29	**Lithuania**	Yes
Luxembourg	LUX	–	–	100	98	99	99	95	89	–	–	–	–	99	1	–	**Luxembourg**	Yes
Malta	MLT	3	–	100	100	89	97	–	–	–	–	–	–	97	3	–	**Malta**	Yes
MKD[a]	MKD	34	–	99	91	93	94	–	–	–	–	–	67	91	–	–	**MKD[a]**	Yes
Monaco	MCO	–	–	100	100	85	99	–	–	–	–	–	–	99	–	–	**Monaco**	-
Montenegro	MNE	0.9	89	100	96	64	89	–	–	–	–	–	64	89	–	58	**Montenegro**	No
Netherlands	NLD	–	–	100	98	96	96	95	–	–	–	–	–	95	1	80	**Netherlands**	-
Norway	NOR	–	–	100	98	95	95	91	–	–	0.1	0.1	–	96	1.7	–	**Norway**	Yes
Poland	POL	–	–	98	97	98	99	–	–	–	0.1	0.1	–	98	2	82	**Poland**	No
Portugal	PRT	–	–	100	100	98	98	–	–	–	–	–	–	98	3	–	**Portugal**	Yes
Republic of Moldova	MDA	65	79	88	76	88	87	28	65	35	–	–	55	89	–	–	**Republic of Moldova**	No
Romania	ROU	38	–	100	79	86	92	–	–	–	–	–	–	89	23	–	**Romania**	Yes
Russian Federation	RUS	–	–	97	72	98	90	–	–	–	–	–	–	97	–	–	**Russian Federation**	No
San Marino	SMR	–	–	–	–	62	65	–	–	–	–	–	–	66	–	–	**San Marino**	-
Serbia	SRB	10	90	99	96	82	95	–	–	–	–	–	60	92	–	–	**Serbia**	No
Slovakia	SVK	18	–	100	99	95	96	96	–	–	0.1	0.1	–	96	1	55	**Slovakia**	No
Slovenia	SVN	–	–	100	99	94	95	–	–	–	0.1	0.1	–	94	1	71	**Slovenia**	-
Spain	ESP	4	–	100	100	96	97	–	–	–	–	–	–	97	5	79	**Spain**	Yes
Sweden	SWE	4	–	100	99	98	98	98	–	–	0.1	0.1	–	98	3	–	**Sweden**	Yes
Switzerland	CHE	–	–	100	100	93	95	80	–	–	–	–	–	97	–	–	**Switzerland**	Yes
Tajikistan	TJK	–	63	74	95	97	96	–	–	–	0.1	0.1	61	96	–	65	**Tajikistan**	No
Turkey	TUR	–	–	100	95	94	96	96	–	–	–	–	22	98	–	–	**Turkey**	No
Turkmenistan	TKM	–	–	60	63	99	99	–	–	–	–	–	–	98	–	–	**Turkmenistan**	Yes
Ukraine	UKR	–	92	96	96	42	47	–	–	–	0.6	0.2	69	19	–	87	**Ukraine**	No
United Kingdom	GBR	–	–	100	99	95	96	93	–	–	–	–	–	94	4	91	**United Kingdom**	Yes
Uzbekistan	UZB	–	68	87	100	99	99	–	–	–	0.1	0.1	28	99	–	–	**Uzbekistan**	No
Average		15		97	95	93	95				0.1	0.1		94	4		% Overall Yes, No, (NP), (NL)	56 40
Highest value		65	93	100	100	99	99	99	93		0.6	0.3	77	99	23	91	% EU15 Yes, No, (NP), (NL)	85 8
Highest country		MDA	BLR	AND	AND			ALB			UKR	GEO	ARM		ROU	GBR	% EU13 Yes, No, (NP), (NL)	69 23
Lowest value		0.9	33	60	63	53	79	28	33		0.1	0.1	22	23	0.2	29	% CIS Yes, No, (NP), (NL)	9 91
Lowest country		MNE	AZE	TKM	TKM	SMR		MDA	ARM				TUR	UKR	FIN		% SEEHN Yes, No, (NP), (NL)	50 50

NL: no list. NP: not public.

[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

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10. Nutrition and physical activity

Introduction

This chapter presents indicators and policies related to the nutrition and physical activity of children and adolescents in the European Region. It covers the whole age range, from breastfeeding in newborns to nutrition and physical activity in adolescents. The chapter delves into topics related to the European child and adolescent health strategy's first priority of addressing the unfinished agenda of preventable death and infectious disease, and directly addresses its third priority, protecting and reducing risk – promoting healthy nutrition and physical activity through the life-course *(1)*. The aim of this chapter is to help identify areas for action in the Region.

Key findings

- Most countries report having a policy in place to initiate exclusive breastfeeding, but there is wide subregional variability around exclusive and partial breastfeeding rates, which indicates weak adherence to WHO guidelines.
- Less than a quarter of countries collect information on marketing of complementary feeding products for infants and young children.
- Marketing to children is not regulated in half of countries, with several having plans to initiate regulations.
- Data on undernutrition in young children are infrequently collected in the Region and are often outdated; they therefore do not allow a good estimation of the size of the problem to be made.
- High childhood obesity and low physical activity rates abound in the Region, with adolescents' physical activity being far below the recommended level.

Findings

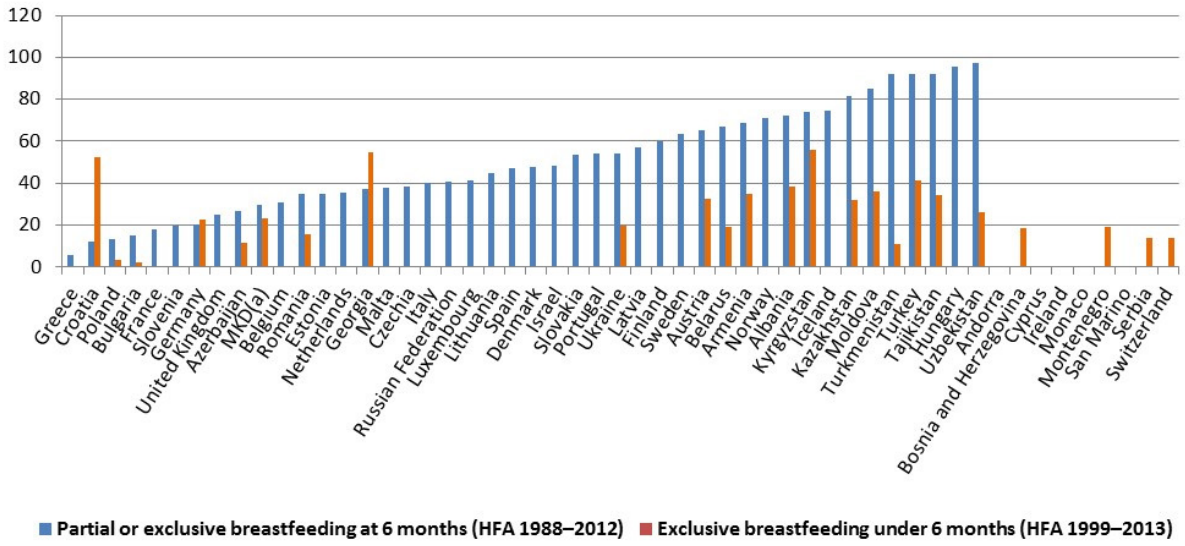
Breastfeeding

Collecting data

Forty countries (83%) reported collecting breastfeeding data based on internationally accepted standards, while seven (15%) do not. All CIS countries reported that their data collection follows international standards, while almost a quarter of EU15 and SEEHN countries (23% and 25% respectively) reported that collection of breastfeeding data was not based on accepted standards.

While countries reported collecting breastfeeding data, Fig. 10.1 shows that often they do not report on it. For example, WHO encourages exclusive breastfeeding up to 6 months, but information on this was missing from 29 countries. Major gaps between reported breastfeeding and exclusive breastfeeding data in publicly available data sets are common in the Region.

Fig. 10.1. Partial and exclusive breastfeeding rates (percentage)

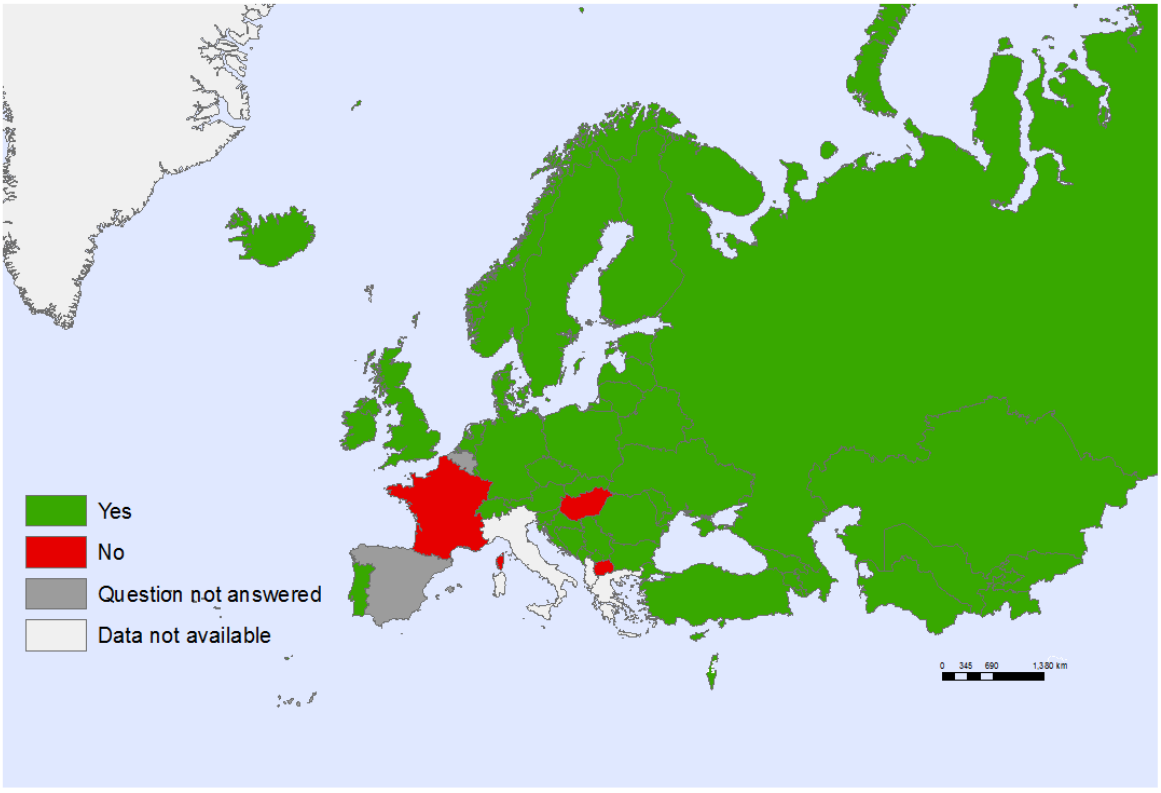


[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

Policy on initiating exclusive breastfeeding

Forty-two countries (88%) reported having a policy of initiating exclusive breastfeeding in health facilities (Fig. 10.2), while four (8%) did not.

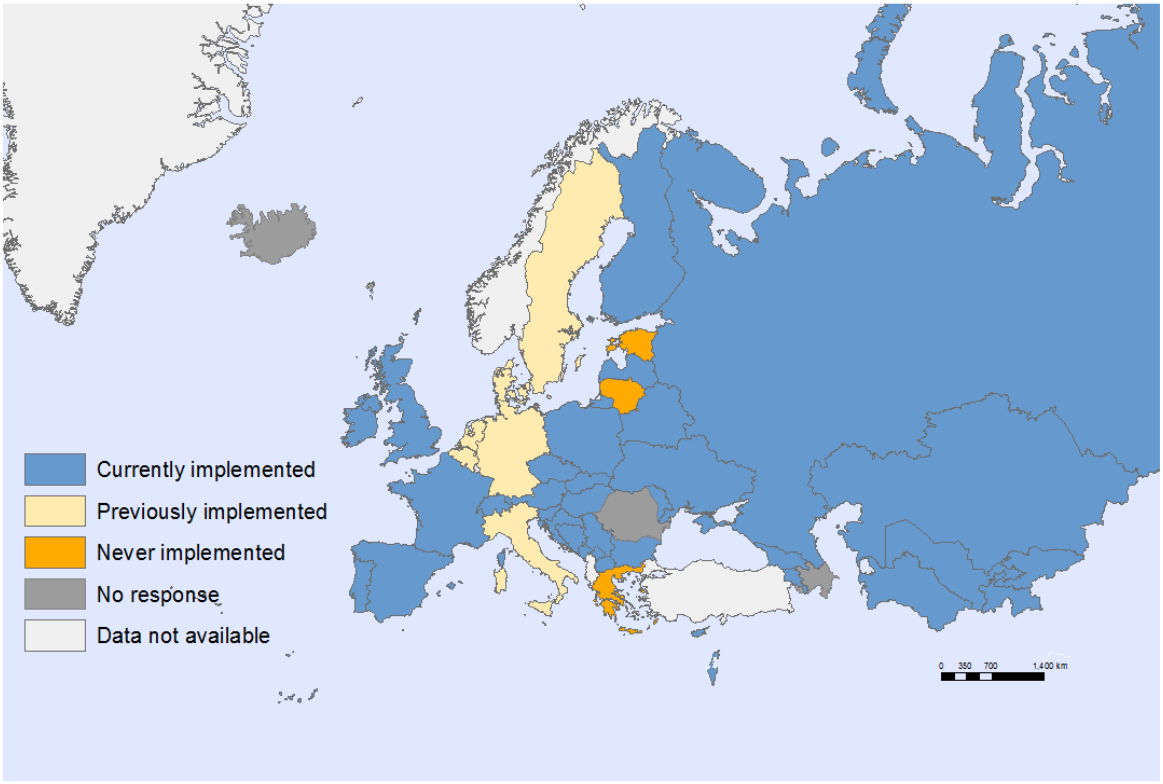
Fig. 10.2. Policy of initiating exclusive breastfeeding in health facilities (countries)



Countries reported a range of breastfeeding practices and enforcement measures, as well as descriptions of different programmes, organizations, groups and other initiatives undertaken, such as legally binding or self-regulatory approaches. Only seven specified that their efforts focused on exclusive breastfeeding; other countries did not specify the type of breastfeeding promoted. Although most countries provided qualitative information about initiatives focused on breastfeeding, a number featured breastfeeding only as part of wider initiatives targeting nutrition and physical activity, prevention of childhood disease and death, medical care for children and child rights. Some of the initiatives are not limited to the promotion of breastfeeding practices, but also include protection, support and implementation of breastfeeding.

The global nutrition policy survey developed to facilitate reporting for the European food and nutrition action plan 2015–2020 and undertaken by WHO in 2017 *(3)* asked specifically about implementation of the Baby-friendly Hospital Initiative, which aims to implement practices that protect, promote and support breastfeeding *(4)*. Most countries (36 of 49, 73%) reported that they are currently implementing the Baby-friendly Hospital Initiative, while nine (18%) are not; of these nine, six had previously implemented it but not currently, and three have never implemented it (Fig. 10.3).

Fig. 10.3. Implementation status of the Baby-friendly Hospital Initiative in 2017



Breastfeeding at 6 months

Rates for infants breastfed at 6 months (Fig. 10.4), exclusively and partially, vary widely in the Region. The lowest reported rate is 6% (Greece) and the highest 97% (Uzbekistan), with a subregional average of 50% *(5)*. For exclusive breastfeeding under 6 months (Fig. 10.5), the lowest rate is 2% (Bulgaria) and the highest 56% (Kyrgyzstan), with only 24 countries reporting on such data *(2)*. Taking initiation of breastfeeding within one hour of birth as an indicator (Fig. 10.6), reporting countries go down to 21, with the lowest rate of 5% in Bulgaria and the highest of 84% in Kyrgyzstan *(2)*. CIS countries reported higher rates of both partial and exclusive breastfeeding at 6 months as well as initiating breastfeeding within one hour of birth. The difference for exclusive breastfeeding rates is lower (Fig. 10.6). Overall, exclusive breastfeeding rates under 6 months of age, as recommended by WHO, are low in the Region, and particularly low in EU13 countries.

Fig. 10.4. Exclusive and partial breastfeeding at 6 months, by country grouping

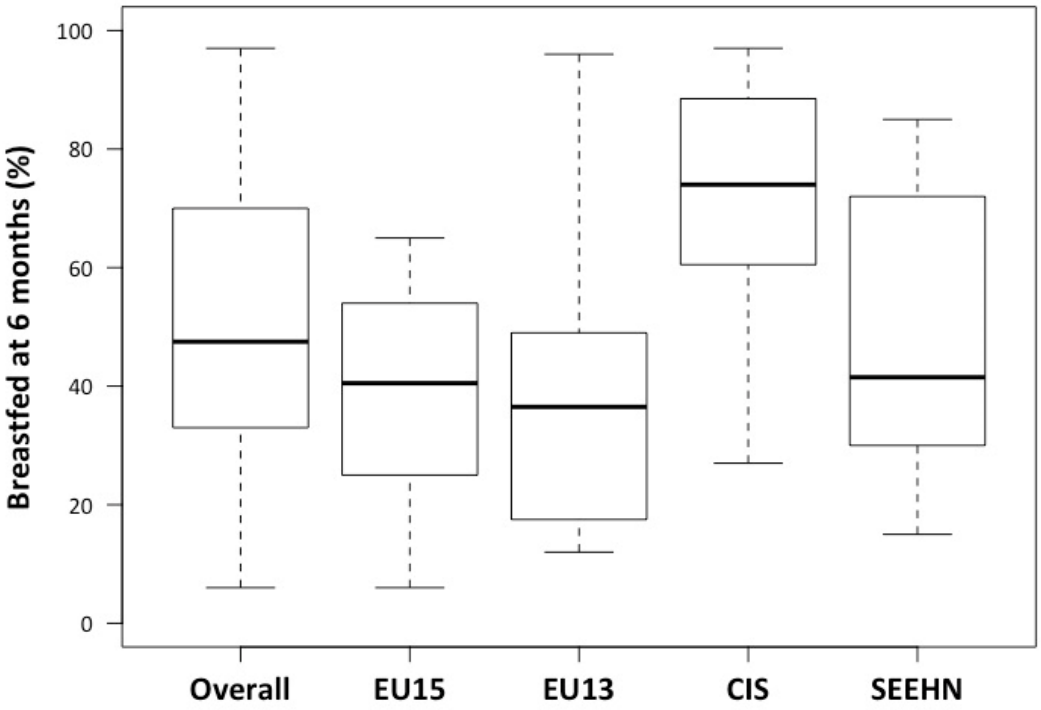


Fig. 10.5. Exclusive breastfeeding under 6 months, by country grouping

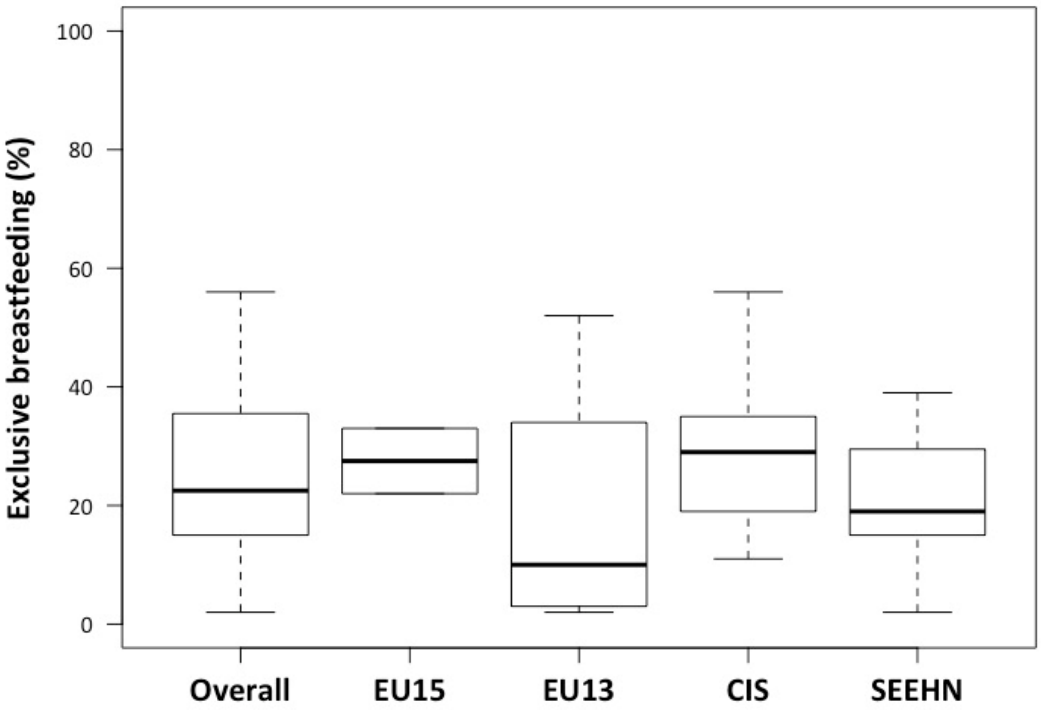
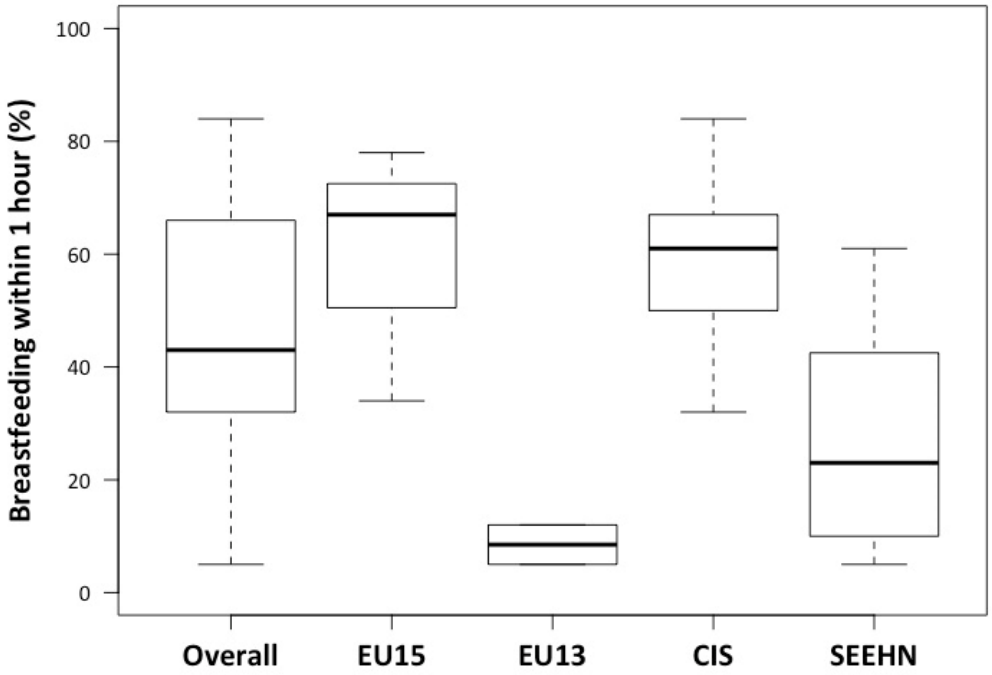


Fig. 10.6. Breastfeeding within one hour after birth, by country grouping



While Fig. 10.4–10.6 calculate an average of the reporting countries, Table 10.1 (at the end of the chapter) does not include a subregional average due to insufficient data (see Annex 1 for further details on methods).

Complementary feeding

Thirty-two countries (67%) collect data about complementary feeding practices for children aged 6–24 months (Fig. 10.7), while 15 (31%) do not. Fig. 10.8 showcases the distribution by country grouping.

Fig. 10.7. Collecting data on complementary feeding habits for children aged 6–24 months (countries)

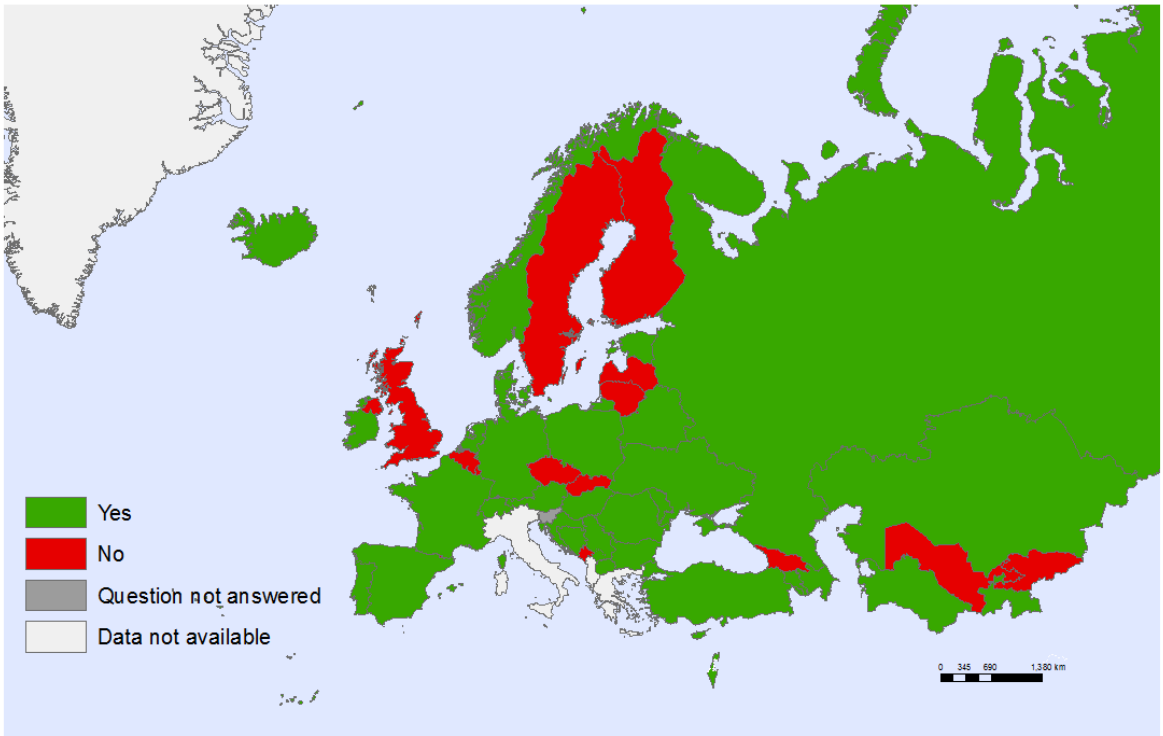
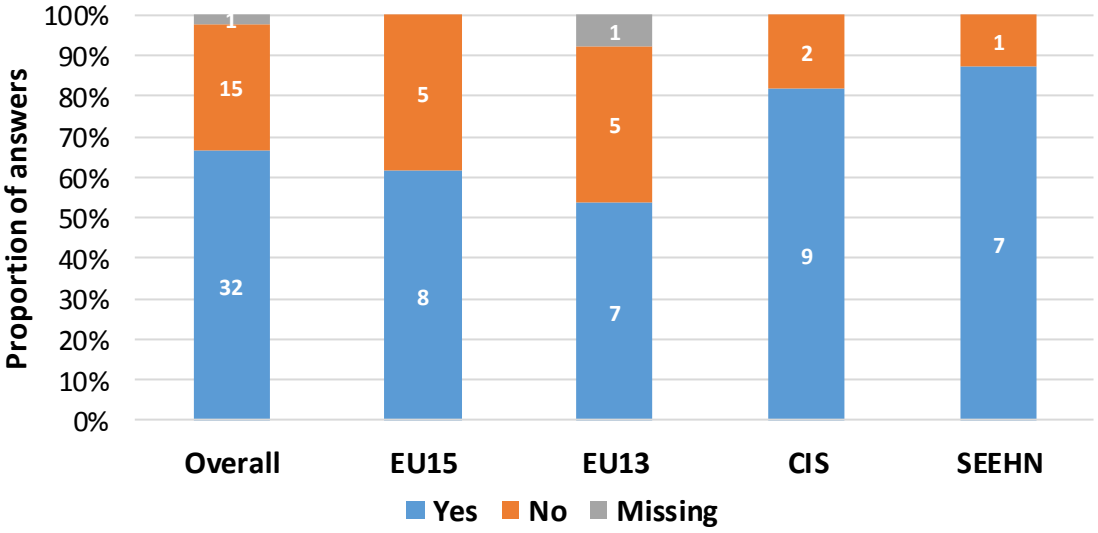


Fig. 10.8. Collecting data on complementary feeding habits for children aged 6–24 months (country grouping)



Marketing of complementary feeding products

Ten countries (21%) collect data on marketing of complementary feeding products for children aged 6–24 months (Fig. 10.9), but 36 (75%) do not. Fig. 10.10 shows the distribution by country grouping: data collection is low across the subregions.

Fig. 10.9. Collecting data on the marketing of complementary feeding products for children aged 6–24 months (countries)

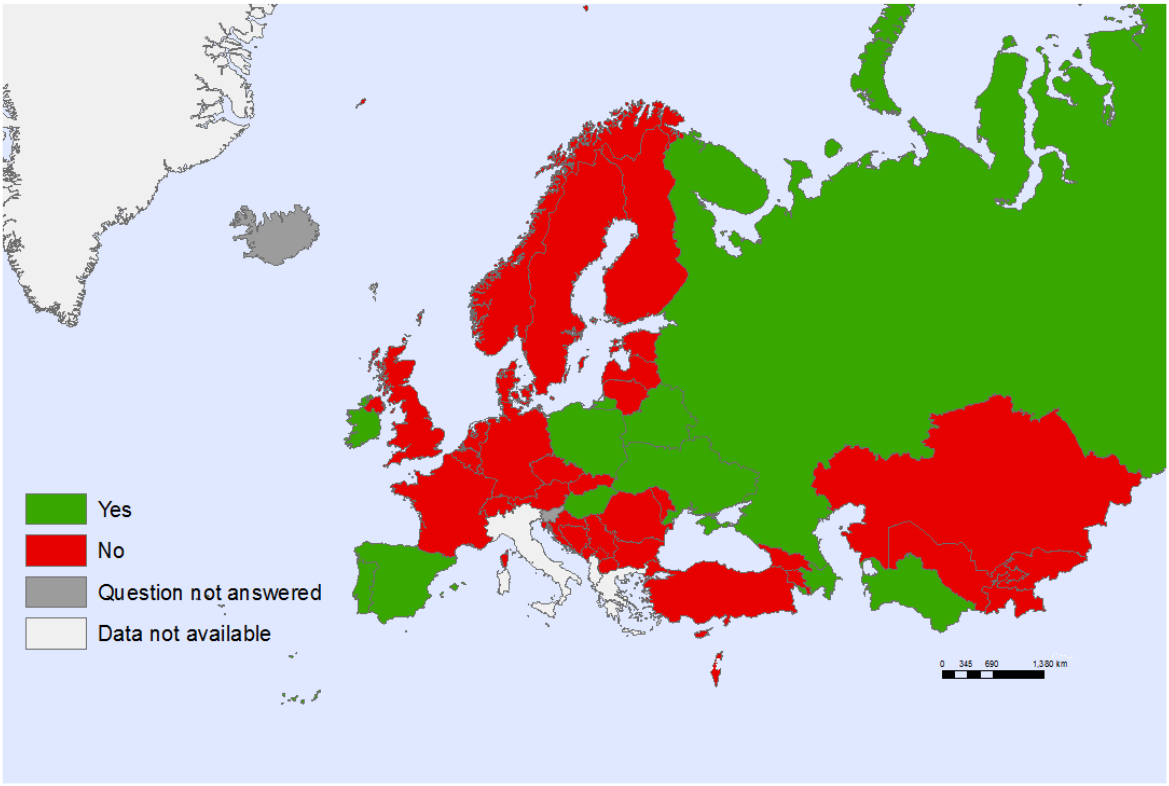
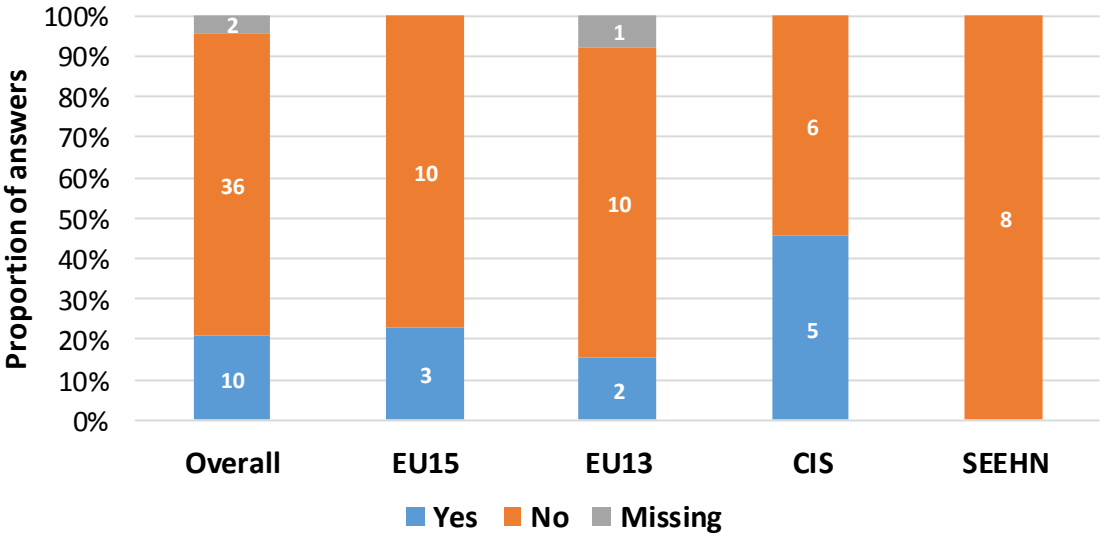


Fig. 10.10. Collecting data on the marketing of complementary feeding products for children aged 6–24 months (country grouping)



Undernutrition (stunting and wasting)

Undernutrition (stunting and wasting) is still a problem in some countries in the Region. According to the European food and nutrition action plan 2015–2020, studies among children aged 0–5 years between 2007 and 2011 showed that stunting rates in the Region range from 7% to 39% *(6)*. Data from the GHO show that the proportion of children under 5 who have stunting ranges from 1% (Germany) to 27% (Tajikistan), while the proportion of children under 5 who have wasting ranges from 1% (Germany) to 10% (Tajikistan). Data were missing for 27 countries, and those in the 26 countries for which data were available tended to be outdated.

Overweight and childhood obesity

Collecting data for obesity in children under 5

Thirty-one countries (65%) collect data on overweight/obesity in children under 5, while 15 (31%) do not (Fig. 10.11). Fig. 10.12 shows distribution by country grouping.

Fig. 10.11. Collecting data on the prevalence of overweight/obesity in children under 5 (countries)

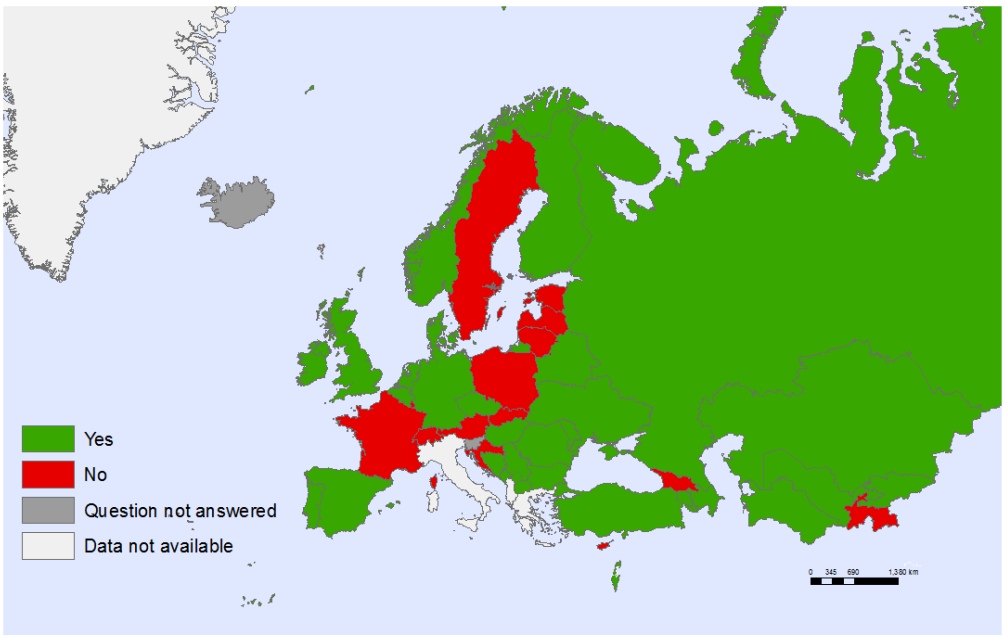
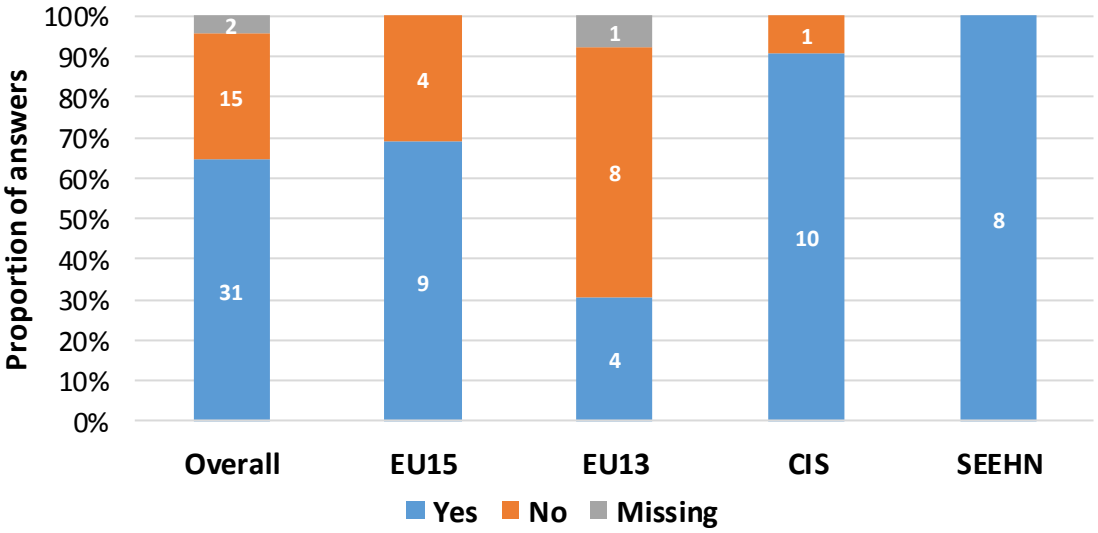


Fig. 10.12. Collecting data on the prevalence of overweight/obesity in children under 5 (country grouping)

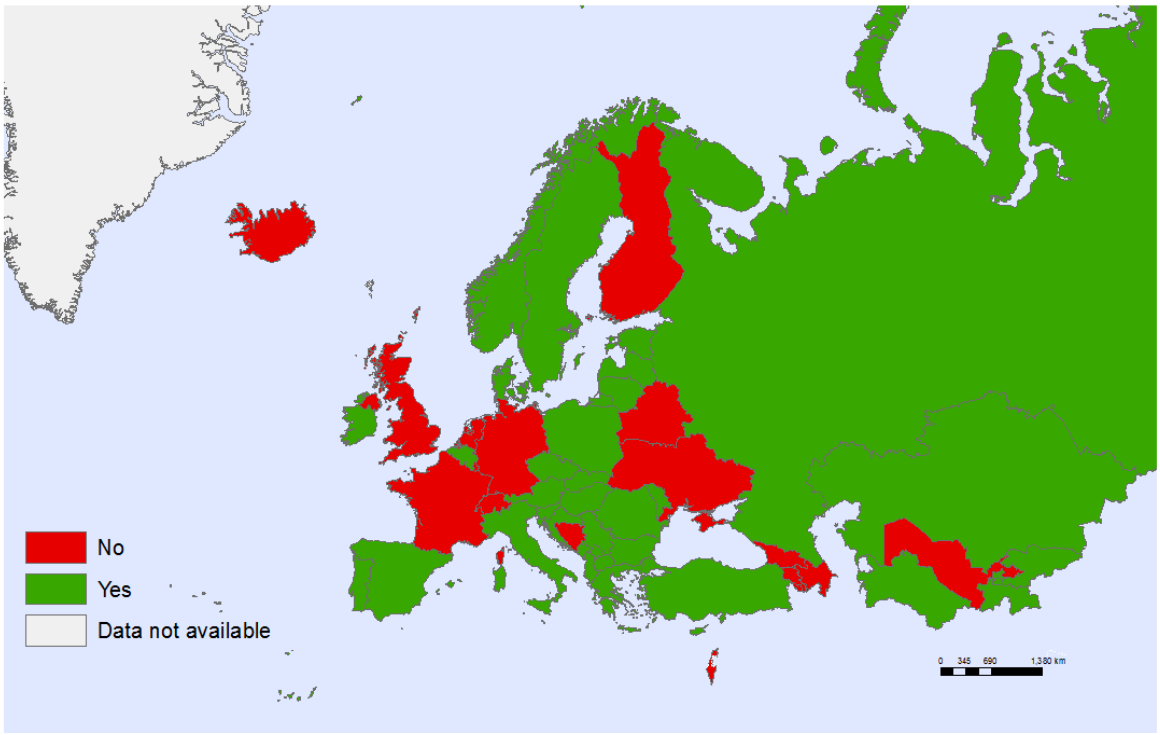


Overweight and obesity in children aged 6–9 years

According to the first round of the COSI, with data collected during the school year 2007/2008, a third of children aged 6–9 in reporting countries were overweight or obese. Information was only available for 21 countries. EU15 countries showed the highest rates for this age group, with the highest in Spain (45% in boys and 41% in girls). The lowest rates were reported by the Republic of Moldova, with 19% in boys and 13% in girls.

COSI has been conducted three additional times (2009/2010, 2012/2013 and 2015/2016) and in 2018 includes 35 countries, as shown in Fig 10.13 *(7)*. Rates of overweight and obesity above 30% in the 2012/2013 and 2015/2016 COSI rounds were reported by Croatia, Greece, Italy, Malta, Montenegro, Poland, San Marino, Serbia, Spain and the former Yugoslav Republic of Macedonia *(7)* (specific rates for each country are detailed in Fig. 29 of *Better food and nutrition in Europe: a progress report monitoring policy implementation in the WHO European Region (7)*).

Fig. 10.13. COSI member countries



Overweight and obesity in adolescents

According to the HBSC survey, boys have a higher prevalence of obesity in almost all countries and subregions at all ages (11, 13 and 15 years) *(8,9)*. The gender difference exceeded 10 percentage points in 11 countries. For boys, the lowest rate is 10% (Denmark) and the highest 29% (Malta), with a subregional average of 18%. For girls, the lowest rate is 4% (Albania) and the highest 25% (Malta), with a subregional average of 11%. Girls from EU15 and EU13 countries have higher rates of obesity than girls from CIS countries.

The HBSC study shows that an increased prevalence of overweight/obesity is associated with low family affluence for boys in around half of the countries and in about two thirds for girls *(8)*. Fig. 10.14 and 10.15 show differences by regional country groupings.

Fig. 10.14. Overweight and obesity of 15-year-old girls, by country grouping

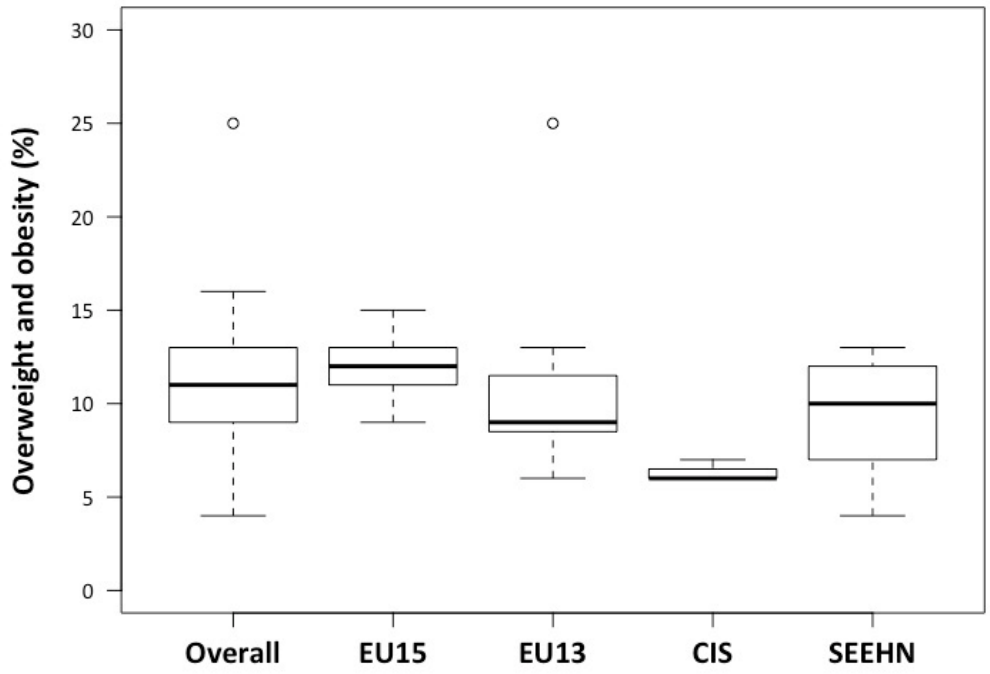
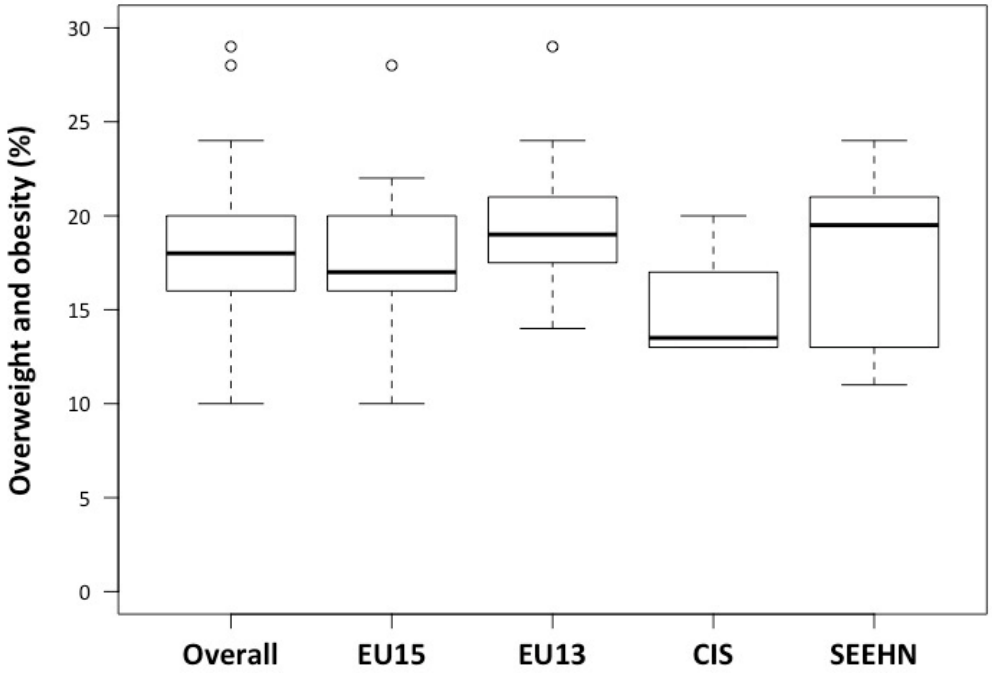


Fig. 10.15. Overweight and obesity of 15-year-old boys, by country grouping

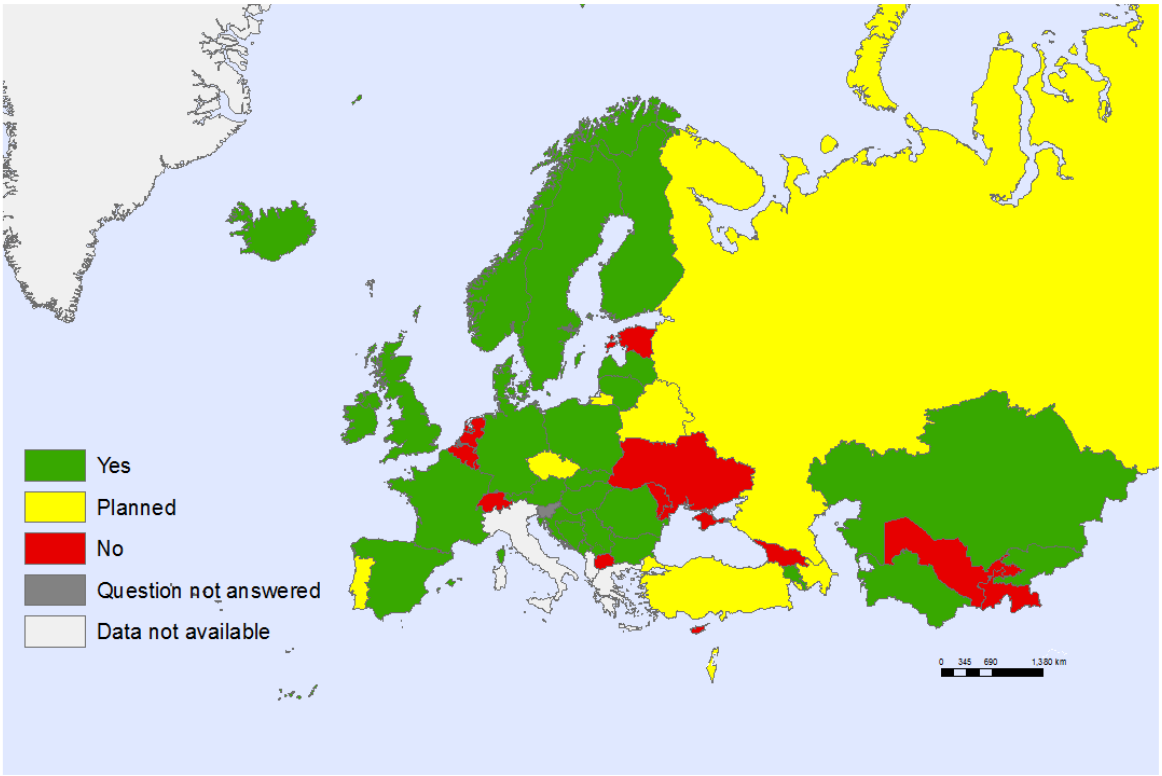


Marketing to children

Legislation

Twenty-six countries (54%) reported having legislation that restricts marketing to children (Fig. 10.16), 14 (29%) do not, and seven (15%) reported that they have plans to introduce such legislation. Of the 26 countries reporting having laws or regulations restricting marketing to children, 25 provided further explanation that revealed a wide spectrum of policies, including guidelines, regulations and pledges. One in 10 countries focuses on advertisements, while two in three focus on prohibition of marketing to children.

Fig. 10.16. Having any laws or regulations that restrict marketing to children (countries)



According to data from the global nutrition policy survey, 26 countries include measures to restrict marketing of food and non-alcoholic beverages to children, the age of children targeted and a clear definition of which foods are covered; 10 countries include a definition of marketing to children in such measures, and seven use the nutrient profile model *(3)*. In relation to regulation of specific communication channels *(3)*, most countries regulate television and radio (20 and 18 respectively), closely followed by Internet and advertising in streets and stores (13 and 12 respectively).

Soft-drink consumption

According to data from the HBSC, soft-drink consumption in the Region varies dramatically. The lowest rate for daily consumption in 15-year-old boys is 5% (Finland) and the highest is 40% (Luxembourg), with a subregional average of 22%. For 15-year-old girls, the lowest rate for daily consumption is 1% (Finland) and the highest is 39% (Malta), with a subregional average of 17%.

Daily consumption of soft drinks increased with age for boys in 23 countries and in 16 for girls *(9)*. Regional differences are shown in Fig. 10.17 and 10.18. CIS countries have lower daily consumption rates than SEEHN countries.

Fig. 10.17. Soft-drink consumption of 15-year-old girls, by country grouping

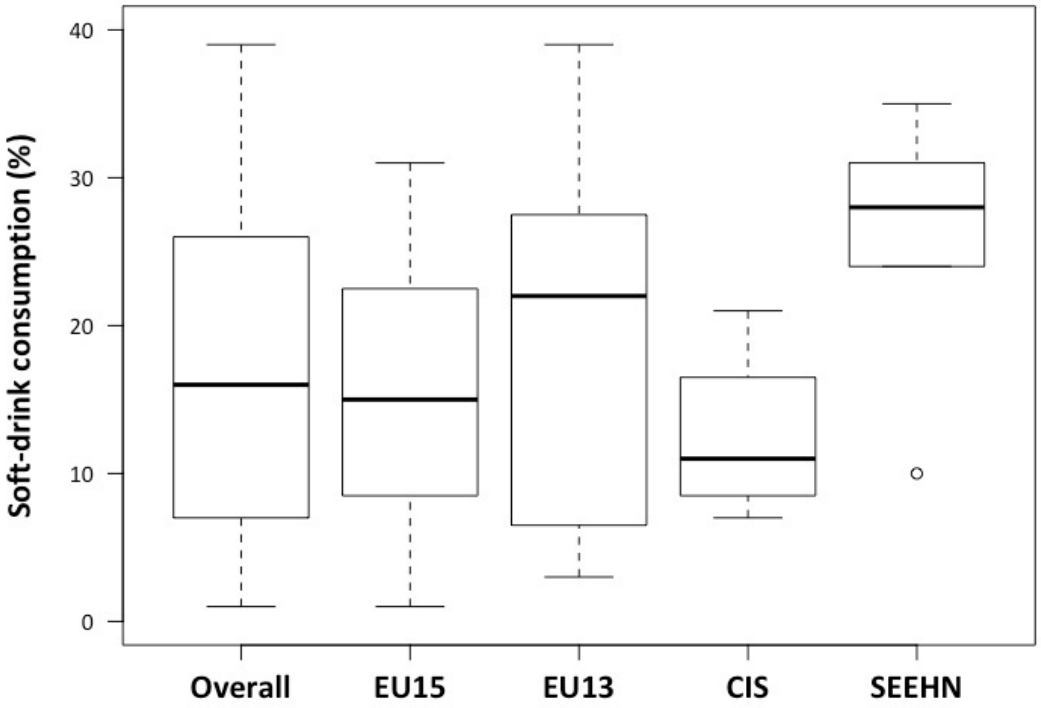
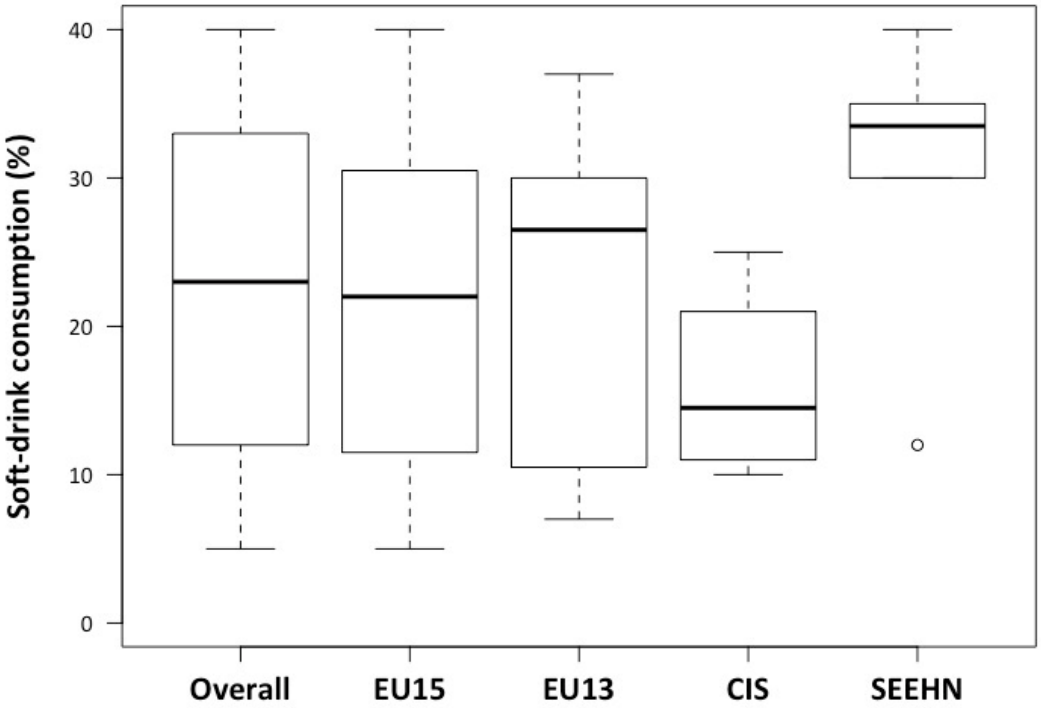


Fig. 10.18. Soft-drink consumption of 15-year-old boys, by country grouping



Collecting data on soft-drink consumption

Twenty-nine countries (60%) collect data on soft-drink consumption (Fig. 10.19), while 18 (38%) reported not collecting such data. Regional differences are shown in Fig. 10.20, which demonstrates that most CIS countries reported that they do not collect such data.

Fig. 10.19. Collecting data about soft-drink consumption for children and adolescents (countries)

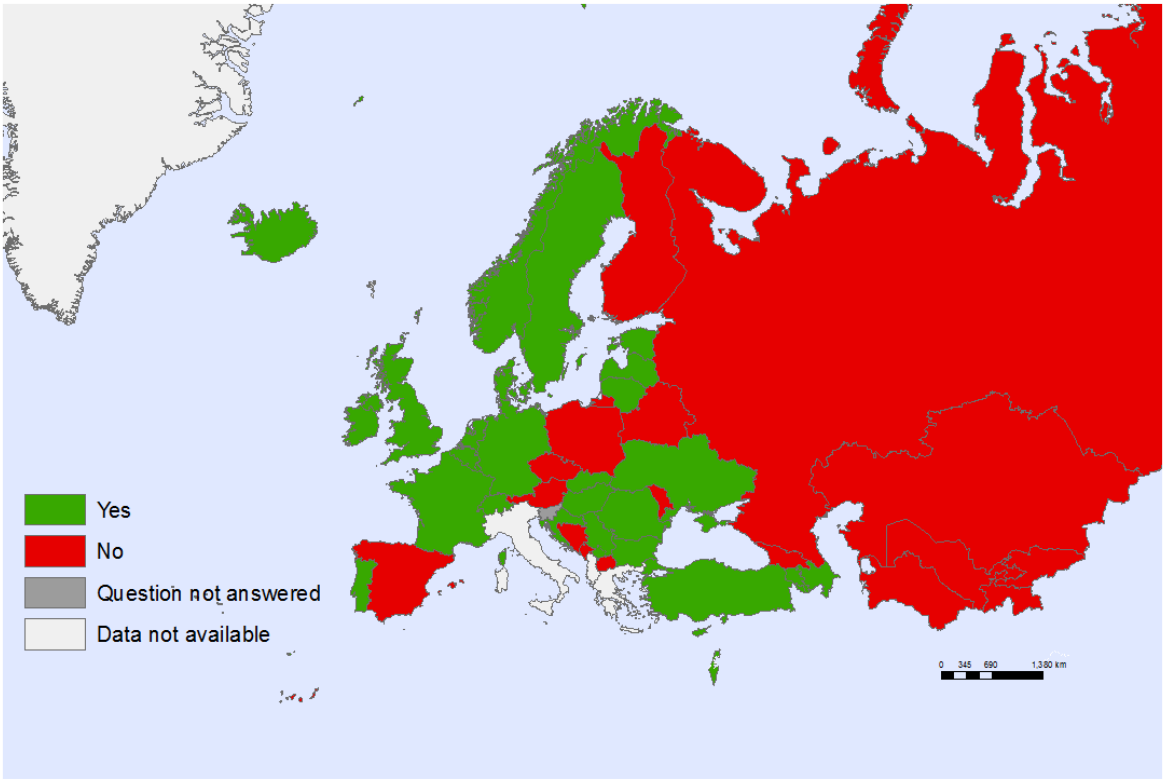
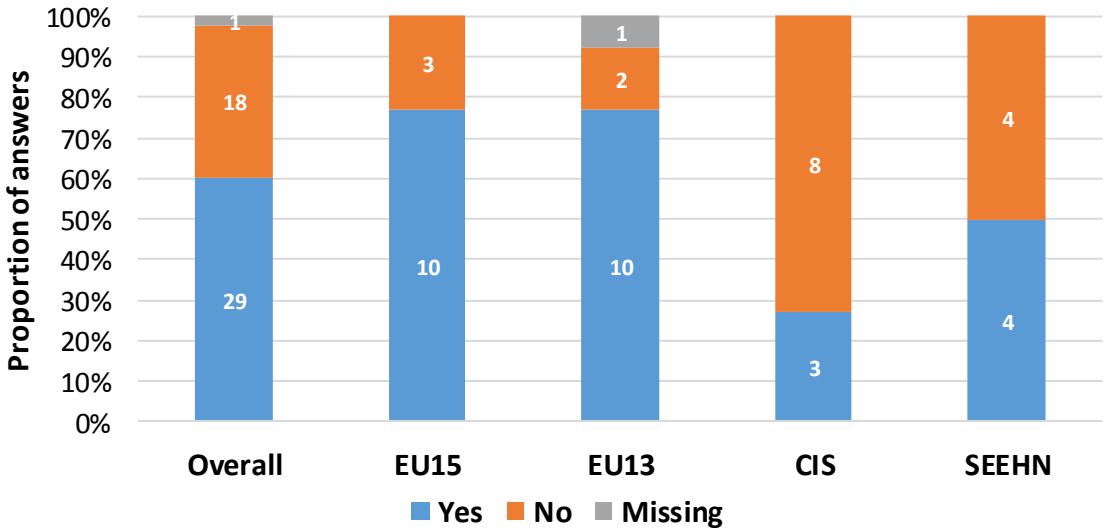


Fig. 10.20. Collecting data about soft-drink consumption for children and adolescents (country grouping)



Moderate-to-vigorous physical activity

According to data from the HBSC, moderate-to-vigorous physical activity (MVPA) (at least 60 minutes daily) for 15-year-olds varies widely. Regional differences by country grouping are shown in Fig. 10.21 and 10.22. The lowest MVPA rate for boys is 10% (Israel) and the highest 29% (Albania), with a subregional average of 21%. For girls, the lowest MVPA rate is 5% (Austria, Israel, Italy and Portugal) and the highest 22% (Republic of Moldova), with a subregional average of 11. Girls from EU15 countries show significantly lower rates of physical activity than those from CIS and SEEHN countries.

Fig. 10.21. MVPA of 15-year-old girls, by country grouping

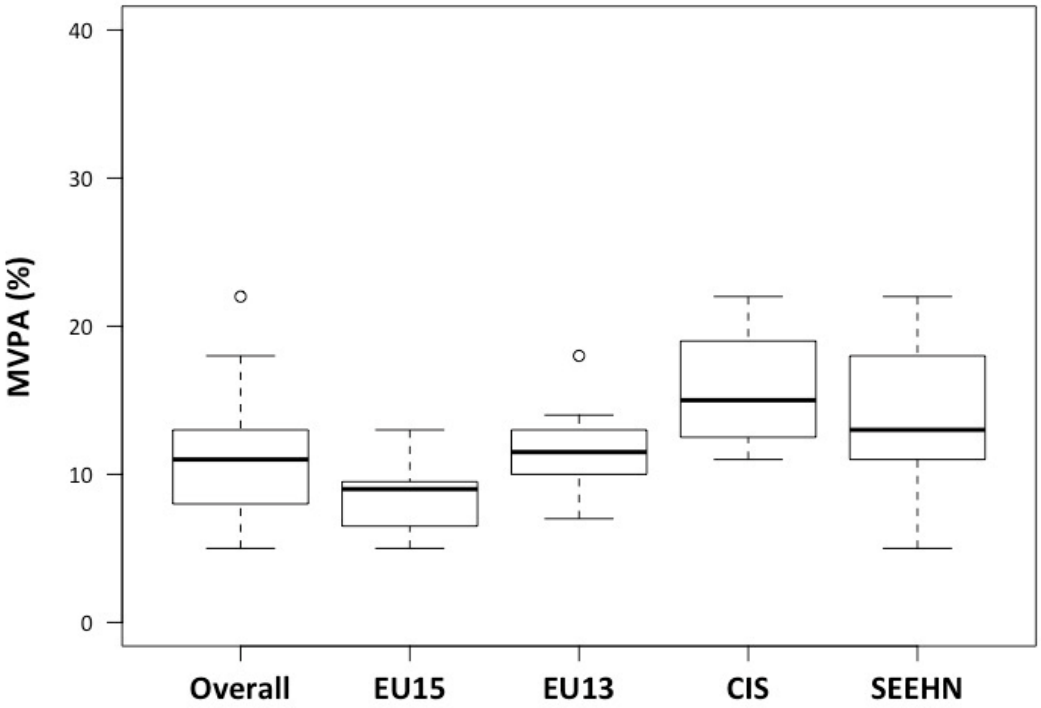
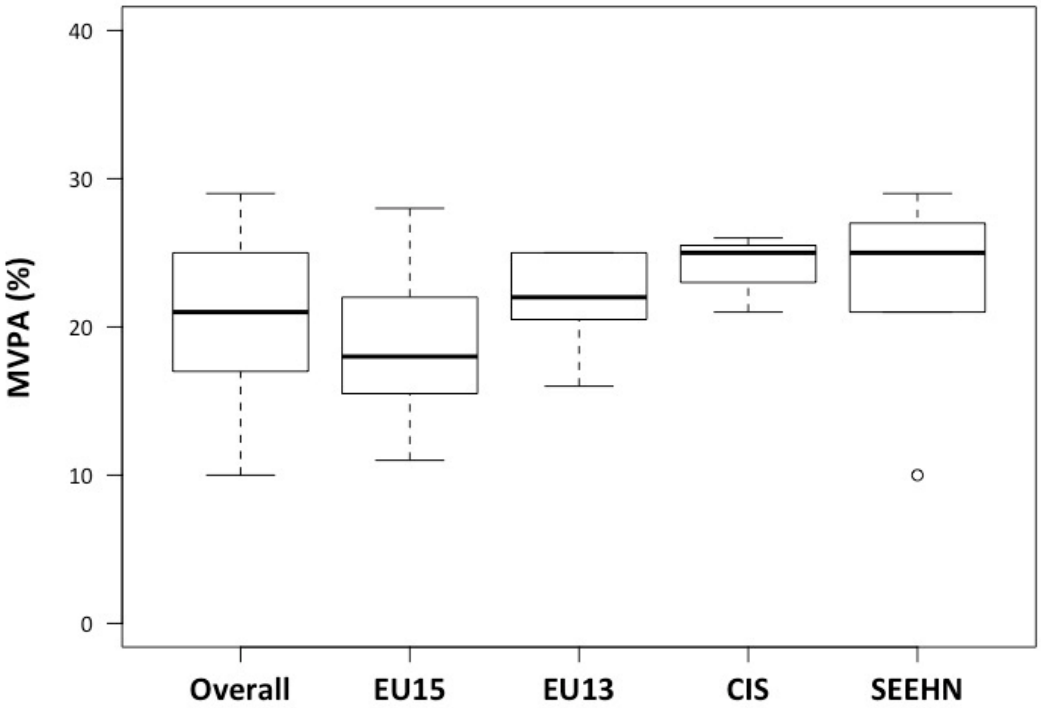


Fig. 10.22. MVPA of 15-year-old boys, by country grouping



Daily MVPA rates are generally low for the Region and decrease with age among boys and girls. A significant decrease takes place between ages 11 and 15, as the HBSC survey observed among boys in 33 countries and regions *(8,9)*. Boys and girls from higher-affluence families are more likely to achieve 60 minutes of MVPA daily in over half of countries and regions *(9)*. The difference between high- and low-affluence groups was 10 percentage points or less in most.

Insufficiently active

Another way to explore physical activity during adolescence is to look at the percentage of young people who do not meet WHO recommended physical activity guidelines (60 minutes per day) and are therefore considered insufficiently active. According to data from the GHO *(10)*, rates for insufficiently active 11–17-year-olds remain worryingly high across the Region. For girls (Fig. 10.23), the lowest insufficiently active rate is 70% (Spain) and the highest 93% (Italy), with a subregional average of 82%. For boys (Fig. 10.24), the lowest rate is 65% (Israel) and the highest 91% (Italy), with a subregional average of 77%.

Fig. 10.23. Insufficiently active 11–17-year-old girls, by country grouping

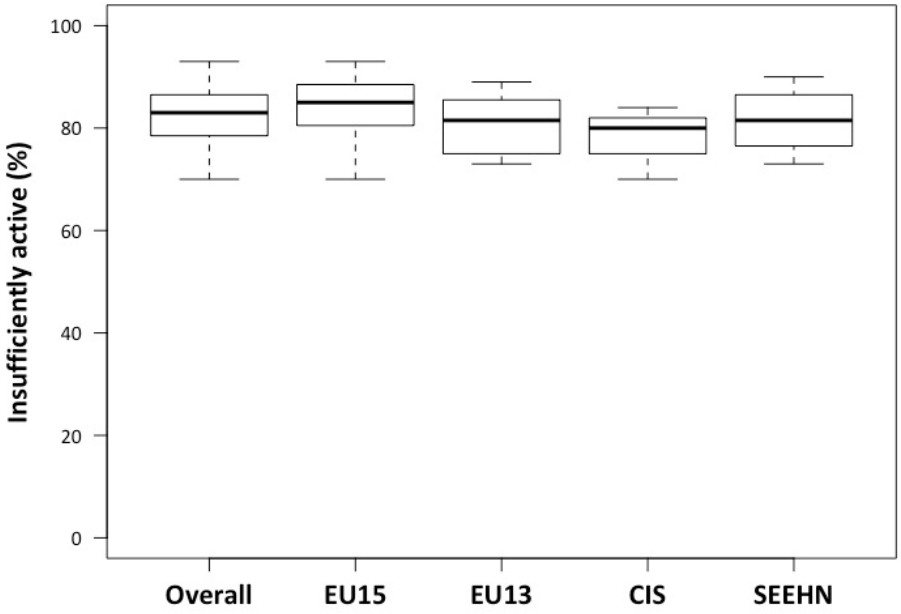
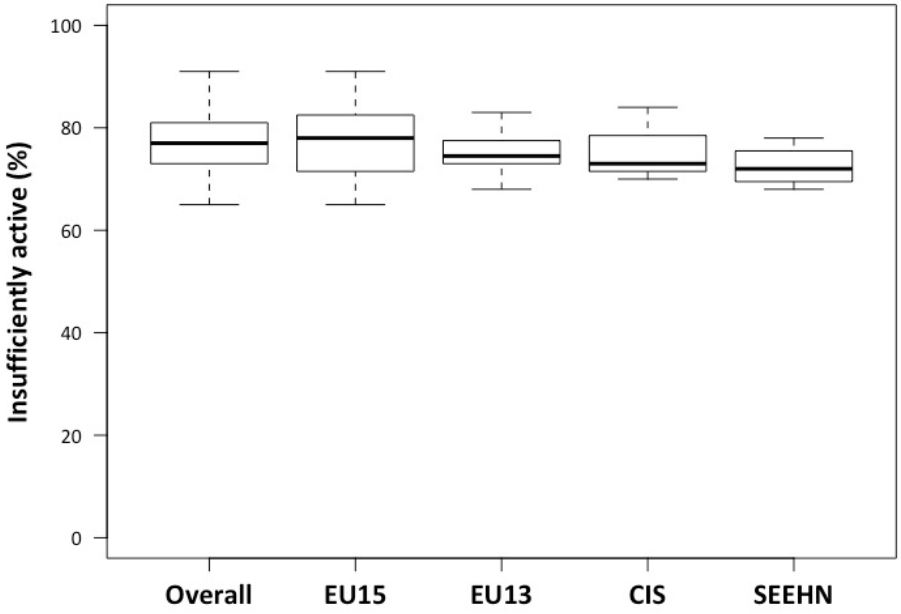


Fig. 10.24. Insufficiently active 11–17-year-old boys, by country grouping



Brushing teeth

According to HBSC data, the subregional average for brushing teeth twice a day remains low. For girls (Fig. 10.25), the lowest rate is 41% (Republic of Moldova) and the highest 91% (Switzerland), with a subregional average of 75%. For boys (Fig. 10.26), the lowest rate is 28% (Republic of Moldova) and the highest 79% (Switzerland), with a subregional average of 55.8%.

Fig. 10.25. Brushing teeth: 15-year-old girls, by country grouping

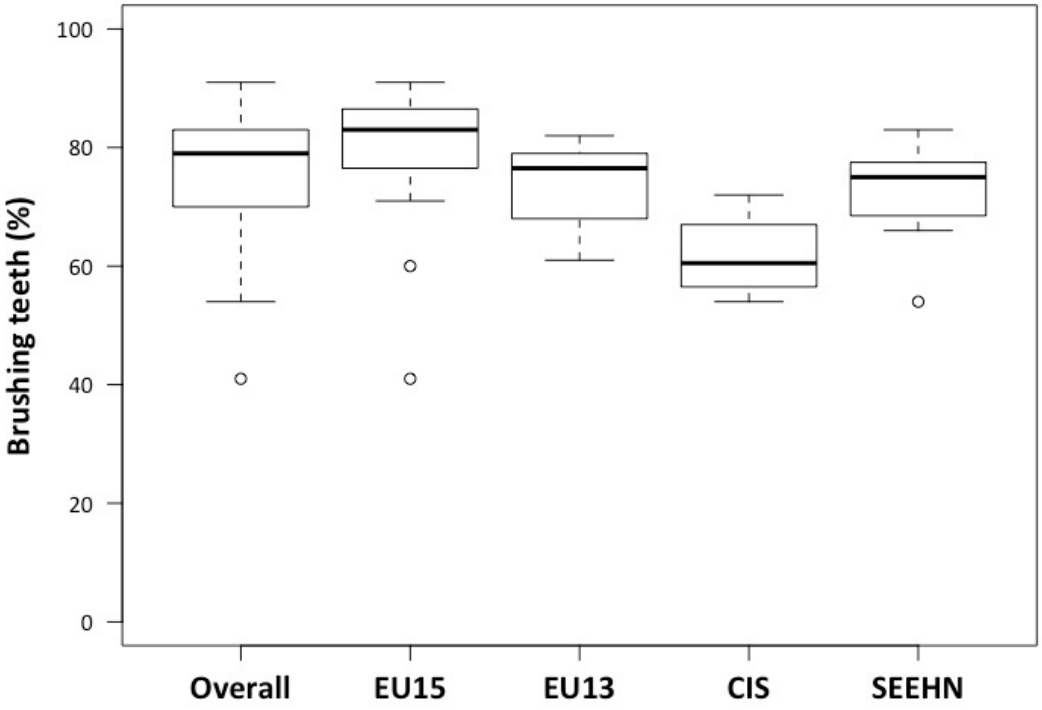
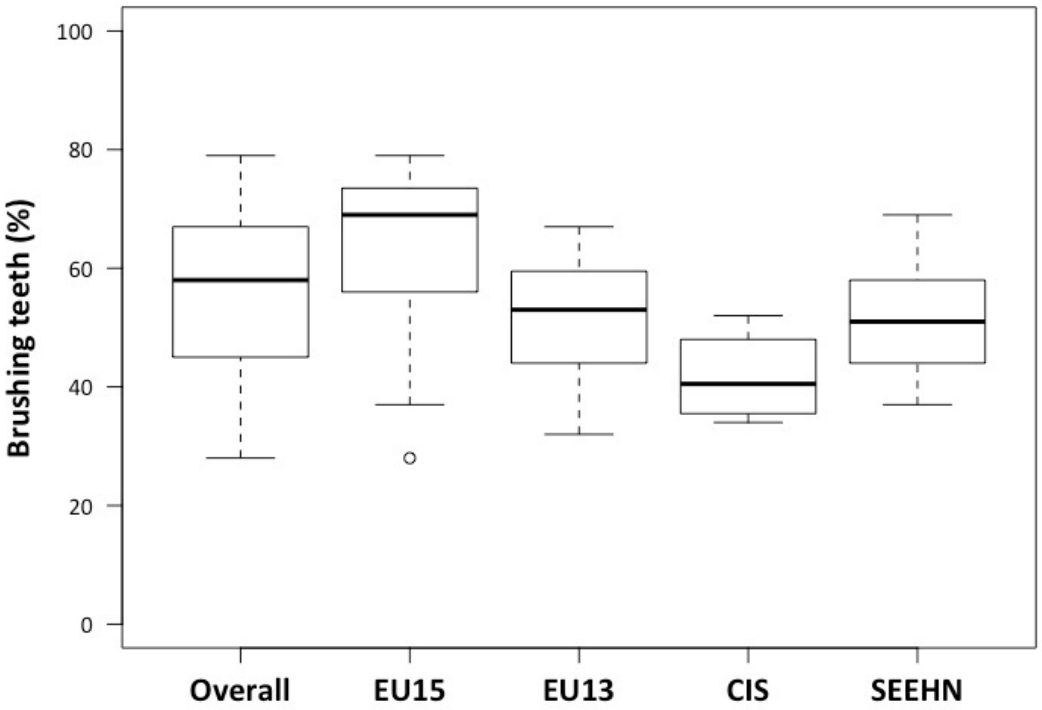


Fig. 10.26. Brushing teeth: 15-year-old boys, by country grouping



Rates in this category have a strong gender difference. Toothbrushing decreases with age for boys, with about half of countries showing a decrease between 11 and 15 years *(9)*. Toothbrushing frequency lags behind the recommended twice a day in most countries, especially among boys.

Findings in perspective

The findings demonstrate the wide subregional variability and lack of data collection for many of the chapter's indicators, even those for which there has been long-standing WHO guidance (such as breastfeeding) or have been adopted by Member States through regional strategies.

Breastfeeding and complementary feeding

Increasing exclusive breastfeeding rates remains a priority across the Region and globally to improve nutrition, prevent mortality and, in the long term, prevent noncommunicable diseases (NCDs) *(11)*. The European Region has the lowest rate of exclusive breastfeeding at 6 months of all WHO regions *(2)*. Reasons include continued promotion of breast-milk substitutes and poor implementation of the International Code of Marketing of Breast-milk Substitutes *(12)*, high participation of women in the labour market and variable rules for maternity leave among countries, lifestyle choices and mixed feeding practices *(7)*.

WHO guidelines suggest that attention needs to be given to breastfeeding-related issues such as early initiation, continuation, exclusivity and reporting to ensure it is practised properly. Having a policy in place is necessary but insufficient by itself to promote increased breastfeeding rates within countries. Mothers from lower socioeconomic groups are less likely to breastfeed than those from higher socioeconomic groups *(13)*, so targeted interventions are needed.

Reporting of breastfeeding rates based on internationally accepted standards and on exclusivity at 6 months must be addressed by each country to increase data quality and the ability to develop interventions that can increase exclusive breastfeeding rates throughout the Region. The observed discrepancies in publicly available breastfeeding data (Fig. 10.1) could be due to many factors, such as overreporting or lumping partial/exclusive breastfeeding rates, that warrant further action for quality reporting.

There is room for improvement in many countries on collecting data about marketing of complementary feeding products. Fifteen countries (31%) are not collecting information on either complementary feeding or marketing of such products, and 21 (44%) collect on the former but not the latter. This points to a gap in covering the range of practices that affect healthy nutrition in the early years. Manufacturers tend to exploit gaps in regulation and promote products that are not helpful in initiating children's healthy eating practices and food preferences. Only systematic data collection by countries will enable them to identify gaps and take corrective action.

Double burden of malnutrition: undernutrition and overnutrition

Some countries in the Region face a nutritional and demographic transition that has resulted in the coexistence of overweight and obesity, and food and nutrition insecurity leading to undernutrition in communities and households *(6)*. While obesity continues to increase, there are still pockets of undernutrition that must be addressed to support the survival and well-being of all children in the Region. More reliable up-to-date and disaggregated data collection on stunting and wasting are needed. Some countries report on these indicators and global initiatives to address the problem are in place *(14,15)*, but efforts remain inconsistent.

Obesity during childhood is considered an important action area in the Region. Rates remain high and a substantial number of countries do not collect data to assess adequately the trend in this age group. Surveillance and monitoring in the European Region for under 5s is particularly low, with pervasive inconsistency in methods and collection *(7)*. An estimated 27% of all adolescent obesity in Europe in 2014 was attributed to socioeconomic differences, up from 18% in 2002 *(9)*. Better surveillance can facilitate timely, regular, high-quality data to support the design of policies and interventions.

Initiatives to track obesity in children and adolescents, such as COSI and HBSC, have been established, but they need to be translated into policy action. Countries are encouraged to join ongoing regional efforts in this area (see Fig. 10.13).

Soft-drink consumption is an important risk factor for childhood obesity. There is room for improvement through better national surveillance and regulation, particularly concerning availability in schools (see Chapter 6). Some countries that participate in the HBSC survey reported not collecting such data, even though HBSC stipulates soft-drink consumption among its mandatory questions. Additionally, physical activity rates remain worryingly low. Stronger efforts should be made to promote physical activity, particularly in schools and through environments that support active movement to schools and work (see, for example, the global recommendations on physical activity for health for 5–17-year-olds *(16)*). This should provide assurance that more young people meet WHO's 60 minutes per day physical activity guidelines.

Cross-cutting issues

Collection of data that enable countries to support national surveillance and cross-national comparisons should be a priority for countries in the Region. Such data are crucial to developing targeted action and monitoring progress. There are at least two areas (obesity and soft-drink consumption) in which increased participation in regional efforts can enable Member States to secure better data. Surveys such as USAID's DHS *(17)* and UNICEF's MICS *(18)* provide systematic population-based information on complementary feeding practices and nutritional status for children under 5. Countries that do not participate in these surveys must develop comparable means of collecting such data.

Countries should also consider looking at laws and regulations that can positively affect behaviours across the Region around, for example, breastfeeding, complementary feeding and marketing to children. Increased health literacy and health promotion for children and adolescents could support increased knowledge about the benefit of toothbrushing in preventing NCDs and strengthen efforts to design more effective interventions to increase physical activity and promote healthier lifestyles *(19)* among children and adolescents.

Conclusion

Exclusive breastfeeding rates remain embarrassingly low in the Region. Having a policy in place is insufficient to improve breastfeeding rates on its own. Reporting according to internationally accepted standards must be addressed to increase data quality, but this needs to lead to improved action.

There is major room for improvement in collecting data about the marketing of complementary feeding products. Marketing is often misleading and needs to be documented to prevent increasing consumption of foods with excessive sugar, salt or fats.

Surveillance and monitoring of children under 5 affected by obesity is lacking, with pervasive inconsistency in methods and collection. For older children, COSI and HBSC surveys show an increasing overnutrition problem. Countries need to consider adoption and enforcement of laws and regulations that can positively affect behaviours to, for example, promote breastfeeding, ban marketing to children and take health promotion in schools seriously.

Table 10.1 includes all indicators used in this chapter, and data from the country profiles and the survey displayed by country with summary statistics.

Table 10.1. Nutrition and physical activity: summary table

Country	Having a breastfeeding policy	Collecting breastfeeding data	Collecting soft-drink data	Having regulations that restrict marketing to children	Collecting data on complementary feeding	Collecting data on the marketing of complementary feeding products	Collecting data on the prevalence of overweight/ obesity under 5 years	Breastfeeding within 1 hour after birth (%)	Breastfeeding <6 months (%)	Exclusive breastfeeding up to 6 months (%)	Country code
Albania	–	–	–	–	–	–	–	43	72	39	ALB
Andorra	No	No	No	No	No	No	Yes	–	–	–	AND
Armenia	Yes	Yes	Yes	Yes	Yes	No	Yes	36	69	35	ARM
Austria	Yes	Yes	No	Yes	Yes	No	No	78	65	33	AUT
Azerbaijan	Yes	Yes	Yes	P	Yes	Yes	Yes	32	27	12	AZE
Belarus	Yes	Yes	No	P	Yes	Yes	Yes	53	67	19	BLR
Belgium	–	No	Yes	No	No	No	Yes	–	31	–	BEL
Bosnia and Herzegovina	Yes	No	No	Yes	Yes	No	Yes	42	–	19	BIH
Bulgaria	Yes	Yes	Yes	Yes	Yes	No	Yes	5	15	2	BGR
Croatia	Yes	Yes	Yes	Yes	Yes	No	No	–	12	52	HRV
Cyprus	Yes	Yes	Yes	No	Yes	No	No	–	–	–	CYP
Czechia	Yes	Yes	No	P	No	No	Yes	–	39	–	CZE
Denmark	Yes	No	Yes	Yes	Yes	No	Yes	–	48	–	DNK
Estonia	Yes	Yes	Yes	No	Yes	No	No	–	35	–	EST
Finland	Yes	Yes	No	Yes	No	No	Yes	–	60	–	FIN
France	No	No	Yes	Yes	Yes	No	No	–	18	–	FRA
Georgia	Yes	Yes	No	No	No	No	No	66	38	55	GEO
Germany	Yes	Yes	Yes	Yes	Yes	No	Yes	–	21	22	DEU
Greece	–	–	–	–	–	–	–	–	6	–	GRC
Hungary	No	Yes	Yes	Yes	Yes	Yes	Yes	–	96	–	HUN
Iceland	Yes	Yes	Yes	Yes	Yes	–	–	–	75	–	ISL
Ireland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	34	–	–	IRL
Israel	Yes	Yes	Yes	P	Yes	No	Yes	–	48	–	ISR
Italy	–	–	–	–	–	–	–	–	40	–	ITA
Kazakhstan	Yes	Yes	No	Yes	Yes	No	Yes	68	82	32	KAZ
Kyrgyzstan	Yes	Yes	No	Yes	No	No	Yes	84	74	56	KGZ
Latvia	Yes	Yes	Yes	Yes	No	No	No	–	57	–	LVA
Lithuania	Yes	Yes	Yes	Yes	No	No	No	–	45	–	LTU
Luxembourg	Yes	Yes	Yes	No	No	No	No	67	41	–	LUX
Malta	Yes	Yes	Yes	No	No	No	No	–	38	–	MLT
MKD[a]	No	Yes	No	No	Yes	No	Yes	21	30	23	MKD[a]
Monaco	–	–	–	–	–	–	–	–	–	–	MCO
Montenegro	Yes	Yes	No	Yes	No	No	Yes	25	–	19	MNE
Netherlands	Yes	Yes	Yes	No	Yes	No	Yes	–	35	–	NLD
Norway	Yes	Yes	Yes	Yes	Yes	No	Yes	–	71	–	NOR
Poland	Yes	Yes	No	Yes	Yes	Yes	No	–	14	4	POL
Portugal	Yes	Yes	Yes	P	Yes	Yes	Yes	–	54	–	PRT
Republic of Moldova	Yes	Yes	No	No	Yes	No	Yes	61	85	36	MDA
Romania	Yes	Yes	Yes	Yes	Yes	No	Yes	12	35	16	ROU
Russian Federation	Yes	Yes	No	P	Yes	Yes	Yes	–	41	–	RUS
San Marino	–	–	–	–	–	–	–	–	–	–	SMR
Serbia	Yes	No	Yes	Yes	Yes	No	Yes	8	–	14	SRB
Slovakia	Yes	No	Yes	Yes	No	No	No	–	53	–	SVK
Slovenia	Yes	Yes	–	–	–	–	–	–	20	–	SVN
Spain	–	–	No	Yes	Yes	Yes	Yes	–	47	–	ESP
Sweden	Yes	Yes	Yes	Yes	No	No	No	–	63	–	SWE
Switzerland	Yes	Yes	Yes	No	Yes	No	No	–	–	14	CHE
Tajikistan	Yes	Yes	No	No	Yes	No	No	50	92	34	TJK
Turkey	Yes	Yes	Yes	P	Yes	No	Yes	39	92	42	TUR
Turkmenistan	Yes	Yes	No	Yes	Yes	Yes	Yes	–	92	11	TKM
Ukraine	Yes	Yes	Yes	No	Yes	Yes	Yes	66	54	20	UKR
United Kingdom	Yes	Yes	Yes	Yes	No	No	Yes	–	25	–	GBR
Uzbekistan	Yes	Yes	No	No	No	No	Yes	67	97	26	UZB

% Overall	Yes, (P), No	88	8	83	15	60	38	54	15	29	67	31	21	75	65	31		50		Average
% EU15	Yes, (P), No	76	12	69	23	77	23	65	6	29	62	38	12	82	65	29	84	97	56	Highest value
% EU13	Yes, (P), No	91	9	92	8	77	15	46	18	27	54	38	27	64	18	64	KGZ	UZB	KGZ	Highest country
% CIS	Yes, (P), No	100	0	100	0	27	73	18	27	55	82	18	45	55	89	11	5	6	2	Lowest value
% SEEHN	Yes, (P), No	88	11	75	25	50	50	67	11	22	88	13	0	100	82	18	BGR	GRC	BGR	Lowest country

P: planned.

[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

Table 10.1 contd

Obesity/overweight, girls 15 (%)	Obesity/overweight, boys 15 (%)	Overweight, boys 6–9 (%)	Overweight, girls 6–9 (%)	Soft-drink consumption, boys 15 (%)	Soft-drink consumption, girls 15 (%)	MVPA, boys 15	MVPA, girls 15	Insufficiently active 11–17 years (%) girls	Insufficiently active 11–17 years (%) boys	Stunting under 5 years (%)	Wasting under 5 years (%)	Brushing teeth, girls 15 (%)	Brushing teeth, boys 15 (%)	Country code	Country
4	11	24	20	35	26	29	14	–	–	23	9	66	42	ALB	**Albania**
–	–	–	–	–	–	–	–	–	–	–	–	–	–	AND	**Andorra**
6	14	–	–	25	21	25	14	80	73	21	4	59	34	ARM	**Armenia**
9	16	–	–	24	15	18	5	85	66	–	–	85	69	AUT	**Austria**
–	–	–	–	–	–	–	–	–	–	18	3	–	–	AZE	**Azerbaijan**
–	–	–	–	–	–	–	–	–	–	5	2	–	–	BLR	**Belarus**
12	16	21	22	39	31	17	8	87	78	–	–	71	51	BEL	**Belgium**
–	–	–	–	–	–	–	–	–	–	9	2	–	–	BIH	**Bosnia and Herzegovina**
11	24	30	27	34	30	25	18	80	68	9	3	79	58	BGR	**Bulgaria**
8	21	–	–	26	24	25	12	85	73	1	1	75	50	HRV	**Croatia**
–	–	–	–	–	–	–	–	–	–	–	–	–	–	CYP	**Cyprus**
11	19	23	20	17	14	20	13	81	73	3	5	80	62	CZE	**Czechia**
9	10	–	–	8	5	16	7	89	87	–	–	83	75	DNK	**Denmark**
9	19	–	–	7	3	18	9	89	83	–	–	79	55	EST	**Estonia**
14	20	–	–	5	1	22	13	85	68	–	–	74	45	FIN	**Finland**
10	14	–	–	35	28	14	6	92	84	–	–	88	73	FRA	**France**
–	–	–	–	–	–	–	–	–	–	11	2	–	–	GEO	**Georgia**
12	20	–	–	26	16	16	9	88	78	1	1	86	73	DEU	**Germany**
15	28	44	39	9	4	15	7	90	82	2	0.8	60	37	GRC	**Greece**
12	20	25	28	30	32	24	11	86	74	3	4	70	51	HUN	**Hungary**
16	20	–	–	8	3	25	14	88	79	–	–	80	63	ISL	**Iceland**
13	18	28	27	14	13	25	9	80	65	–	–	80	61	IRL	**Ireland**
13	21	–	–	33	31	10	5	90	78	–	–	76	58	ISR	**Israel**
9	22	44	39	16	12	11	5	93	91	4	1	85	69	ITA	**Italy**
–	–	–	–	–	–	–	–	–	–	13	4	–	–	KAZ	**Kazakhstan**
–	–	–	–	–	–	–	–	–	–	13	3	–	–	KGZ	**Kyrgyzstan**
9	16	25	21	8	5	21	14	82	77	–	–	63	40	LVA	**Latvia**
7	14	27	22	13	7	23	12	86	81	–	–	61	42	LTU	**Lithuania**
13	17	–	–	40	27	26	9	82	73	–	–	79	63	LUX	**Luxembourg**
25	29	33	33	37	39	16	9	85	78	–	–	66	32	MLT	**Malta**
12	21	28	26	40	35	27	12	83	71	5	2	–	–	MKD	**MKD[a]**
–	–	–	–	–	–	–	–	–	–	–	–	–	–	MCO	**Monaco**
–	–	–	–	–	–	–	–	–	–	9	3	83	69	MNE	**Montenegro**
12	13	–	–	39	29	22	12	78	78	2	3	82	62	NLD	**Netherlands**
7	18	24	25	13	5	23	8	79	79	–	–	84	60	NOR	**Norway**
6	19	–	–	27	20	25	11	75	75	–	–	82	67	POL	**Poland**
14	17	33	36	22	18	18	5	81	81	–	–	41	28	PRT	**Portugal**
7	13	19	13	12	10	25	22	–	–	6	2	54	37	MDA	**Republic of Moldova**
9	18	28	23	30	24	21	11	73	73	13	4	71	46	ROU	**Romania**
6	20	–	–	10	7	21	11	84	84	–	–	–	–	RUS	**Russian Federation**
–	–	43	33	–	–	–	–	–	–	–	–	–	–	SMR	**San Marino**
–	–	–	–	–	–	–	–	–	–	6	4	75	51	SRB	**Serbia**
9	17	–	–	29	25	25	13	73	73	–	–	79	61	SVK	**Slovakia**
13	21	30	27	8	6	21	7	75	75	–	–	78	57	SVN	**Slovenia**
13	20	45	41	23	18	28	12	70	70	–	–	88	74	ESP	**Spain**
13	20	23	22	7	5	15	10	83	83	–	–	91	79	SWE	**Sweden**
9	15	–	–	36	23	12	7	85	85	–	–	–	–	CHE	**Switzerland**
–	–	–	–	–	–	–	–	–	–	27	10	72	52	TJK	**Tajikistan**
–	–	25	23	–	–	–	–	77	77	10	2	–	–	TUR	**Turkey**
–	–	–	–	–	–	–	–	–	–	19	7	–	–	TKM	**Turkmenistan**
6	13	–	–	17	12	26	16	70	70	4	0.3	62	44	UKR	**Ukraine**
12	16	–	–	19	14	18	9	73	73	4	1	87	74	GBR	**United Kingdom**
–	–	–	–	–	–	–	–	–	–	20	5	–	–	UZB	**Uzbekistan**
11	18			22	17	21	11	82	77	10	3	75	56		Average
25	29	45	41	40	39	29	22	93	91	27	10	91	79		Highest value
MLT	MLT	ESP	ESP		MLT	ALB	MDA	ITA	ITA	TJK	TJK	SWE	SWE		Highest country
4	10	19	13	5	1	10	5	70	65	1	0.3	41	28		Lowest value
ALB	DNK	MDA	MDA	FIN	FIN	ISR		ESP	IRL	DEU	UKR	PRT	PRT		Lowest country

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11. Country context of child and adolescent health and well-being

Introduction

This chapter describes country-level indicators that are included in the online country profiles *(1)* and others extracted from additional data sources. They give a perspective on the political, social and governmental context of children's lives in Europe. The chapter summarizes the relationship between indicators emphasized by the SDGs *(2)* and the WHO European child and adolescent health strategy *(3)*, such as child mortality and adolescent pregnancy rates, and their relation to indicators describing the social and political environments in which children live. These social and political factors are determinants of child health, as recognized by the European policy framework, Health 2020 *(4)*. Details on the analysis performed for this chapter can be found in Annex 1.

Key findings

- Child mortality has decreased considerably in the European Region.
- Child mortality and adolescent pregnancy rates vary widely; they are correlated with the country's GDP.
- There is a strong correlation between governance indicators and under-5 mortality and adolescent pregnancy rates. The Corruption Perceptions Index shows the strongest correlation with under-5 mortality.

Findings

Child mortality in the European Region

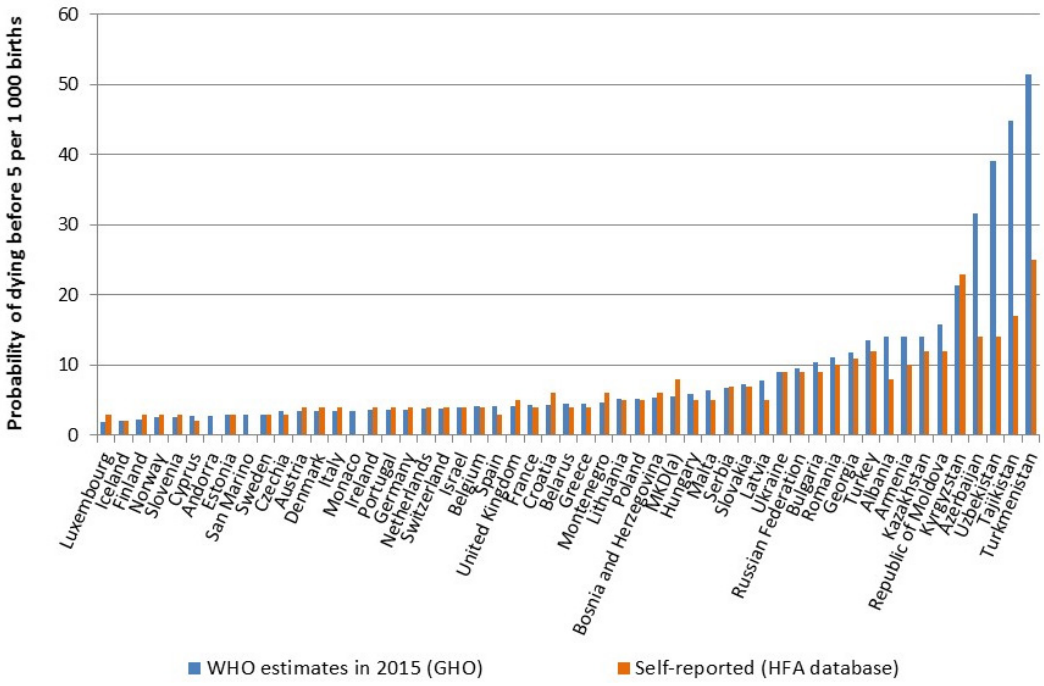
The European Region has a wide range of under-5 mortality, with country groupings summing up and reflecting the diversity (see Fig. 1.1). The UN IGME *(5)* reported a decline in child mortality in the European Region in the past three decades (see Fig. 1.2), but some countries still have high rates of under-5 mortality, with up to 50 deaths per 1000 live births (see Fig. 1.1).

Under-5 mortality rates from the GHO *(6)*, which show data modelled by UN IGME, range from a low of 1.90 (Luxembourg) to a high of 51.40 (Turkmenistan) deaths per 1000 live births, with a subregional average of 8.83. Data on under-5 mortality self-reported by countries to the European Health for All (HFA) database *(7)*, accessible through the European Health Information Gateway *(8)*, display the same pattern but sometimes with lower values: from two (Cyprus and Iceland) to 25 (Turkmenistan) deaths per 1000 live births. Mortality rates in the CIS are higher than in EU countries. The causes of death in children aged 5–14 are modelled from the Global Burden of Disease exercise of the Institute of Health Metrics and Evidence *(9)*.

Self-reported and estimated child mortality

Fig. 11.1, built from GHO and HFA data, shows variance in some countries, depending on the data source. The GHO modelled data are generally higher than the self-reported rates in the regional HFA database in the higher mortality countries.

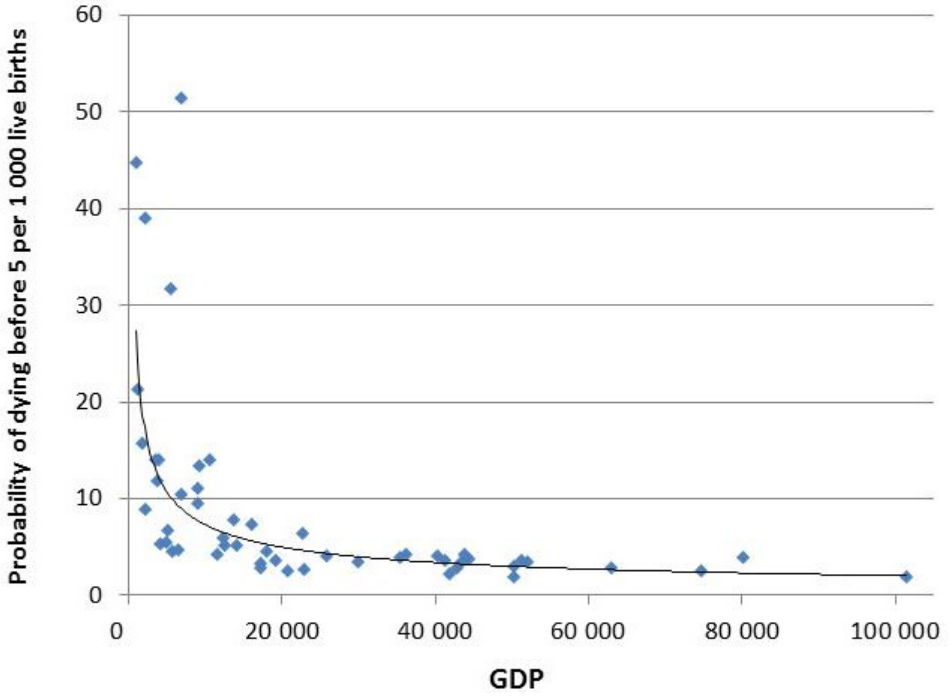
Fig. 11.1. Self-reported (HFA database) and estimated (GHO) child mortality rates in European countries, 2015



Child mortality and its association with countries' wealth

GDP, from the World Bank Group's World Development Indicators database *(10)*, expressed in US$ per capita, is the sum of gross value added by all resident producers in the economy plus any product taxes, minus any subsidies not included in the value of the product. GDP in the Region for 2015 ranged between US$ 926 per capita in Tajikistan to US$ 163 352 per capita in Monaco; the subregional average was US$ 27 028. The GDP is commonly used as an indicator of the economic health of a country and is associated with child mortality (Fig. 11.2, $r^2 = 0.64$, $p < 0.001$). The wealthier a country, the lower the rates of child mortality.

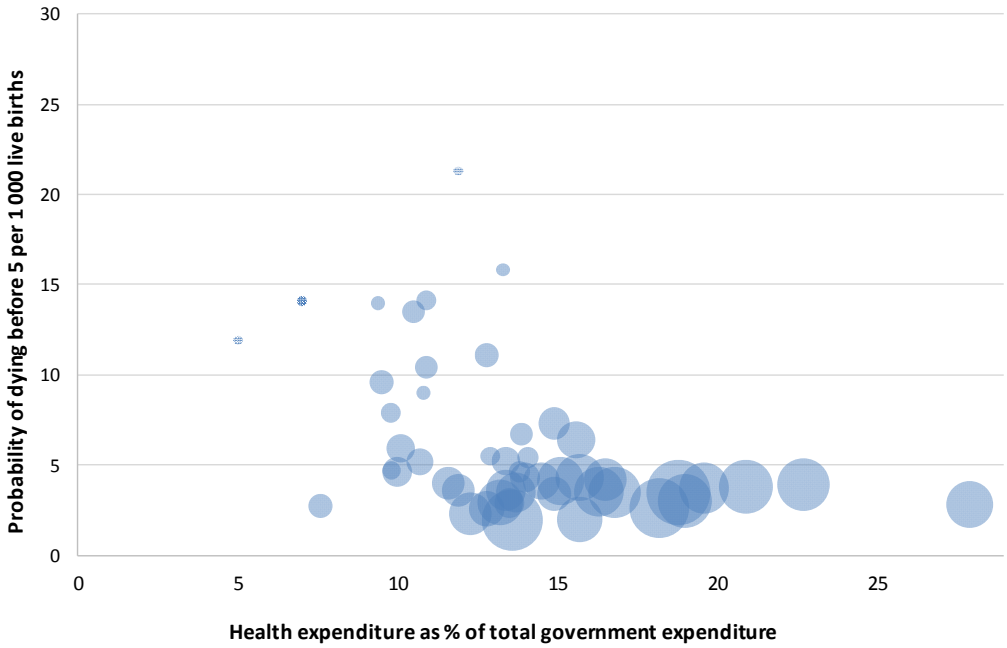
Fig. 11.2. Child mortality (HFA database, 2015) and its association with GDP (World Bank Group, 2015)



Child mortality and health expenditure in relation to total government expenditure

Fig. 11.3 displays the relationship between under-5 mortality and health expenditure. It shows that most of the countries with high child mortality have relatively low expenditure on health, both absolute and as a proportion of government expenditure. Health is a political choice.

Fig. 11.3. Child mortality (HFA database, 2015) and its association with health expenditure (HFA database, 2015)[a]



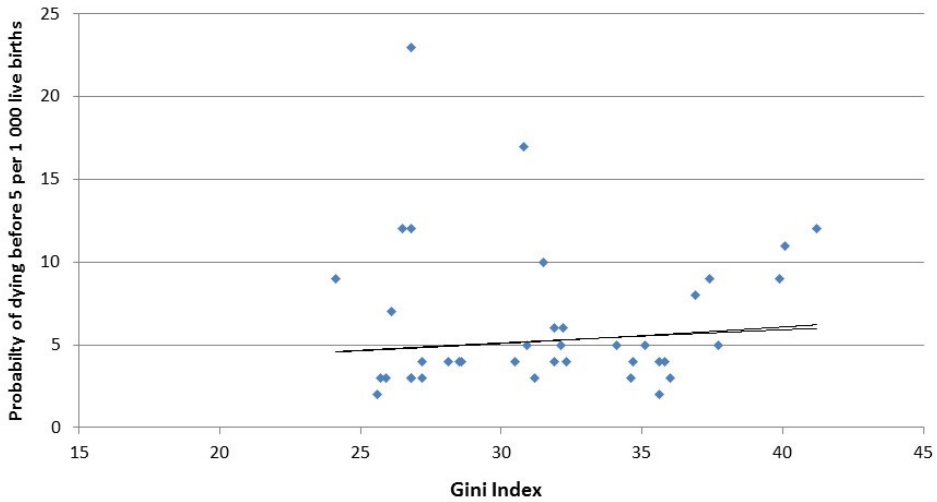
[a] Bubble-size indicates the health expenditure per capita in international $ purchasing power parity.

Child mortality and inequality

As shown in Fig. 11.2, the GDP of a country is associated with child mortality. The usual way of looking at inequality of household income in countries is the Gini Index, published by the World Bank *(10)*. The more inequality in a country, the higher the Gini Index.

An association between child mortality and inequality as measured by the Gini Index cannot be demonstrated in the European context (Fig. 11.4). Correlating under-5 mortality rates with the wealth distribution of a country did not show any relation ($r^2 = 0.02$, $p = 0.315$). Similarly, the association between child mortality and the proportion of children living in poverty in a country was found to be weak ($r^2 = 0.18$).

Fig. 11.4. Child mortality (HFA database, 2015) and its association with the Gini Index



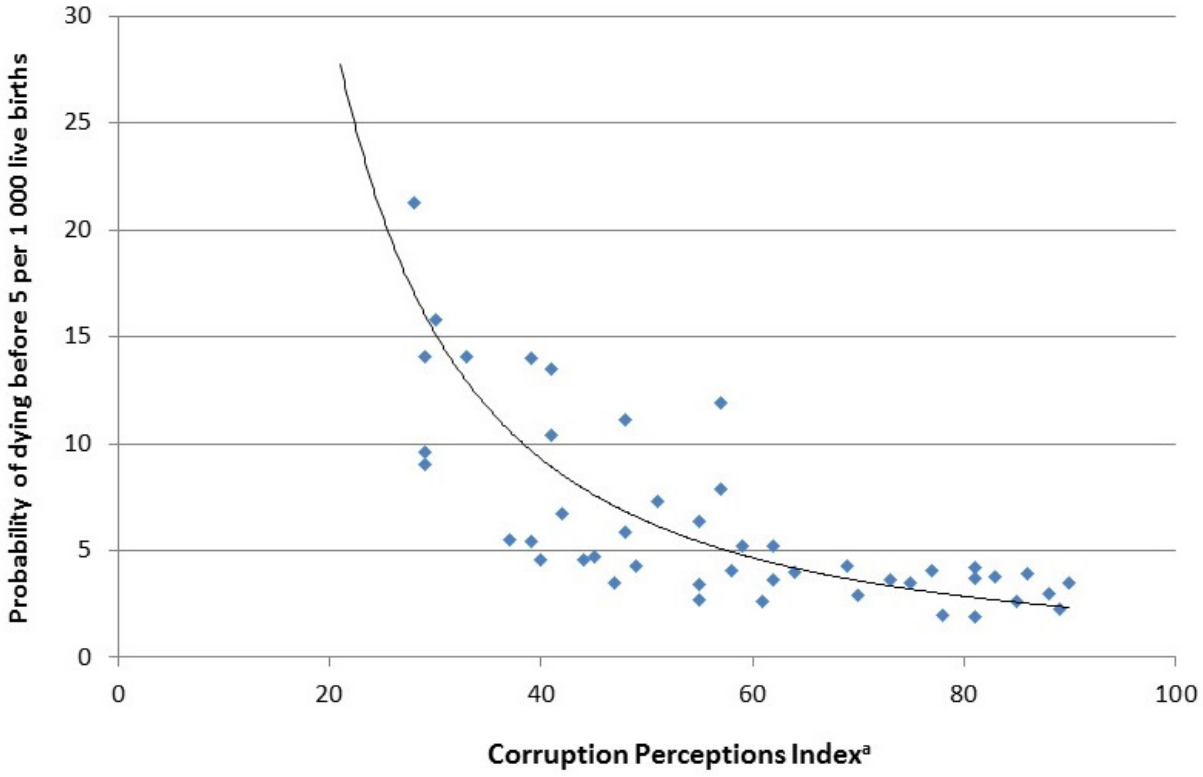
Child mortality and its association with governance indicators

The quality of governance affects all aspects of a person's life, including childhood. Several governance indicators published by the World Bank Group and Transparency International were explored. Data were from 2015 and were correlated against child mortality data from the HFA database (2015). According to this analysis, child mortality is strongly correlated with several governance indicators.

Child mortality and corruption

Corruption in countries is a threat to the provision of all services, including universal health coverage and the quality of, and access to, health care. The Corruption Perceptions Index, published by Transparency International *(11)*, uses a scale ranging from zero to 100, where zero means a country being highly corrupt. In the European Region, the country with the highest Corruption Perceptions Index and therefore the lowest perceived corruption is Denmark, with a score of 90. The subregional average is 54.7. The association between the Corruption Perceptions Index and under-5 mortality is strong (Fig. 11.5). The higher perceived corruption (low Corruption Perceptions Index) in a country, the higher the number of children who die before their fifth birthday ($r^2 = 0.68$, $p < 0.001$).

Fig. 11.5. Child mortality (HFA database, 2015) and its association with the Corruption Perceptions Index



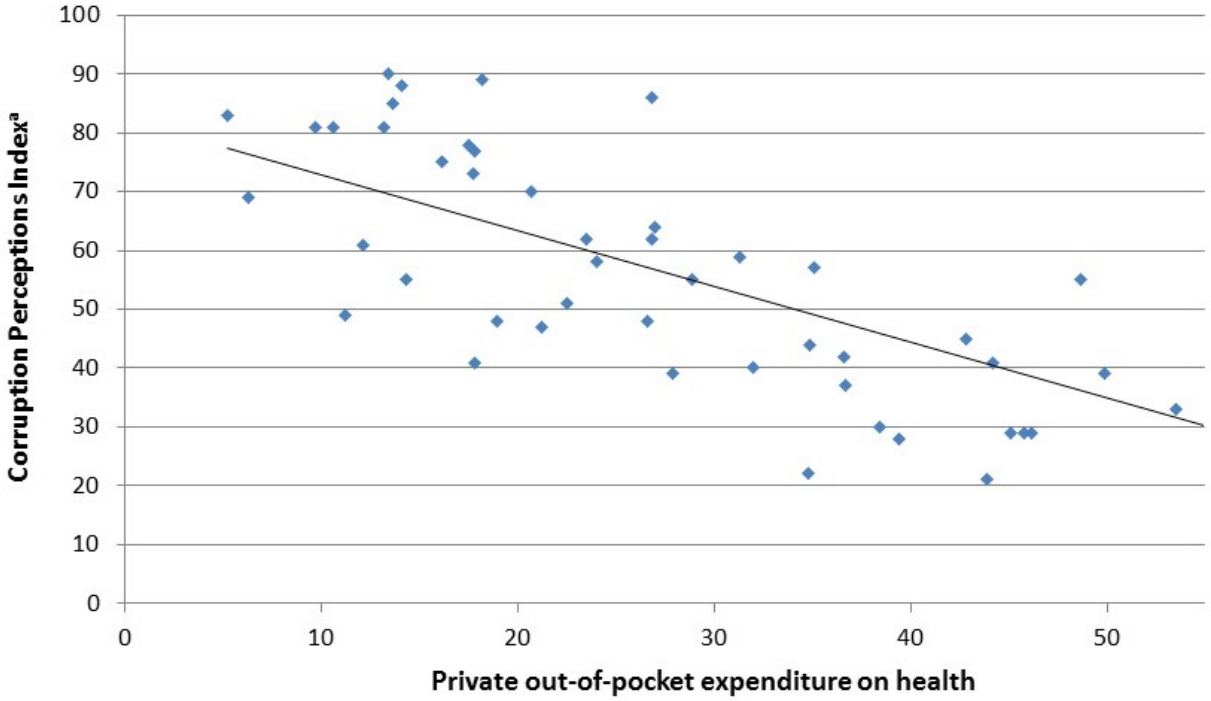
[a] A lower score indicates a higher level of corruption.

Private out-of-pocket health expenditure and corruption

Private household out-of-pocket payments on health are the direct outlays made by households to health practitioners and suppliers of pharmaceuticals, therapeutic appliances and other health-service providers, published by the European HFA database *(7)*. On average, citizens in the European Region pay 26.6% of health expenditure out of pocket.

Out-of-pocket payments on health are associated with higher corruption in a country (Fig. 11.6, $r^2 = 0.52$, $p < 0.001$). This association indicates that corruption might have significant implications for health expenditure. The more corruption in a country, the more citizens have to pay out of their private monies.

Fig. 11.6. Out-of-pocket expenditure for health (HFA, 2014) and the association with corruption



[a] A lower score indicates a higher level of corruption.

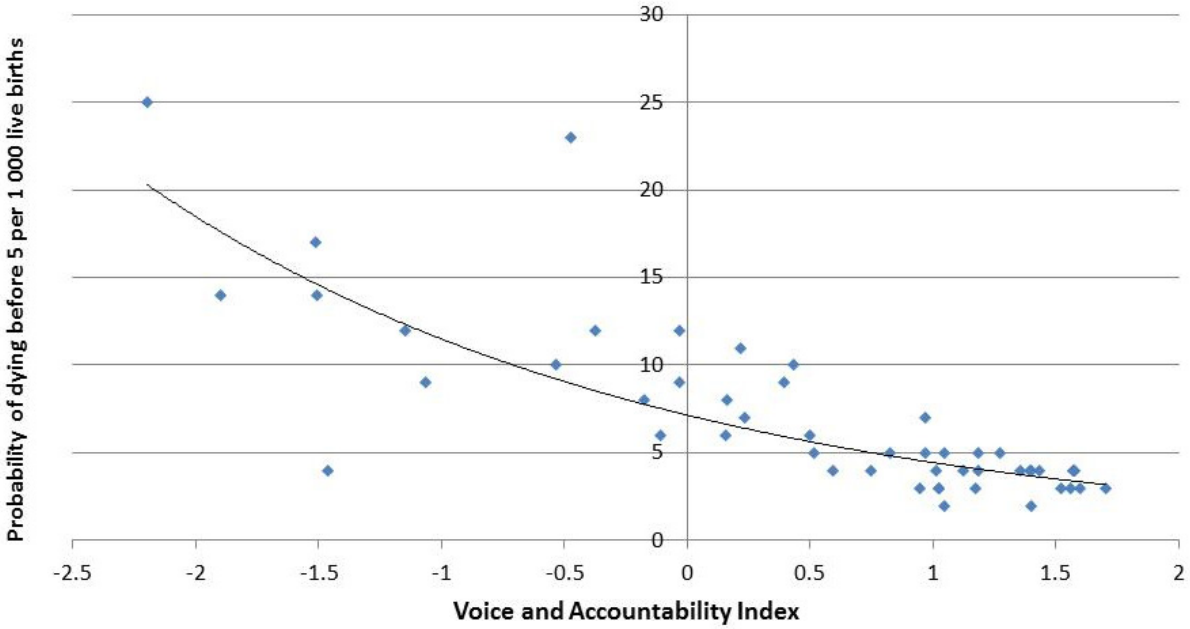
Child mortality and its association with the perception of citizens' voices being heard

According to the World Bank Group, "Voice and accountability captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media" *(12)*. Like the other five governance indicators published by the World Bank, this indicator ranges from –2.5 to +2.5, with higher scores corresponding to better outcomes.

The perception of citizens' participation in their government varies in the Region, with the lowest value in Turkmenistan (–2.20) and highest in Norway (+2.20). The subregional average is +0.52.

As Fig. 11.7 indicates, voice and accountability was highly associated with child mortality ($r^2 = 0.65$, $p < 0.001$). Lower child mortality rates were associated with a higher perception of population involvement in government activities (such as freedom of expression and free media).

Fig. 11.7. Child mortality (HFA, 2015) and its association with the Voice and Accountability Index[a]



[a] The Voice and Accountability Index captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association and a free media.

Child mortality and the effectiveness of governments for policy implementation

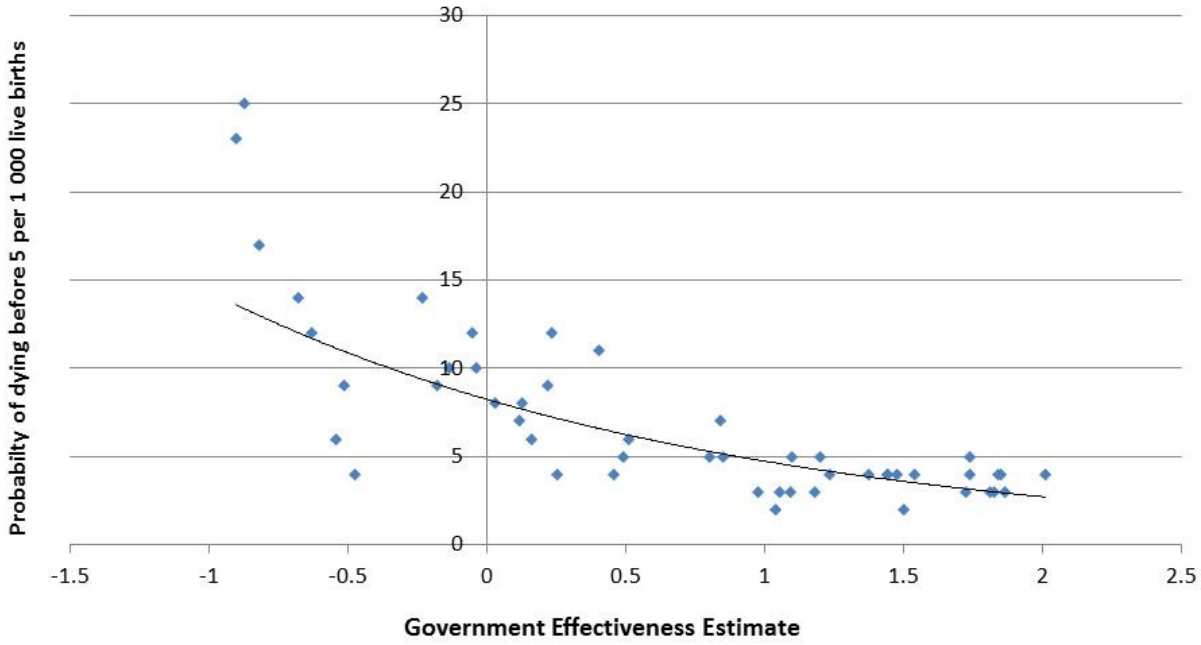
Government effectiveness in a country captures *(12)*:

> the perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

In the European Region, the country with the lowest perceived quality of public services rated by the World Bank was Kyrgyzstan (–0.90), and the highest score of government effectiveness was for Switzerland (2.01). The subregional average is 0.69.

The probability of a child dying before their fifth birthday was highly associated with the government effectiveness of a country ($r^2 = 0.65$, $p < 0.001$). The higher the quality of public services, civil services, policy implementation, independence from political pressure and government commitment, the lower the under-5 mortality rate (Fig. 11.8).

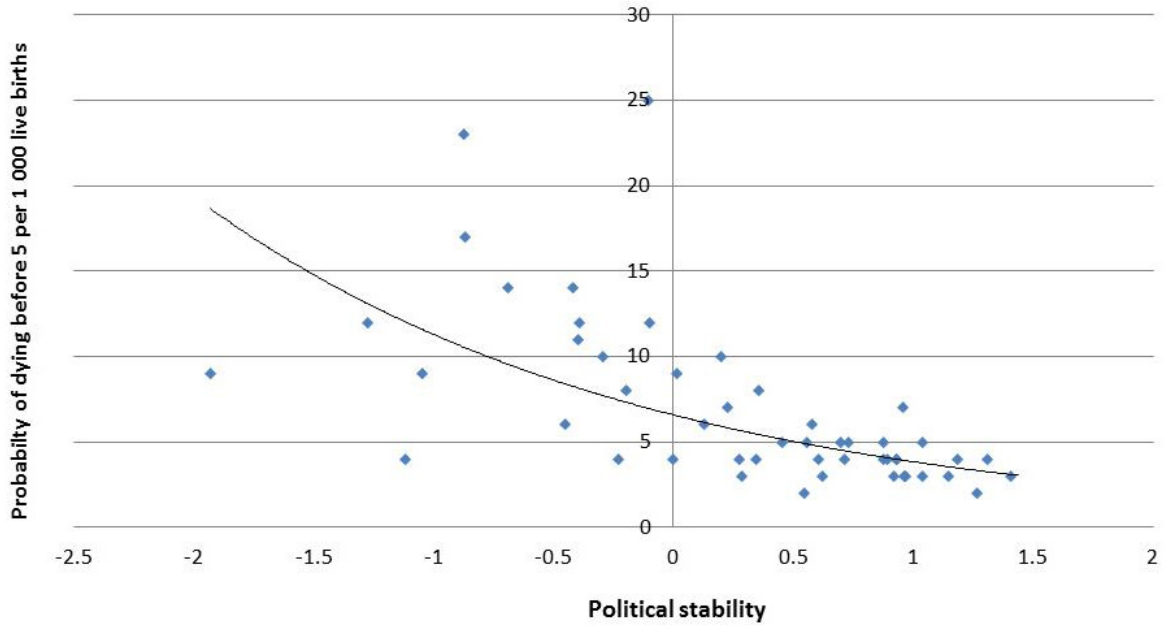
Fig. 11.8. Child mortality (HFA database, 2015) and its association with the Government Effectiveness Estimate



Child mortality and political stability and absence of violence

The Political Stability and Absence of Violence/Terrorism Index, published by the World Bank *(12)*, indicates the perception of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism. Ukraine is the country with the lowest value in the European Region (–1.93), and Andorra was rated as the country with the highest political stability (1.21). The subregional average is 0.32. The political stability of a country was found to be moderately associated with under-5 mortality (r^2 = 0.47, $p < 0.001$). The more politically stable a country, the lower the under-5 mortality (Fig. 11.9).

Fig. 11.9. Child mortality (Health for All, 2015) and its association with the Political Stability and Absence of Violence/Terrorism Index



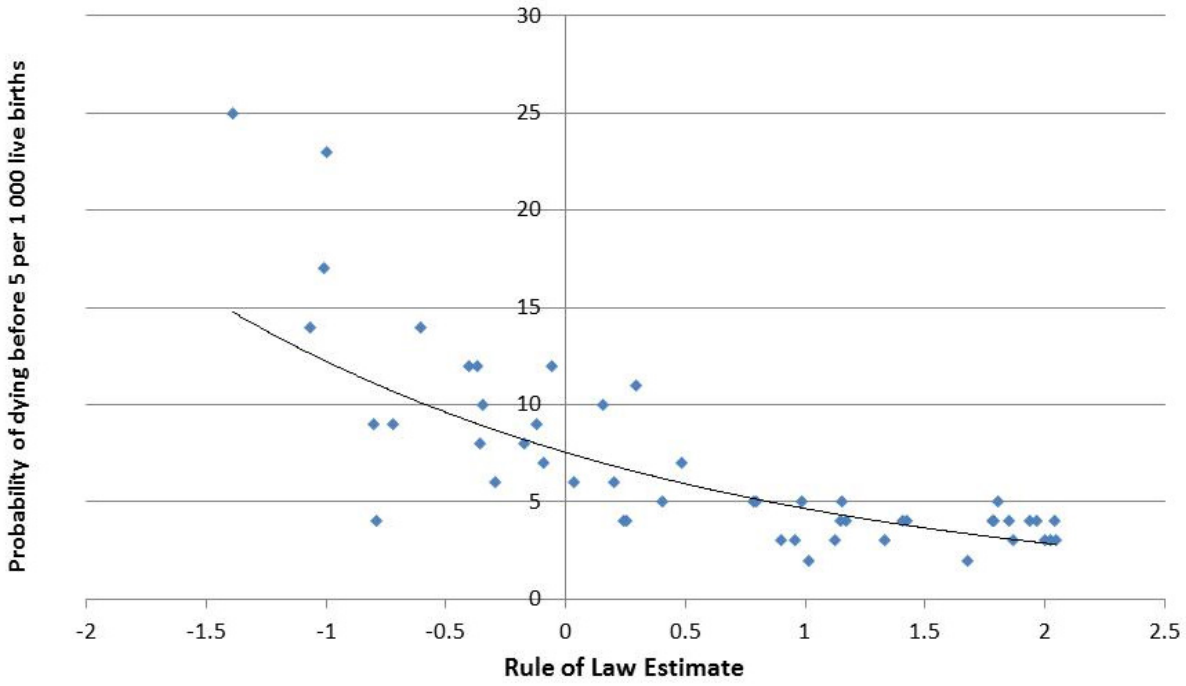
Child mortality and trust in justice systems

The Rule of Law Estimate describes perceptions of *(12)*:

> the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

The country in the European Region with the lowest Rule of Law value estimated by the World Bank is Turkmenistan (–1.39), with Finland on top (2.07). The subregional average is 0.69. This indicator, which includes the accountability on the rules and justice systems, was highly associated with child mortality ($r^2 = 0.66$, $p < 0.001$). The higher the confidence in the rules and justice system, the lower is the probability of a child dying before the age of 5 (Fig 11.10).

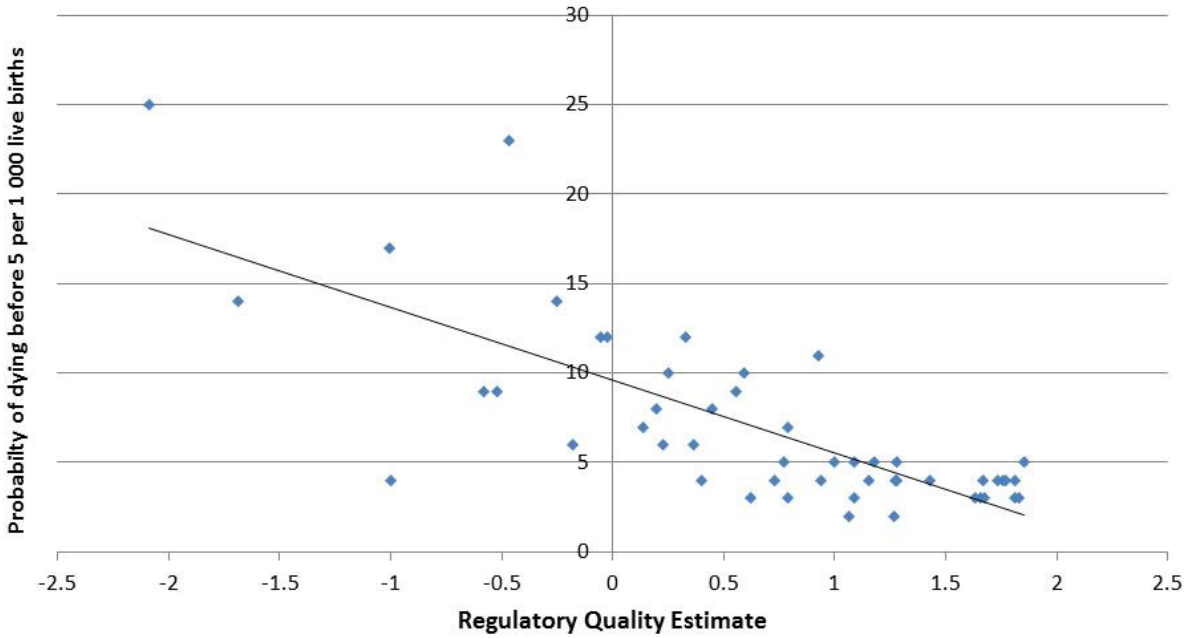
Fig. 11.10. Child mortality (HFA, 2015) and its association with the Rule of Law Estimate



Child mortality and promotion of the private sector

The Regulatory Quality Estimate published by the World Bank Group captures the perceptions of the government's ability to formulate and implement sound policies and regulations that permit and promote private sector development *(12)*. The indicator ranges from –2.09 in Turkmenistan to 1.86 in the United Kingdom, with a subregional average of 0.67. Child mortality was associated with the Regulatory Quality Estimate ($r^2 = 0.58$, $p < 0.001$). The higher the ability for formulating and implementing policies and regulations to promote the private sector, the lower the probability of dying before the age of 5 (Fig. 11.11).

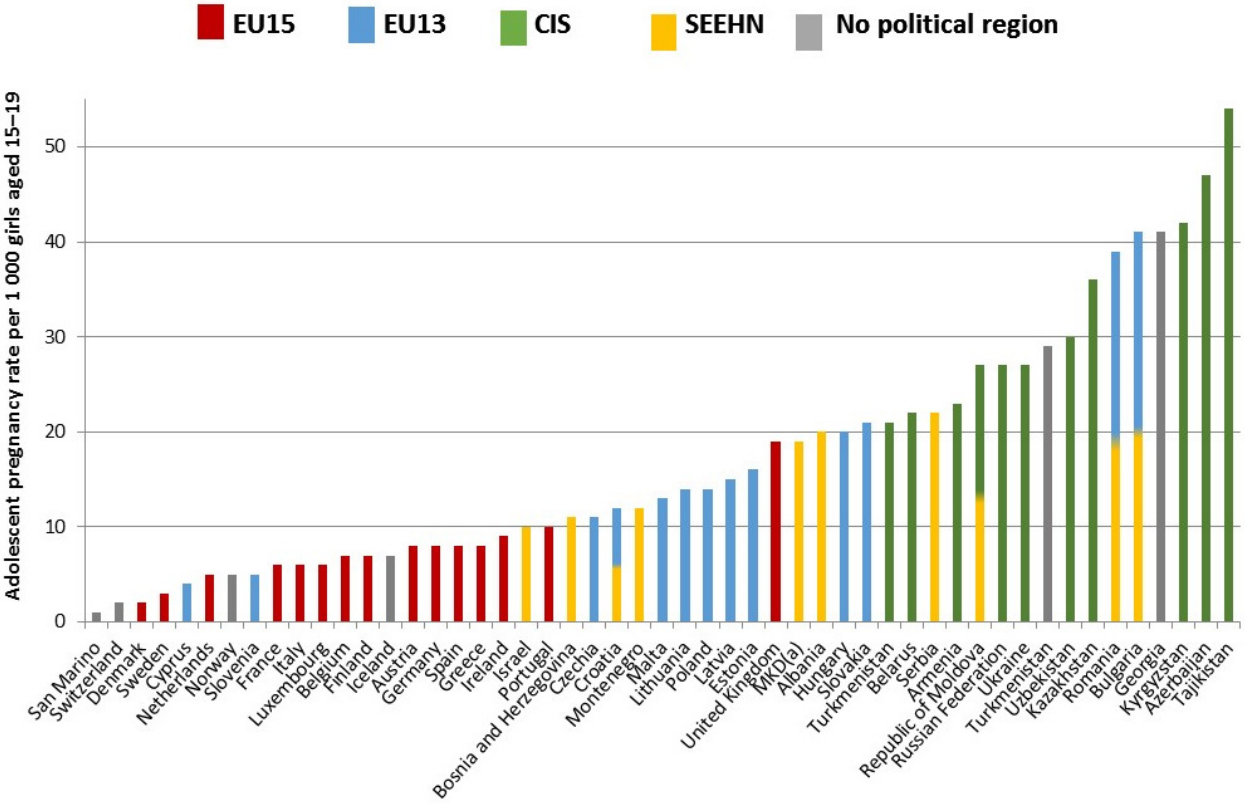
Fig. 11.11. Child mortality (HFA, 2015) and its association with the Regulatory Quality Estimate



Adolescent pregnancy rates

The SDGs target a reduction in adolescent pregnancy. Adolescent pregnancy rates have declined over recent decades *(13,14)*, but the Region exhibits a wide range of rates, with country groupings reflecting this diversity (Fig. 11.12). Adolescent birth rate ranges from a low of one (San Marino) to 54 (Tajikistan) per 1000 girls aged 15–19, with a subregional average of 17.10 *(15)*.

Fig. 11.12. Adolescent pregnancy rate per 1000 girls, by country grouping

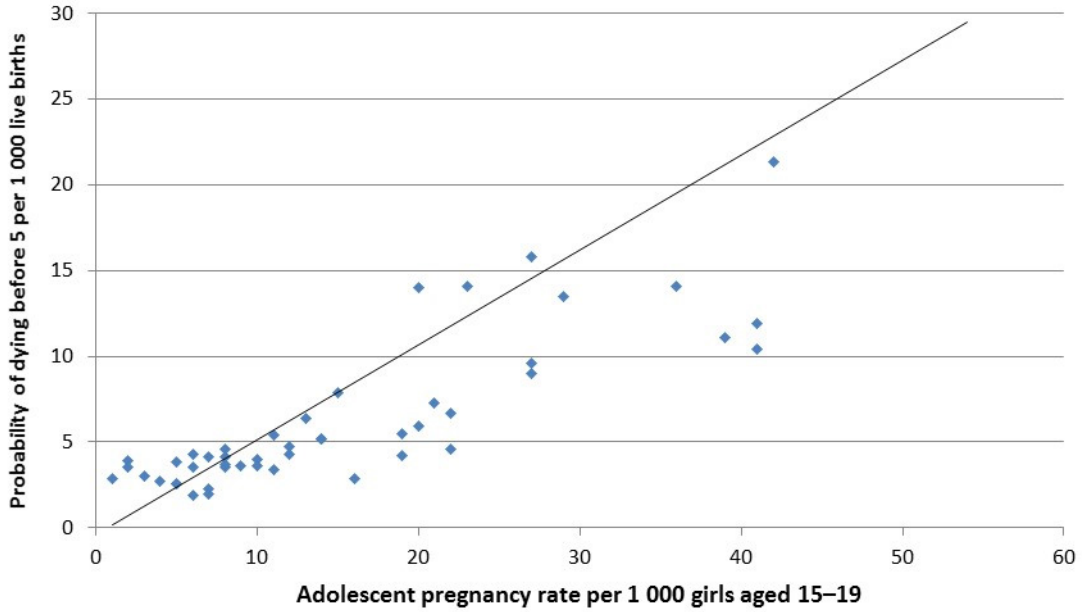


[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

Adolescent pregnancy rate and child mortality

Adolescent pregnancy rates are highly associated with under-5 mortality. There is generally higher under-5 mortality where there is a higher risk of adolescent pregnancy ($r^2 = 0.59$, $p < 0.001$), with some notable exceptions: Turkmenistan has the highest child mortality rate in the Region, but reports moderate-to-low adolescent pregnancy rates, whereas Belarus and Bulgaria report low numbers of child deaths per 1000 births but high rates of teenage pregnancies (Fig. 11.13).

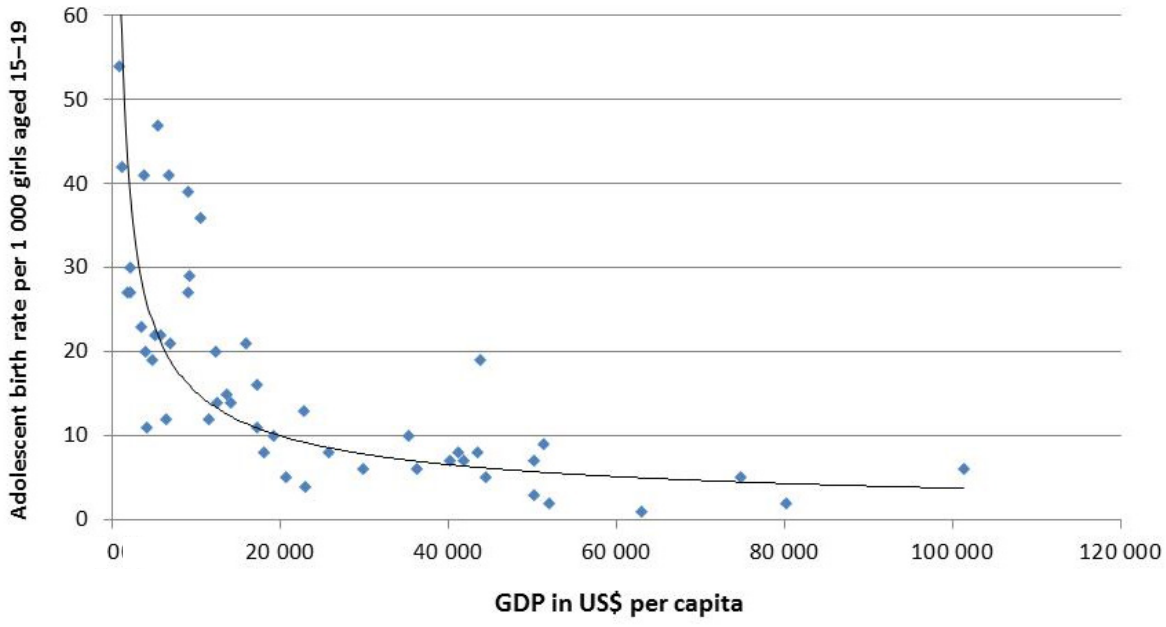
Fig. 11.13. Adolescent pregnancy rate (United Nations Population Fund (UNFPA), 2006–2015) and child mortality (HFA, 2015)



Adolescent pregnancy rate and its association with wealth

The GDP is commonly used as an indicator of a country's economic wealth *(10)*. As Fig. 11.14 shows, economic wealth is associated with the number of teenage pregnancies in a country ($r^2 = 0.64$, $p < 0.001$). The wealthier a country, the lower the rate of adolescent pregnancies reported.

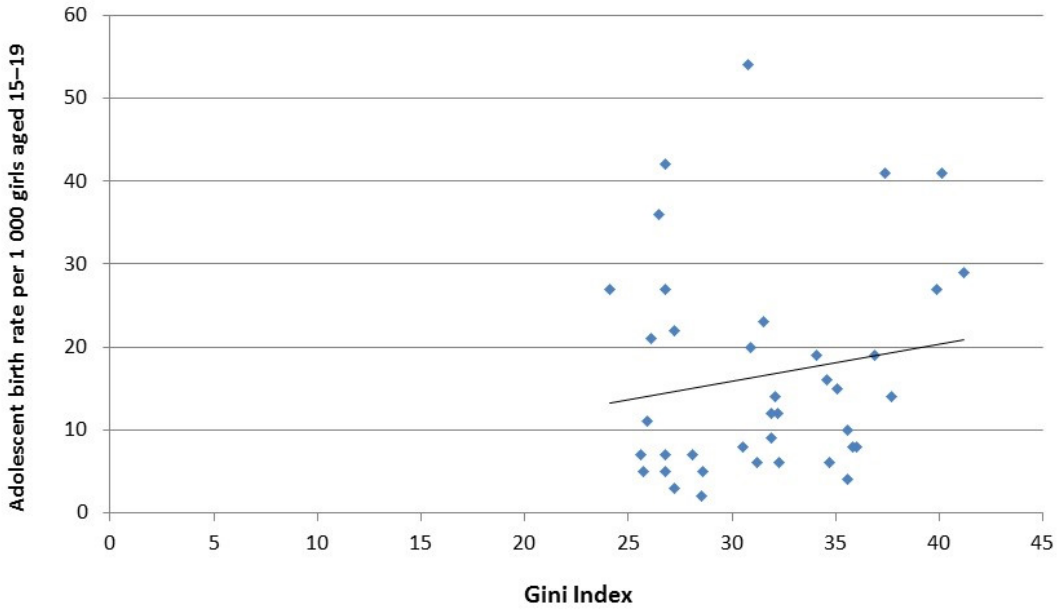
Fig. 11.14. Adolescent pregnancy rate (UNFPA, 2006–2015) and its association with GDP



Adolescent pregnancy rate and inequality

Despite the assumption that adolescent pregnancy rates are associated with inequality in a country, an association between adolescent birth rates per 1000 girls aged 15–19 and inequality in the European context as measured by the GINI Index could not be demonstrated (Fig. 11.15) *(10)*. Correlating adolescent pregnancy rates with the wealth distribution of a country did not show any relation ($r^2 = 0.04$, $p = 0.682$).

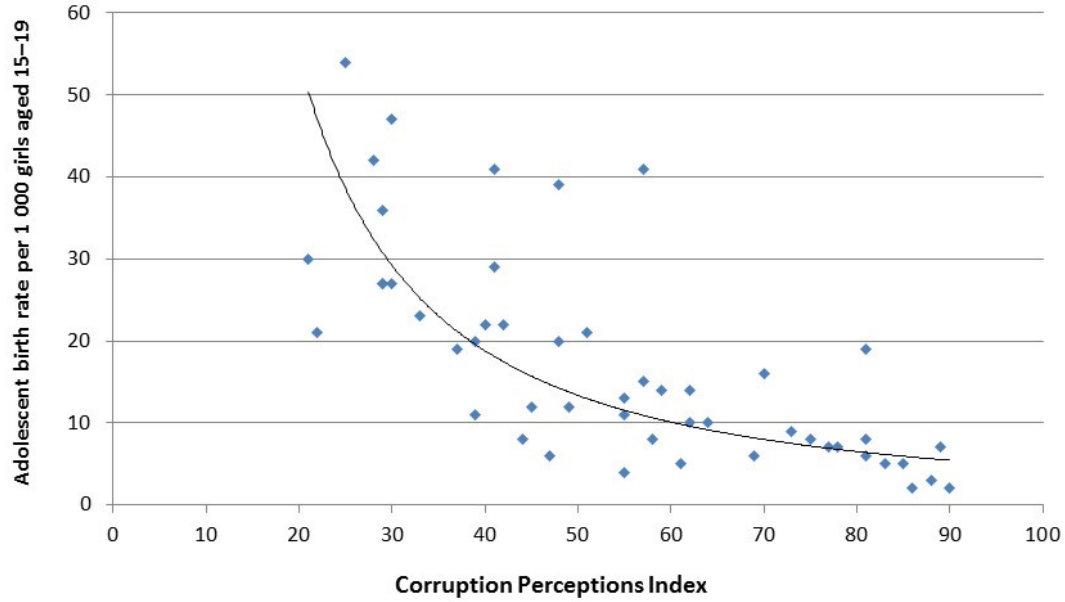
Fig. 11.15. Adolescent pregnancy rate (UNFPA, 2006–2015) and its association with the GINI Index



Adolescent pregnancy rate and its association with governance indicators

The adolescent pregnancy rate was highly associated with corruption (Fig. 11.16). The higher the perceived corruption (low Corruption Perceptions Index), the more adolescent girls are at risk of becoming teenage mothers ($r^2 = 0.58$, $p < 0.001$).

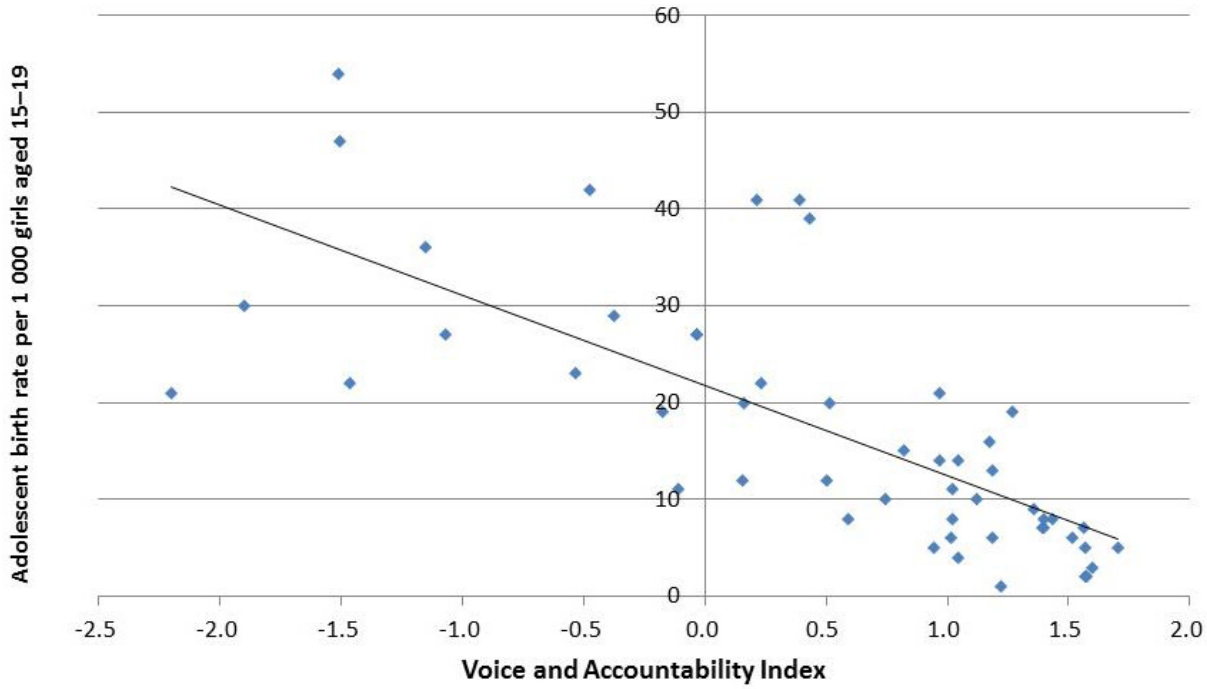
Fig. 11.16. Adolescent pregnancy rate (UNFPA, 2006–2015) and its association with the Corruption Perceptions Index



Adolescent pregnancy rate and its association with the perception of citizens´ voices being heard

As indicated in Fig. 11.17, voice and accountability (as measured by the Voice and Accountability Index *(12)*) was associated with adolescent pregnancy rates in countries ($r^2 = 0.54$, $p < 0.001$). The higher the perception of participation in activities of the government, such as freedom of expression and free media, the lower the rates of teenage pregnancies.

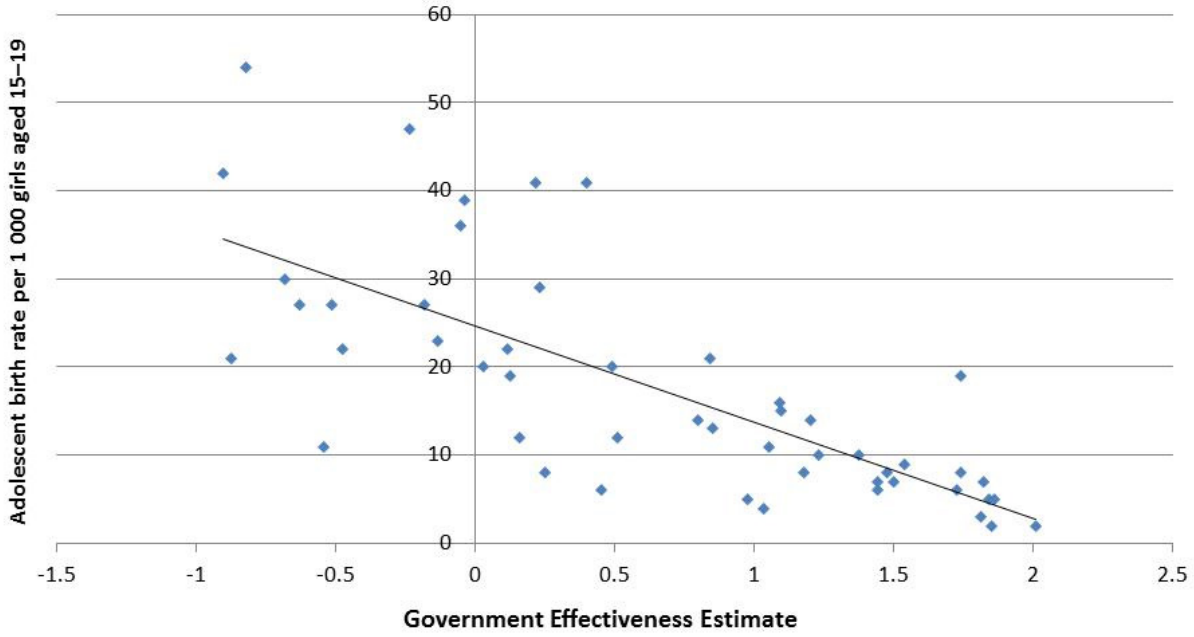
Fig. 11.17. Adolescent pregnancy rate (UNFPA, 2006–2015) and its association with the Voice and Accountability Index



Adolescence pregnancy rate and the effectiveness of governments for policy implementation

Adolescence pregnancy rates were associated with the government effectiveness of a country ($r^2=0.55$, $p<0.001$) (as measured by the Government Effectiveness Estimate *(12)*). The higher the quality of public services, civil services, policy implementation, independence from political pressure and the government's commitment, the lower the risk of getting pregnant as an adolescent (Fig. 11.18).

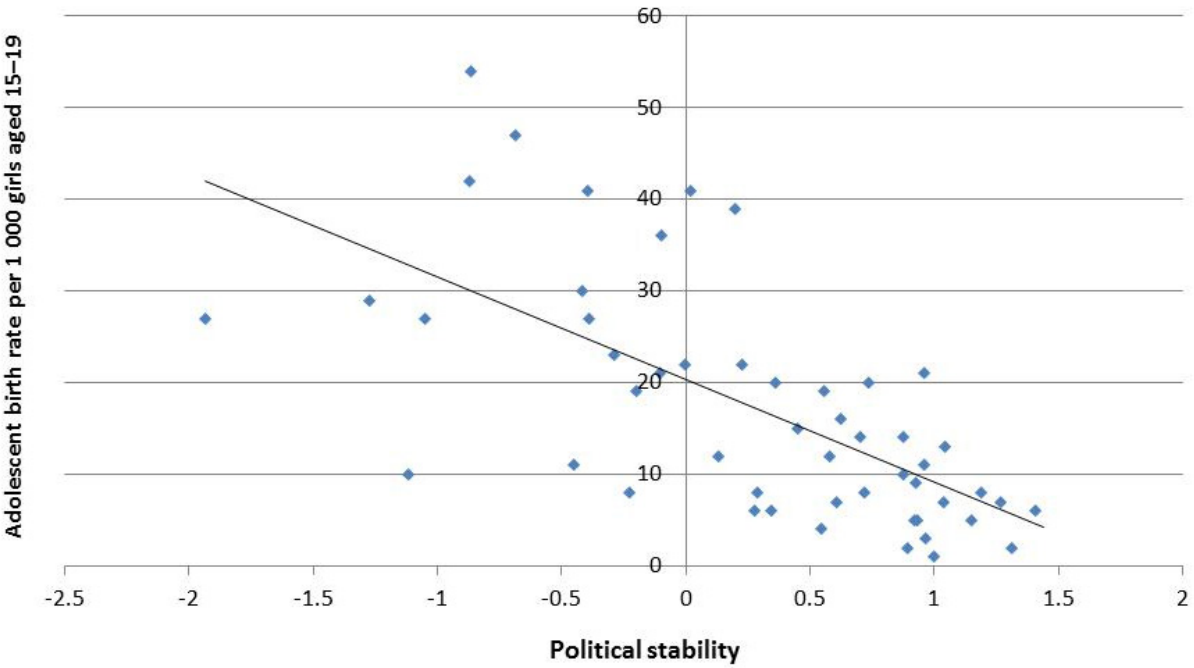
Fig. 11.18. Adolescent pregnancy rate (UNFPA, 2006–2015) and its association with the Government Effectiveness Estimate



Adolescent pregnancy rate and political stability and absence of violence

The political stability of a country was found to be moderately associated with adolescent pregnancy rates ($r^2 = 0.44$, $p < 0.001$). The more politically stable a country (as measured by the Political Stability and Absence of Violence/Terrorism Index *(12)*), the lower the probability of becoming a mother between the ages of 15 and 19 (Fig. 11.19).

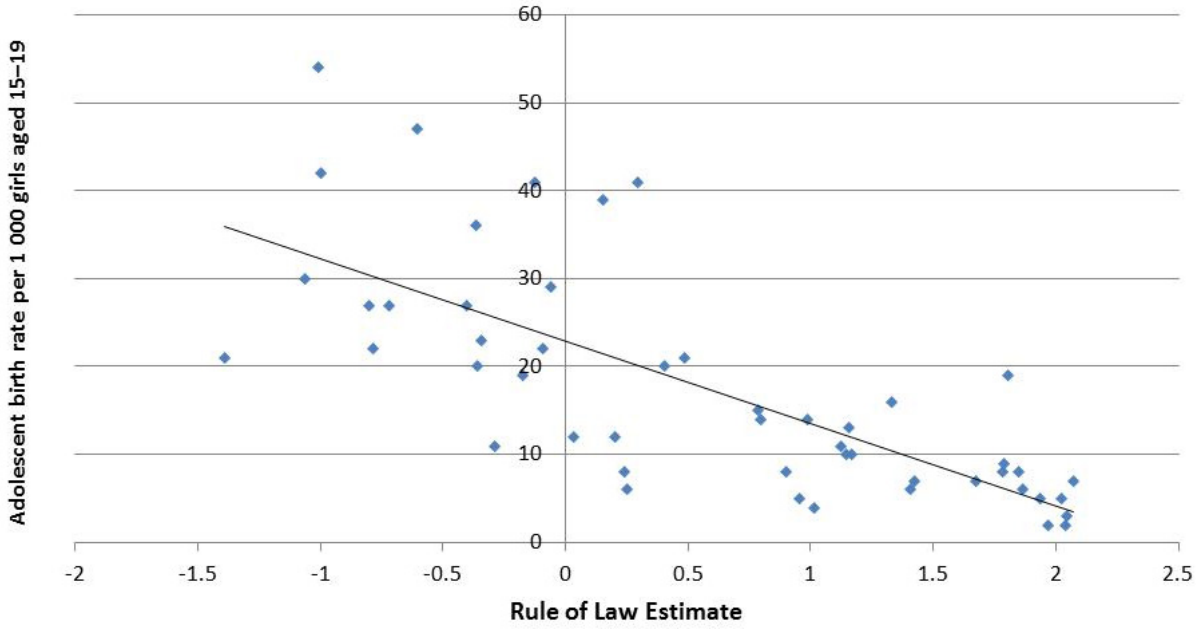
Fig. 11.19. Adolescent pregnancy rate (UNFPA, 2006–2015) and its association with the Political Stability and Absence of Violence/Terrorism Index



Adolescent pregnancy rate and trust in justice systems

This indicator, which includes the accountability on the rules and justice systems *(12)*, was highly associated with child mortality ($r^2 = 0.54$, $p < 0.001$). The higher the confidence in the rules and justice system, the lower the rates of adolescent pregnancies (Fig. 11.20).

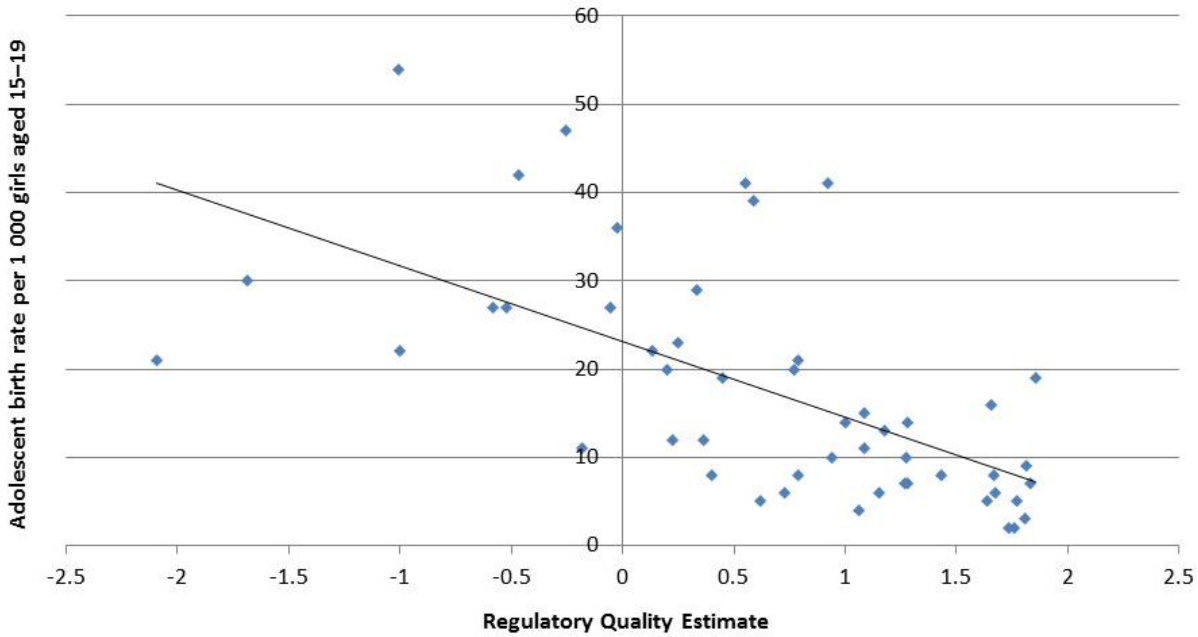
Fig. 11.20. Adolescent pregnancy rate (UNFPA, 2006–2015) and its association with the Rule of Law Estimate



Adolescent pregnancy rate and Regulatory Quality

Regulatory Quality, as defined by the World Bank Group, refers to the "perceptions of the government to formulate and implement sound policies and regulations that permit and promote private sector development" *(12)*. This indicator was found to be moderately associated with adolescent pregnancy ($r^2 = 0.38$, $p < 0.001$) (Fig. 11.21).

Fig. 11.21. Adolescent pregnancy rate (UNFPA, 2006–2015) and its association with the Regulatory Quality Estimate (World Bank Group, 2015)



Findings in perspective

Child mortality remains a top concern, as indicated by its inclusion in the SDGs, specifically target 3.2 *(16)*. Most countries in the European Region exhibit low child mortality rates relative to global comparisons, but in some countries, the rate in 2015 was close to the global average of 43 deaths per 1000 live births *(16)*. As Brownell & Enns *(17)* state, progress to decrease child mortality "has been uneven and inequalities persist across both developing and high-income countries".

There is a discrepancy between modelled and self-reported data in several of the higher-mortality countries, which indicates problems with the reliability of data for global monitoring, an issue that Victora & Boerma discussed recently in a commentary *(18)*. This review's analyses took, as a conservative approach, the self-reported mortality rates provided by countries. They nevertheless indicated a link between child mortality and indicators describing the political and socioeconomic environment of children. The quality of governance in countries is affecting the health of children. Strong relationships between under-5 mortality and corruption and government effectiveness can also be shown globally *(19)*. A European response to under-5 mortality therefore needs to look into a commitment and action to decrease corruption. Child mortality is also a useful indicator of other government sectors that need to function to ensure its reduction.

Adolescent pregnancy limits access to education for young girls and exposes them to risks for their own physical and mental health *(20)*, as well as that of their infants *(21)*. The number of births to young mothers aged 15–19 years varies across the Region, with a higher rate in the CIS. Young children are not the only ones affected by the political and economic environment: adolescents are too. The findings also showed a strong relationship between adolescent pregnancy, GDP and perceived corruption.

Social determinants of health are well established *(22)* and have been underpinning the Health 2020 framework *(4)*. It was therefore surprising not to find an association of inequity, as measured with the GINI Index, or the proportion of children living in poverty with the mortality and adolescent pregnancy outcomes. This might indicate that these national indicators are insufficiently sensitive to capture these inequities.

Conclusion

The global commitment to reducing both child mortality and adolescent pregnancy (SDG targets 3.2.1 and 3.7.2) in the coming 12 years calls for renewed action to meet these goals in Europe. The presented findings can help in the development of effective European programmes to achieve progress by 2030.

Table 11.1 includes all indicators used in this chapter, and data from the country profiles and the survey displayed by country with summary statistics.

Table 11.1. Country context of child and adolescent health and well-being: summary table

Country	Country code	GDP, US$ per capita	Total health expenditure per capita ($PPP)	Total mid-year population (million)	Child population (0–14 years old) (million)	Child population size (0–17 years) (million) (2015 data)	Total immigrant population	Child immigrant population (0–14 years)	Adolescent immigrant population (15–19 years)	Live births per 1 000 population	Civil registration coverage of births (%)	Adolescent birth rate per 1 000 girls aged 15–19 (2006–2015)	Early neonatal deaths per 1 000 live births	Under-5 mortality (GHO, 2015)	Probability of dying before 5 per 1 000 children	Mortality rates all causes 5–9 years per 100 000	Mortality rates all causes 10–14 years per 100 000	% of children at risk of poverty and social exclusion (0–15 years)
Albania	ALB	3 965	307	2.9	0.84	–	–	–	–	11	99	20	3	14	8	26	25	–
Andorra	AND	42 807	3 334	0.07	–	–	–	–	–	8	100	–	3	3	–	6	6	–
Armenia	ARM	3 500	156	3.0	0.57	0.69	1 112	–	10	14	100	23	5	14	10	28	31	–
Austria	AUT	43 439	3 923	8.5	1.2	1.5	166 323	–	–	10	100	8	2	4	4	9	10	24
Azerbaijan	AZE	5 496	214	9.6	2.0	2.6	1 954	–	55	17	94	47	4	32	14	65	56	–
Belarus	BLR	5 740	678	9.5	1.4	1.8	14 155	–	–	13	100	22	1	5	4	21	21	22
Belgium	BEL	40 231	3 420	11.3	1.9	2.3	146 626	26 263	10 962	11	100	7	2	4	4	9	10	43
Bosnia and Herzegovina	BIH	4 198	681	3.8	0.61	–	5 620	–	–	8	100	11	1	5	6	13	14	–
Bulgaria	BGR	6 820	763	7.1	0.96	1.2	25 223	3 071	1 102	9	100	41	3	10	9	21	23	–
Croatia	HRV	11 536	1 353	4.2	0.64	0.76	11 706	775	550	9	90	12	3	4	6	10	11	16
Cyprus	CYP	22 957	933	0.85	0.14	–	15 183	753	1 198	11	100	4	1	3	2	11	10	25
Czechia	CZE	17 231	1 814	10.5	1.6	1.9	29 602	4 176	1 365	10	100	11	1	3	3	8	9	19
Denmark	DNK	52 002	4 053	5.7	1.0	1.2	78 492	12 930	5 555	10	100	2	3	4	4	7	8	19
Estonia	EST	17 295	1 315	13.1	0.20	0.24	15 413	1 471	411	10	100	16	1	3	3	11	13	14
Finland	FIN	41 921	2 787	5.5	0.87	1.1	28 746	5 040	1 647	11	100	7	1	2	3	8	9	35
France	FRA	36 248	3 526	64.4	11.4	14.2	363 869	63 884	30 326	12	100	6	2	4	4	7	9	24
Georgia	GEO	3 796	131	3.7	0.76	0.78	–	–	–	16	100	41	4	12	11	31	37	16
Germany	DEU	41 219	3 990	80.7	10.5	13.1	1 543 848	305 992	172 730	9	100	8	2	4	4	8	9	21
Greece	GRC	18 036	1 294	11.0	1.7	1.9	64 446	–	–	9	100	8	2	5	4	9	10	31
Hungary	HUN	12 259	1 205	9.9	1.4	1.7	58 344	4 748	3 403	9	100	20	2	6	5	10	13	–
Iceland	ISL	50 173	3 146	0.33	0.07	0.80	5 635	825	268	13	100	7	1	2	2	6	8	36
Ireland	IRL	51 290	2 511	4.6	0.94	1.2	76 888	–	–	15	100	9	2	4	4	9	10	28
Israel	ISR	35 330	1 582	8.1	2.3	2.8	–	–	–	21	100	10	2	4	4	10	11	42
Italy	ITA	29 847	2 449	60.7	8.3	–	280 078	36 054	22 514	8	100	6	2	4	4	7	9	29
Kazakhstan	KAZ	10 508	581	17.5	4.2	–	–	–	–	23	100	36	4	14	12	40	41	14
Kyrgyzstan	KGZ	1 103	121	6.0	1.8	2.2	3 960	299	189	27	98	42	12	21	23	37	37	–
Latvia	LVA	13 665	594	2.0	0.3	0.35	9 479	1 721	153	11	100	15	2	8	5	16	17	32
Lithuania	LTU	14 172	1 166	28.8	0.45	0.52	22 130	2 434	436	10	100	14	2	5	5	13	16	–
Luxembourg	LUX	101 450	5 717	0.57	0.09	0.11	23 803	3 632	1 079	11	100	6	1	2	3	6	7	–
Malta	MLT	22 776	2 124	0.42	0.06	0.08	12 831	1 444	450	10	100	13	4	6	5	13	11	29
MKD[a]	MKD[a]	4 853	539	2.1	0.37	0.42	1 320	25	44	11	100	19	6	6	8	17	18	26
Monaco	MCO	163 352	6 466	0.04	–	–	–	–	–	26	–	–	0	4	–	–	–	30
Montenegro	MNE	6 415	508	0.63	0.12	0.14	–	–	–	12	98	12	2	5	6	12	15	–
Netherlands	NLD	44 433	4 526	16.9	2.9	3.4	166 872	27 411	14 134	10	100	5	2	4	4	8	9	–
Norway	NOR	74 735	5 426	5.2	0.91	1.1	60 816	11 620	3 841	11	100	5	2	3	3	7	7	46
Poland	POL	12 495	1 115	38.5	5.8	6.9	218 147	34 883	8 878	10	100	14	2	5	5	10	13	31
Portugal	PRT	19 223	1 744	10.3	1.6	1.8	29 896	4 050	2 138	8	100	10	2	4	4	10	11	–
Republic of Moldova	MDA	1 843	264	4.1	0.57	0.69	2 070	–	–	11	100	27	5	16	12	23	25	17
Romania	ROU	8 973	868	19.5	3.2	3.7	132 795	–	–	9	90	39	3	11	10	18	22	12
Russian Federation	RUS	9 057	958	143.5	21.4	–	286 970	24 681	17 677	13	100	27	3	10	9	24	28	27
San Marino	SMR	62 993	3 173	0.03	0.01	0.01	429	–	–	8	100	1	0	3	0	–	–	31
Serbia	SRB	5 144	812	7.1	1.0	1.2	–	–	–	9	99	22	4	7	7	14	17	50
Slovakia	SVK	15 963	1 580	5.4	0.81	1.0	6 997	2 452	187	10	100	21	3	7	7	13	13	–
Slovenia	SVN	20 713	1 935	2.1	0.29	0.36	15 420	–	–	10	100	5	1	3	3	8	10	–
Spain	ESP	25 832	2 102	46.4	7.0	8.3	342 114	53 742	24 247	9	100	8	1	4	3	8	9	43
Sweden	SWE	50 273	4 385	9.8	1.6	2.0	134 240	30 133	11 224	12	100	3	1	3	3	7	8	23
Switzerland	CHE	80 215	4 269	8.3	1.2	1.5	153 627	20 152	8 930	10	100	2	3	4	4	8	9	18
Tajikistan	TJK	926	53	8.5	2.5	–	1 042	–	–	28	88	54	8	45	17	60	58	16
Turkey	TUR	9 130	803	78.7	19.0	–	–	–	–	17	94	29	4	14	12	33	31	–
Turkmenistan	TKM	6 948	209	5.4	1.8	–	–	–	–	31	96	21	8	51	25	63	60	–
Ukraine	UKR	2 115	297	44.8	6.4	7.6	–	–	–	11	100	27	4	9	9	24	26	–
United Kingdom	GBR	43 734	2 808	64.7	10.7	13.7	631 452	–	–	12	100	19	2	4	5	8	10	–
Uzbekistan	UZB	2 132	181	29.9	8.6	10.5	6 418	758	501	23	100	30	6	39	14	43	44	–
Average		27 028	1 904	17.1	3.1	2.8	123 716	23 635	11 168	13	99	17	3	9	7	17	19	27
Highest value		163 352	6 466	143.5	21.4	14.2	1 543 848	305 992	172 730	31	100	54	12	51	25	65	60	50
Highest country		MCO	MCO	RUS	RUS	FRA	DEU	DEU	DEU	TKM		TJK	KGZ	TKM	TKM	AZE	TKM	
Lowest value		926	53	0.03	0.01	0.01	429	25	10	8	88	1	0	2	0	6	6	12
Lowest country		TJK	TJK	SMR	SMR	SMR	SMR	MKD	ARM		TJK	SMR			SMR		AND	

[a]MKD: the former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO).

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12. Cross-cutting issues and conclusions

The health and well-being of European children and adolescents sits at the heart of this report, which seeks to shed light on areas that influence young people's transformation not only developmentally, but also in the social and political landscapes they inhabit in their home countries.

The European child and adolescent health strategy provided a regional template for this effort and gives countries a framework from which to build. The survey findings *(1)* and the child and adolescent health country profiles *(2)* provide feedback to Member States on areas where improvements can be made, and allows countries to compare themselves to others. Practical tools like AA-HA! *(3)* and other regional tools *(4)* contribute to this improvement process.

Indicators included here were mapped against other international initiatives such as the SDGs *(5)* and the global strategy for women's, children's and adolescents' health *(6)* (see Annex 2) to show the high degree of reciprocity between them, suggesting that by adopting actions in line with the European strategy, Member States will also be contributing to these wider initiatives. The 2030 Agenda encompassed by them places additional pressure to optimize investment and integration across policy areas to meet the commitments made by Member States.

Overall, the findings demonstrate the need for action in every country to realize the full potential of European children and adolescents. Policies are not enough. What needs to be considered can be taken out of this document, and specific feedback is being provided to countries by WHO. The data have been made available to all stakeholders, which also contributes to an improved accountability process in countries.

Strengths and limitations of the process

The survey's reliance on self-reporting by national ministries of health represents a limitation. The Regional Office liaised with ministries to improve responses for partially or incompletely answered questions, but not always successfully. The qualitative questions, which asked for explanations and examples, were answered with different levels of detail and uneven quality, making summing up and comparing results sometimes difficult. Some of the qualitative responses have been included in the narrative in relevant chapters as they provide further insight into the categorical questions. All responses are available from the WHO database.

Respondents were ministry of health staff, who were encouraged to consult with other ministries and experts in the field. Some inconsistencies were exposed during peer review of the survey results. This is particularly evident in relation to access to contraception or abortion without parental consent, where affirmative responses to the categorical question were often contradicted by qualitative information showing their limited scope (see Chapter 5), and ECD, where despite almost universal affirmation about the existence of ECD support systems (see Chapter 6), the qualitative responses cast doubt that programmes are being implemented comprehensively and effectively. Data were not changed, however. Inconsistencies and differences of opinion need to be resolved through dialogue in countries on potential improvements in data quality in preparation for the next survey round.

Decentralization of health issues in government

Many European countries are federally organized or have decentralized the responsibility for health to lower levels of government. The responses obtained might therefore not reflect the reality in all parts of the country: an example is the United Kingdom, where the situation in Scotland is quite different from that in England. Where health insurance funds are responsible for service delivery and professional bodies for the organization of care, the ministry of health has delegated authority to them and often does not collect data consistently.

Decentralization can also preclude countries from adopting appropriate mechanisms for safeguarding the quality of care that children and adolescents in need receive. This might be a problem where gaps need to be identified and addressed. Generally, formal governance processes are reported better from eastern European countries with a more centralized historical structure, compared to western European countries. For certain areas, like ECD, research has shown that integrated systems under one ministry or agency are associated with better quality (see Chapter 6), but this is often not translated into better governance scores and health outcomes, such as child mortality and adolescent pregnancy rates (see Chapter 11).

Data collection

One major issue documented in many countries relates to inadequate or uneven data collection on, for example, vulnerable children or neglected issues like maternal alcohol consumption. Lack of data to address the equality gap surfaced for many of the presented areas, specifically around disaggregation (for instance, in terms of differences by migrant status, ethnic and socioeconomic background, or about staffing levels by geographic area), inadequate availability (for the treatment of mental health conditions or infectious diseases, for example), or inconsistent data collection for key indicators (such as about children who institutionalized, undernourished or victims of violence). Lack of disaggregation affects countries' potential to address inequalities (see Chapter 3) and the ability of health systems to make the right choices for children and adolescents (see Chapter 4). Importantly, these indicators often are included in global monitoring efforts building towards the 2030 Agenda (see Annex 2).

Reporting by countries to WHO

The main European database to which countries report is the HFA database *(7)*, which provided a key source for the country profiles *(2)*. HFA, however, does not always reflect the reality in countries, with some data being old, out of date or scarcely reported. One area of particular concern was adolescent suicide rates, where more consistent and reliable reporting by countries is needed (see Chapter 8).

Countries sometimes have more recent data but do not report them back to WHO (on tobacco-smoke exposure, ability to buy tobacco products, introduction of vaccines or vaccination rates, for instance). There is also a discrepancy between modelled and self-reported data (see Chapter 11) in several of the higher-mortality countries, which indicates problems with the reliability of data for global monitoring *(8)*.

The WHO Regional Office for Europe has invested in the European Health Information Gateway (see Annex 1 for further details) *(9)*, which brings together data relevant to the countries in the Region. Including the data in this report and that used for regional monitoring of child and adolescent health in the publicly available European Health Information Gateway provides additional incentives to update and provide quality data for the online repository. Inconsistencies between different data can also be addressed in this way, by linking related answers in the Gateway for the ease of ministries and the general public.

Cross-national surveys

WHO encourages countries to join ongoing regional efforts, such as HBSC *(10)* and COSI *(11)*, to monitor the situation of children and adolescents comparably. Surveys like HBSC also provide a window into the health matters that are most important to children and adolescents. Other surveys have components that contribute to the regional picture, such as those on mental health, NCDs, alcohol and tobacco use, child abuse and neglect, and intimate-partner violence. Their data are used to monitor the child and adolescent health and other related strategies *(5,6,12–17)* and are available through the European Health Information Gateway *(9)*, which also allows cross-tabulating and linking of surveys.

Household surveys, such as USAID's DHS *(18)* and UNICEF's MICS *(19)*, represent a noticeable gap in data collection in Europe. They provide systematic population-based information on maternal and

child health-related behaviours such as immunization, complementary feeding practices and nutritional status of children under 5. Their data are used for global monitoring exercises like Countdown to 2030 *(20)*, but they primarily are undertaken in low- and lower-middle-income countries, so many European countries do not participate. If they do not already do so, countries must develop comparable means of collecting such data. Otherwise, there are noticeable gaps, especially evident in the child and adolescent health country profiles *(2)*.

Importantly, these data collections need to be used for action, addressing the gaps found and acting upon them. For adolescents, schools provide a convenient and important avenue for health promotion (see Chapter 6).

Services

Provision of services to children and adolescents is one of the most important functions of the health sector. Cross-cutting themes include the lack of quality assurance, particularly for mental health and sexual and reproductive health. Just over half of the Region's countries assess the quality of mental health services for children and adolescents or have guidance in place for facilitating the transition from child to adult mental health services. Health-care regimes can moderate inequalities, but barriers to access, like fees that need to be paid in about half of the countries for all services, make it difficult for children and adolescents in need *(21)* (see Chapter 4). This is against the principles of the UNCRC *(22)*, so needs to be addressed by countries.

Competent adolescents' access to care without parental consent is another area that needs action in a number of countries. While most countries have policies that provide guidance on consent, assent and confidentiality for children, adolescents, parents and health workers, there is still work to be done to facilitate access to services for children and adolescents through the removal of barriers to affordability; confidentiality and parental consent remain priorities.

Adolescent sexuality

Some governments are particularly inactive on the topic of the evolving sexuality of adolescents, perhaps reflecting discomfort or fear of opposition. The UNCRC, which all governments in the European Region have signed, is clear on participation and access to services *(22)*. The Region has also endorsed an action plan in this area *(15)* and has signed up to the 2030 Agenda *(5,6)*, both of which promote improvements, especially around better access to contraception, health services for at-risk groups, and access to sexual and reproductive health services, which are unequal across the Region. Half of the countries have a policy on sexuality education in schools (see Chapter 6), but policy is insufficient when the extent to which such education translates into knowledge is unknown (see Chapter 5). Standards for sexuality education in Europe with guidelines for the introduction of holistic sexuality education in countries have been developed *(23)* and can support societal change and improved outcomes for children and adolescents in countries throughout Europe.

Right to participation

Countries have a responsibility to facilitate children's and adolescents' participation in matters of concern to them (*22,24–26)*, but they find it challenging to identify what steps or measures are needed to achieve that goal *(27)*. National child and adolescent health strategies and some indicators would benefit from the increased participation of children and adolescents. Integrating participatory methods in child and adolescent health research is necessary to produce data that are meaningful to children and adolescents, reflect their lifestyles and are of value to policy and programmes *(28)*. Additionally, programmes that involve children and adolescents in their development and implementation are generally viewed as positive by children and can confer health benefits, especially on knowledge around health-related behaviours like smoking and healthy eating *(29)*.

The analysis shows that 15 countries with an ombudsman involved young people in the development of their child and adolescent health strategy, but 18 did not. This may indicate that even when there is a specific person in government with a mandate on children's rights, it may not be sufficient to catalyse change in this area (see Chapters 2 and 5). The promotion of practical tools *(30,31)* and measurement of participation of children and adolescents in matters that affect them *(27)* can remove barriers to their integration within national policy, research and programme landscapes. Increasing children's and adolescents' health literacy may support broader competence and contribute towards their critical thinking, self-awareness and citizenship skills *(32)*, which are crucial to embracing participation in society.

Social and political circumstances of child health and well-being

Social determinants have long been shown to be important for child health *(33)*. A country's GDP is strongly correlated with under-5 mortality and adolescent pregnancy rates. Interestingly, no association with income inequalities and the level of children living in poverty at country level could be found. This might indicate that these national indicators can be insufficiently sensitive to capture these inequities.

SDG 1, specifically target 1.2, directly addresses poverty in all its forms *(5)*, so more appropriate measures are needed. UNICEF, for example, has developed the Multiple Overlapping Deprivation Analysis policy tool *(34)*, which draws on the UNCRC to define the non-monetary dimensions of child poverty *(35)* and emphasizes age-appropriate constructs for children and adolescents *(36)*. The HBSC study is another rich source of data on the social determinants of health for adolescents *(10)*. In some countries, it has found that family affluence is often a weaker predictor of health problems than the socioeconomic position of the place of residence and the quality of social bonds *(37)*.

The effects of income inequality on health seem to be a result of a combination of individual socioeconomic factors and insufficient investment by countries in social protection and socioeconomic living conditions *(38)*. The strong relationship between child mortality and perceptions of corruption *(39)*, and with other governance indicators *(40)*, makes the case that governance interventions can be as important as specific medical interventions to improving child and adolescent health. Health needs to be in all policies, as stipulated in Health 2020 *(41)*.

Subregional differences

An interesting cross-cutting matter revealed by the survey was the broadness of subregional differences. Disparities can be found in areas such as governance, uptake of paediatric essential drugs lists, marketing of complementary feeding products and promotion of products to children, data collection on gaps between staffing levels by geographic area, and rates of fighting, bullying, classmate support, child mortality, adolescent pregnancy and breastfeeding. These are highlighted to promote national dialogue aimed at achieving incremental improvements, and because the differences provide a unique opportunity to share best practice in support of children and adolescents in Europe.

Targets

The increasing adoption of national frameworks in Europe favours action on child and adolescent health, but resolute responses are needed to fill the gaps identified: for example, a European response to under-5 mortality needs to reflect a commitment to, and action towards, decreasing corruption. Even when global targets exist (on exclusive breastfeeding or physical activity, for instance), wide variability or low rates in meeting the targets may indicate weak adherence or the need for different interventions.

Country feedback reports from survey data have been used to promote dialogue with countries about their achievements in child and adolescent health and possible areas for action. Monitoring and evaluating identified interventions will be critical to facilitating incremental improvements towards

national targets. Support for countries without systems to assess their national strategies shall remain a priority to promote evidence-informed programmatic and policy changes in the Region (see Chapter 2). Collaboration around regionally relevant targets for child and adolescent health can enhance national efforts to address findings from this work, align indicators with international commitments and reduce reporting requirements for countries in the Region *(17,42,43)*.

Progress towards 2020 and beyond

When the first European strategy for child and adolescent health and development was endorsed in 2005 *(44)*, a similar survey went to Member States in 2006 (WHO Regional Office for Europe, unpublished data, 2006). Two items allowed for a 10-year comparison for the 19 countries that participated in both surveys (see Chapters 2 and 5, and Annex 2). With 48 responses, the 2017 survey gave WHO a broader picture of the situation of children and adolescents in the countries than its predecessor. The survey will be repeated, as mandated by the WHO Regional Committee for Europe, in 2019 to record changes.

Aiming for full participation in the next round sends a strong message about national commitments to achieving a clearer subregional picture of child and adolescent health. A combined analysis will inform the renewal of the child and adolescent health strategy from 2021 onwards, in line with relevant strategies that cover the period up to 2030. These findings should inform decision-makers about trends in the Region and areas where they can effect change in their national policies in support of improved child and adolescent health and well-being. As 2020, the European strategy's endpoint, approaches, the ambitions embedded in the regional compromise towards achieving the 2030 Agenda are ready to be realized.

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Annex 1

Methodology

This annex summarizes the diverse data sources used in the report (see section on data sources), illustrates how they were analysed and presented (see section on data analysis and presentation), and describes how readers can become data explorers using the WHO European Health Information Gateway (see section on how to explore the data yourself).

Data sources

Country profiles on child and adolescent health

When the European child and adolescent health strategy 2015–2020 was adopted, supporting evidence was needed to assess the current status of child health in Europe and to monitor the strategy's implementation by identifying areas for action for national policy-makers. Initially, a set of country profiles was developed for all 53 Member States of the WHO European Region, which synthesized the best available data on child and adolescent health, and graphically presented them as one-page statistical summaries. The purpose of these profiles was to begin the development of an initial dataset and to inform the subsequent development of the baseline survey.

Profile indicators were selected based on how accurately and holistically they represented child and adolescent health, which was assessed through iterative expert consultation and collaboration with other WHO programme areas.

The final dataset was derived from the following sources.

- **Brotherton & Bloom, 2016**: article publishing statistics on human papillomavirus vaccination (Curr Obstet Gynecol Rep. 2015;4:220–33. doi:10.1007/s13669-015-0136-9).
- **European School Survey Project on Alcohol and Other Drugs (ESPAD):** partnering with the European Monitoring Centre for Drugs and Drug Addiction, ESPAD delivers a database focusing on substance use (http://www.espad.org/databases).
- **European Centre for Disease Prevention and Control (ECDC):** database focusing on the surveillance and monitoring of infectious diseases (https://ecdc.europa.eu/en/home).
- **Eurostat**: database of the European Commision with comprehensive statistics on public health, economy and other policies (http://ec.europa.eu/eurostat/web/main).
- **Health Behaviour in School-aged Children (HBSC):** a result of a collaboration with WHO, this cross-national survey monitors the health behaviours of 11-, 13- and 15-year-olds (for more details on HBSC, see section on HBSC) (http://www.hbsc.org/).
- **WHO**: six datasets or databases were used:
    - **Health for All Database (HFA)**: the first and most used dataset for this project, it provides a rich background for the data used for the country profiles as well as the current report. HFA data can be explored online in a novel and powerful way, as will be illustrated below in the section on exploring the data yourself: the European Health information Gateway (https://gateway.euro.who.int/en/datasets/european-health-for-all-database/).
    - **Global Health Observatory (GHO):** includes several health-related statistics (http://www.who.int/gho/en/).
    - **United Nations Children's Fund (UNICEF) database:** includes statistics on children, maternal health, water and sanitation, and education (https://data.unicef.org/).

- **WHO European Childhood Obesity Surveillance Initiative (COSI):** includes data on nutrition and physical activity (http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/activities/who-european-childhood-obesity-surveillance-initiative-cosi).
- **Global Youth Tobacco Survey (GYTS)**: has a data focus exclusively on tobacco (http://www.who.int/tobacco/surveillance/gyts/en/).
- **European database on human and technical resources for health (HlthRes-DB):** looks at human and technical resources for health (https://gateway.euro.who.int/en/datasets/european-database-on-human-and-technical-resources-for-health/).

Once synthesized, the data were formatted to align with the WHO Regional Office for Europe gateway metadata and uploaded online as part of the online database. PDF versions of the country profiles were uploaded as well, and are accessible via the WHO European Health Information Gateway at https://gateway.euro.who.int/en/country-profiles/.

Ultimately, the profiles synthesize an overview of population and health systems for each country, information on childhood infectious diseases, sexual and maternal health, risk behaviours, nutrition, and mental health and well-being. They also feature inequities and gender differences for boys and girls in six of the indicators.

Baseline survey for child and adolescent health strategy

Survey construction

The *baseline survey* was the central tool to capture the state of child and adolescent health and related policies in the European Region in accordance with the child and adolescent health strategy and complementary to the country profiles. While the profiles provided an overview of existing data on child and adolescent health for each country, some relevant information was missing to fully evaluate the progress of the strategy until 2020 and create an overall subregional picture. To fill these gaps, the baseline survey was created following this process.

Firstly, the child and adolescent health programme at the Regional Office developed a measurement framework to identify major objectives linked to the child and adolescent health strategy and to be reflected in the final questionnaire. Three objectives were identified: (1) increasing political commitment towards the development and implementation of national child and adolescent health strategies; (2) strengthening people-centred health systems and public health capacity to improve child and adolescent health; and (3) ensuring specific information is in place to address the social determinants of health and the equality gap for young people, parents and caregivers.

Second, the team reviewed the country profiles and generated items that complemented the existing data sources on the basis of the aforementioned objectives.

Lastly, experts throughout the Regional Office (such as programme managers on violence and injury prevention, nutrition, tobacco, alcohol and maternal health, among others) and WHO collaborating centres in the European Region provided their input and made suggestions for new items. The generated items were then reviewed and translated into Russian.

Survey structure

Overall, 82 questions were selected. The items were grouped according to three major areas corresponding to the objectives in the measurement framework: (1) policy environment; (2) people and capacity-building; and (3) evidence to address the equality gap. Questions were placed, starting with general items regarding health strategies and governance and ending with the most sensitive questions on sexual and reproductive health. The topic areas covered in the survey largely correspond to the chapters in this report. Regarding the type of data captured, 68% asked whether or not a specific policy – that is, recommended by the strategy or WHO guidelines – is in place in the country (for example, "Do you collect systematic information on maternal alcohol consumption? If Yes, please describe"), 19% asked for specific rates (such as, "What is the total hospitalization rate for pneumonia

for children under 5?") and 13% required qualitative descriptions ("How do you assess the quality of prenatal services at national level?", for instance). Qualitative information typically was requested to provide evidence of a particular action (such as links to relevant documents) or explain how a process takes place nationally, as shown before. The process of analysing data alongside other evidence is illustrated in the next section.

Data collection

The questionnaire was set up using an online survey tool (SurveyGizmo, Boulder (CO), United States of America) and was sent out to the 53 WHO focal points at ministries of health in the WHO European Region in August 2016 via an email participation link. Participants were invited to share the link with national experts for specific topic areas and it was possible to save and continue the questionnaire at any time. After the initial invitation to participate was sent, several individual reminders were sent out to address missing responses or respond to questions. Every new response submitted through the online system was reviewed for missing answers, clarity of responses or potential discrepancies between responses to quantitative and qualitative questions. There were 48 responses when the survey was closed in March 2017. Some of the countries only gave partial responses and left out certain questions, as is seen in the maps and tables used in the chapters of the main text. Despite several attempts to follow up with country representatives from Albania, Greece, Italy, Monaco and San Marino, they did not respond to the survey.

Complementary data

The country profiles and the baseline survey function as the main data sources for this report, but several other materials were also used; most of these databases are based on WHO and other United Nations sources.

WHO European survey 2006

In 2005, the first European strategy for child and adolescent health and development was adopted by the WHO Regional Committee. In this context, a previous survey was sent to countries in 2006. While most questions were different to the most recent baseline survey, there are a few comparable items that allowed for a 10-year comparison for the countries that participated in both surveys (19 countries). Both surveys, for example, asked countries whether they have adopted a child and adolescent health strategy (see Chapter 2) and whether young people participated in its review or development (see Chapter 5).

Health Behaviour in School-aged Children (HBSC)

HBSC is a cross-national survey that monitors the health behaviours of 11-, 13- and 15-year-olds using large representative samples. The data collection takes place every four years, making it a central tool in understanding health in young people as well as inequalities based on gender and family background. The study provided 15 indicators for the country profiles and the present report incorporates additional indicators that were not previously used in the country profiles. Fig. A1.1 illustrates the 42 Member States of the European Region that participate in HBSC. All data from HBSC international reports are available on the European Health Information Gateway (https://gateway.euro.who.int/en/datasets/hbsc/).

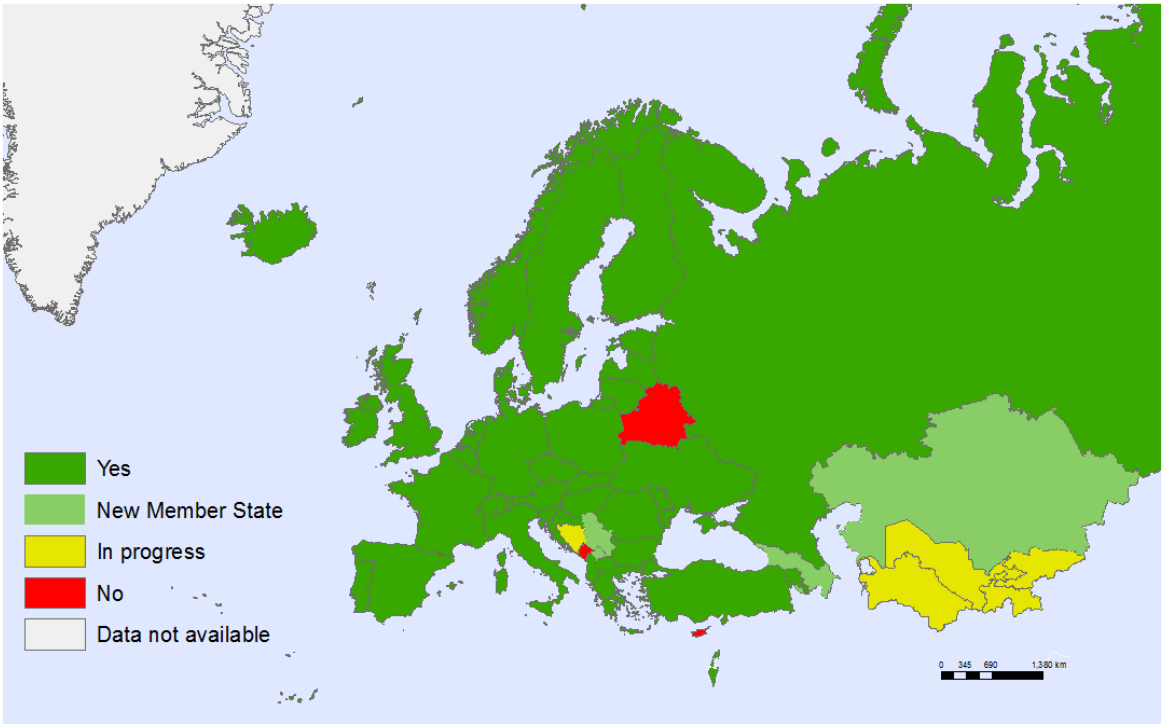
United Nations Population Division

Data from the United Nations Population Division (https://esa.un.org/unpd/wpp/) were used as some basis for indicators that required the number of children of a certain age range in each nation to compile comparable rates (such as rates of institutionalized children (see Chapter 3)).

Eurostat

Eurostat provided some statistical background data for European Union (EU) countries.

Fig. A1.1. Member States participating in the HBSC study



Models of Child Health Appraised (MOCHA) study

Chapter 4 features data from the Models of Child Health Appraised (MOCHA) study, which compares children's primary health care in 30 European countries. It derives its data from the European Observatory on Health Systems and Policies, expert opinions from national professional officers and the supplement to the *Journal of Pediatrics*.

European Childhood Obesity Surveillance Initiative (COSI)

Chapter 10 features data on obesity among children aged 6–9.

Global Health Observatory

Chapter 10 features data for insufficiently active adolescents.

Global nutrition policy survey

The survey was developed to facilitate reporting for the WHO European food and nutrition action plan 2015–2020. Data are available in the European Health Information Gateway. Chapter 10 features data on the implementation status of the Baby-friendly Hospital Initiative and marketing to children.

Data analysis and presentation

The following subsections describe how the different data sources were combined, analysed and presented in this report. They draw from the chapters' figures and tables to explain how they were created and meant to be understood by readers.

Country codes and abbreviations

The tables presented at the end of each chapter used country names as acknowledged by WHO alongside the United Nations ISO-3 country codes (see Table A1.1). Note that the name for the former Yugoslav Republic of Macedonia was continuously abbreviated in tables and graphs (due to space constraints) using the country ISO-3 code MKD.

Table A1.1. List of country names and abbreviations

Code	Country	Code	Country
ALB	Albania	KAZ	Kazakhstan
AND	Andorra	KGZ	Kyrgyzstan
ARM	Armenia	LTU	Lithuania
AUT	Austria	LUX	Luxembourg
AZE	Azerbaijan	LVA	Latvia
BEL	Belgium	MCO	Monaco
BGR	Bulgaria	MDA	Republic of Moldova
BIH	Bosnia and Herzegovina	MKD	The former Yugoslav Republic of Macedonia
BLR	Belarus	MLT	Malta
CHE	Switzerland	MNE	Montenegro
CYP	Cyprus	NLD	Netherlands
CZE	Czechia	NOR	Norway
DEU	Germany	POL	Poland
DNK	Denmark	PRT	Portugal
ESP	Spain	ROU	Romania
EST	Estonia	RUS	Russian Federation
FIN	Finland	SMR	San Marino
FRA	France	SRB	Serbia
GBR	United Kingdom of Great Britain and Northern Ireland	SVK	Slovakia
GEO	Georgia	SVN	Slovenia
GRC	Greece	SWE	Sweden
HRV	Croatia	TJK	Tajikistan
HUN	Hungary	TKM	Turkmenistan
IRL	Ireland	TUR	Turkey
ISL	Iceland	UKR	Ukraine
ISR	Israel	UZB	Uzbekistan
ITA	Italy		

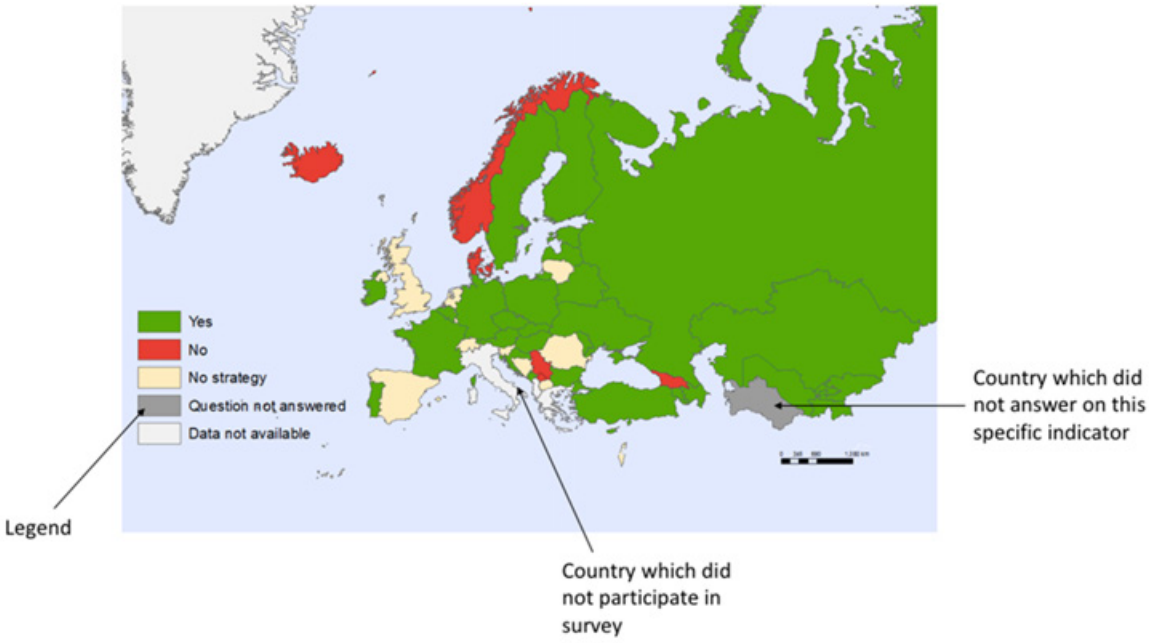
Geographic distributions and country groupings

Initially, the results of the baseline survey were analysed descriptively for each item with categorical options (for instance, "Is there a certain policy?", answered with either "Yes" or "No"). Two ways of visualizations were subsequently used: maps and bar charts.

Maps

The maps (see Fig. A1.2 and Fig. A1.3) present a visual overview of answers to a certain indicator. Fig. A1.3 shows colour-coded country groupings for example. They were created in accordance with WHO Regional Office for Europe guidelines, which enhances the size of some small countries and does not display non-Member States of the European Region. If the country's response is not clearly recognizable due to, for example, the map's format or the small size of the country, all responses can be validated in the tables at the end of each chapter. The maps illustrate the indicator name at the top and a legend in the bottom-left corner. Throughout this report, affirmative responses ("Yes") were always designed to be desirable from the view of the strategy or WHO guidelines, hence "Yes" is colour coded as **green**. In contrast, "No" responses are highlighted as **red**. Countries that are marked as **grey** did not respond to the specific item, while countries in **white** (such as Italy and Greece) did not participate in the survey.

Fig. A1.2. Sample map



Bar charts

The bar charts (Fig. A1.4) can be read as complementary to the maps. They present the responses to the same indicator, but analysed by official country groupings. The country groups are listed in Table A1.2. Notably, some countries do not belong to any of the groups and are therefore represented only in the left bar labelled as "Overall" and some countries belong to more than one category. The colour coding is also slightly different to the maps, as can be seen in the legend.

Fig. A1.3. Country grouping

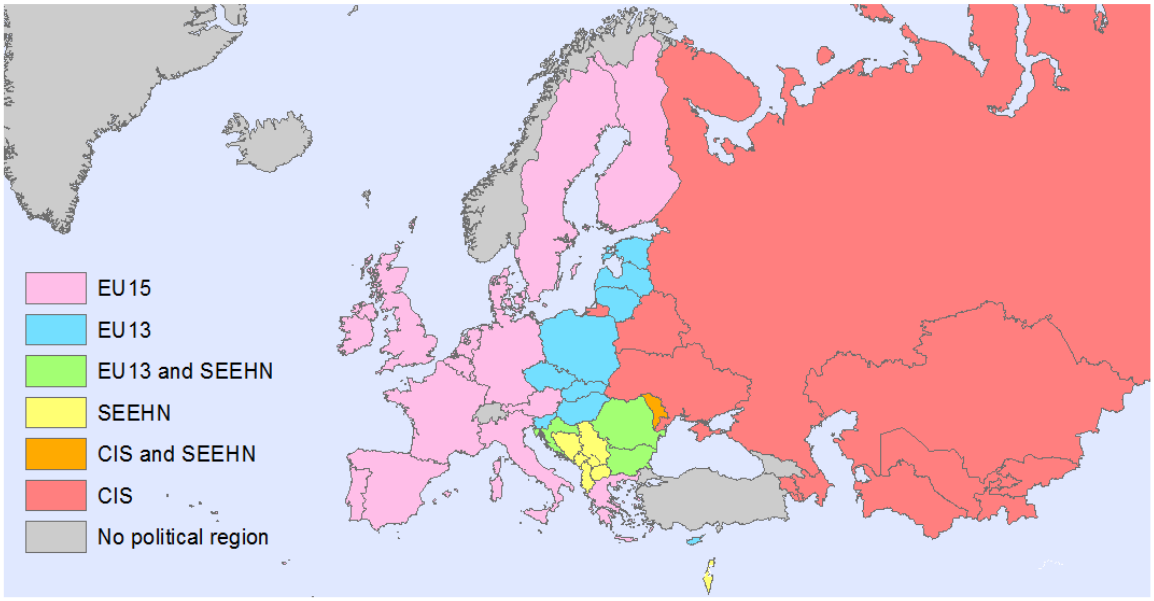


Fig. A1.4. Sample bar chart

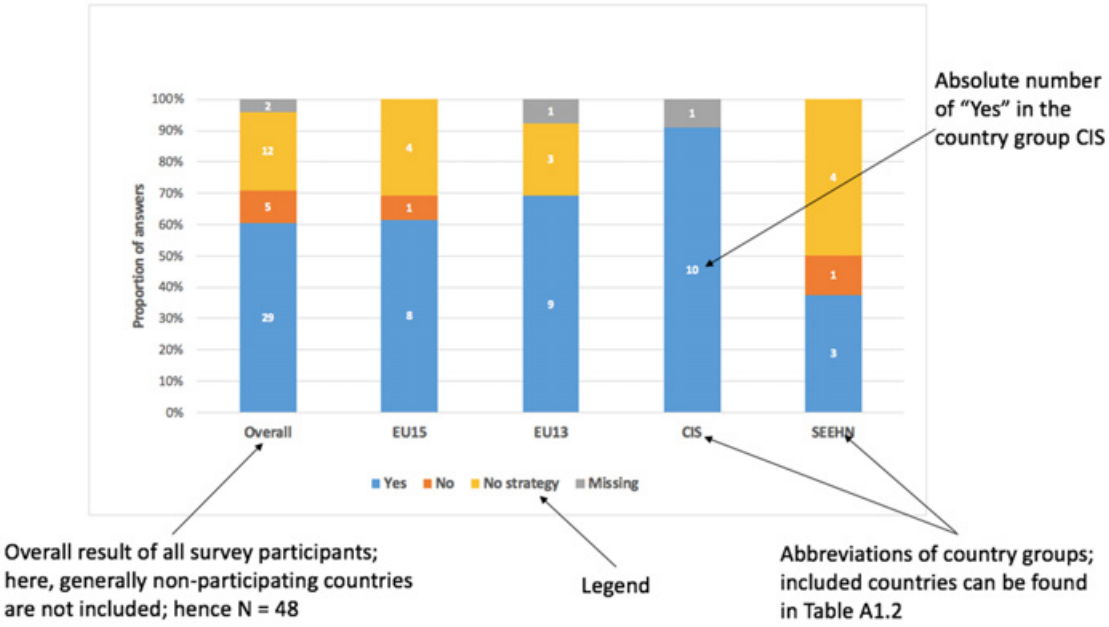


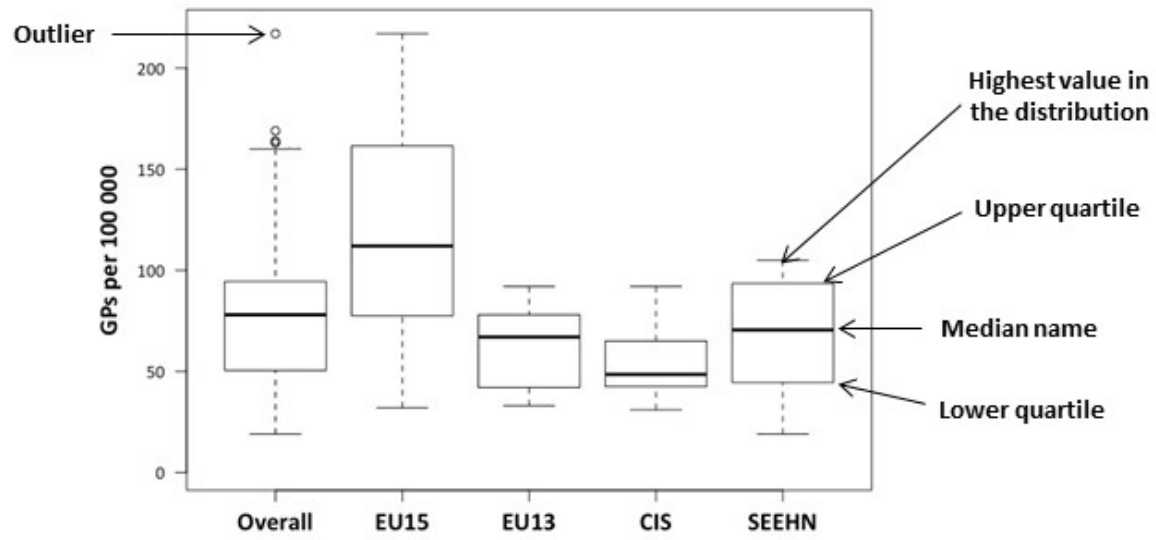
Table A1.2. Overview of country grouping

Group label	Description	Countries
CIS	Commonwealth of Independent States	Azerbaijan, Armenia, Belarus, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Uzbekistan, Ukraine
SEEHN	South-eastern Europe Health Network	Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, Republic of Moldova, Romania, Serbia, the former Yugoslav Republic of Macedonia
EU15	Member States that belonged to the European Union before May 2004	Austria, Belgium, Denmark, Germany, Finland, France, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom
EU13	Member States that joined the European Union since May 2004	Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia
Countries without specific group membership	Countries that do not belong to any of the groups specified in this table; these are captured under "Overall"	Andorra, Georgia, Iceland, Monaco, Norway, San Marino, Switzerland, Turkey

Rates and quantitative indicators

Some of the results in the chapters were derived from quantitative indicators and were displayed as boxplots (see Fig. A1.5). These were built using *R statistics* and compiled using country groupings, as described in Table A1.2. The measure of central tendency appears as thick black lines in each boxplot and represents the median score of the respective group. The value for each country can be found in the summary table at the end of each chapter. Additional quantitative analysis, in the form of regression analysis, was performed for a number of variables in Chapter 11 (see section below on additional analysis for Chapter 11).

Fig. A1.5. Sample boxplot



Qualitative analysis

In addition to quantitative results, some information presented within the chapters is derived from qualitative responses offered by countries in relevant comment boxes throughout the survey. In total, the baseline survey contained 51 questions with components asking for qualitative responses. Member States voluntarily responded to these questions, resulting in response rates of between 21% and 87% for different questions. A selected number of qualitative indicators were then analysed. These were chosen according to highest response rates and their potential to complement relevant quantitative statistics in the report to help better understand the situation in the European Region. Table A1.3 lists selected qualitative indicators.

Table A1.3. Qualitative indicators selected for analysis, listed from highest response rate

Question	Chapter	Response rate (%)
1. How is the minimum age for purchasing alcohol enforced? Please describe	7. Risk-taking and exploratory behaviours	86.8
2. What type of adolescent-friendly health services do you provide? Please describe	4. Health systems and quality of care	84.9
3. Please describe: do you have a policy of initiating exclusive breastfeeding in health facilities?	10. Nutrition and physical activity	84.9
4. Please describe and include link(s) to relevant documentation: do you have a system in place supporting early childhood development?	6. Health in schools	83.0
5. Please describe: is there an ombudsman for children with a mandate on children's and adolescents' rights?	5. Rights and participation	79.3
6. Can you provide an example(s) of government policies that have been considered in terms of their impact upon the health of children and adolescents? Government policies could include, for example, agriculture, transport, housing, justice or development policy, or fiscal decisions	2. Child and adolescent health strategy and governance	73.6

The responses were analysed using a thematic analysis approach, where text was coded by key concepts relevant to each indicator area. To outline the step-by-step process, indicator 5, *"Please describe: is there an ombudsman for children with a mandate on children's and adolescent's rights?"*, is used as an example.

Each indicator's responses were first rapidly reviewed and potential themes summarized and shared with the team for feedback and confirmation. For this question, additionally to the "Yes" or "No" responses, the potential themes identified from qualitative responses included: 1) the ombudsman's focus of mandate (children and/or rights); 2) the body to which the ombudsman belongs and their exact role (government, council, commissioner, adviser); 3) the level of authority (federal, national); and 4) other. Next, after the team discussed and confirmed the direction of analysis, the responses were thematically coded, guided by the potential themes. In the case of indicator 5, the analysis concentrated on whether countries focused their ombudsman's mandate exclusively on child rights or more broadly. The team was also interested in the level of authority at which the ombudsmen operated and what specific activities they were responsible for. The coded results were mapped in matrix tables. To finalize the analysis, the number of countries that described certain themes in their responses was calculated. For this question, of the 30 countries that described the ombudsman's mandate focus in

their responses, 23 described the mandate focus as child rights only, while seven described a broader target population; these two categories are mutually exclusive. For categories such as "details on ombudsman's responsibilities", the number of countries under each subcategory (that is, promotion of children's rights, monitoring of children's rights, administrative responsibilities) are not mutually exclusive because countries sometimes described multiple responsibilities. All final themes and their frequencies were inputted into the chapter text.

The following are important to note when reading the qualitative results.

- The qualitative responses were provided voluntarily by countries, so the percentages may not fully represent the reality within the European Region. They do, however, provide useful insights into potential trends.
- The responses are meant to be read in complementarity to the quantitative responses. Member States were often asked to provide a categorical response, and the qualitative text provides further insight into the country's context beyond their "Yes" or "No" response.

Summary tables

Summary tables (see Fig. A1.6) can be found at the end of each chapter and display the results of all indicators by country. On the left side of the summary table, categorical answers from the baseline survey are presented. These data (often in Yes/No format) are featured in green and light red and according values. For conditional questions, if a participant answered "No" to the original question, their answer(s) to the following conditional questions will contain a written version of the original questions' response (for example, *"Do you have a strategy" (strategy and governance) – No"*; *"Do you have a budget allocated to the Strategy?"* in table would appear as "No strategy").

Table legend

1. [Green colour] Yes
2. [Light red] No
3. [–] no data are available:
    a. white background – country did not participate
    b. grey background – country did not answer the question.

On the right side of the summary tables, country abbreviations and quantitative indicators are displayed. Quantitative indicators are colour coded so that darker shades of blue represent higher values and lower shades of blue represent lower values. Whether or not higher values can be interpreted as more or less desirable depends on the specific indicator and can be derived from the narrative in the chapters where the results are discussed.

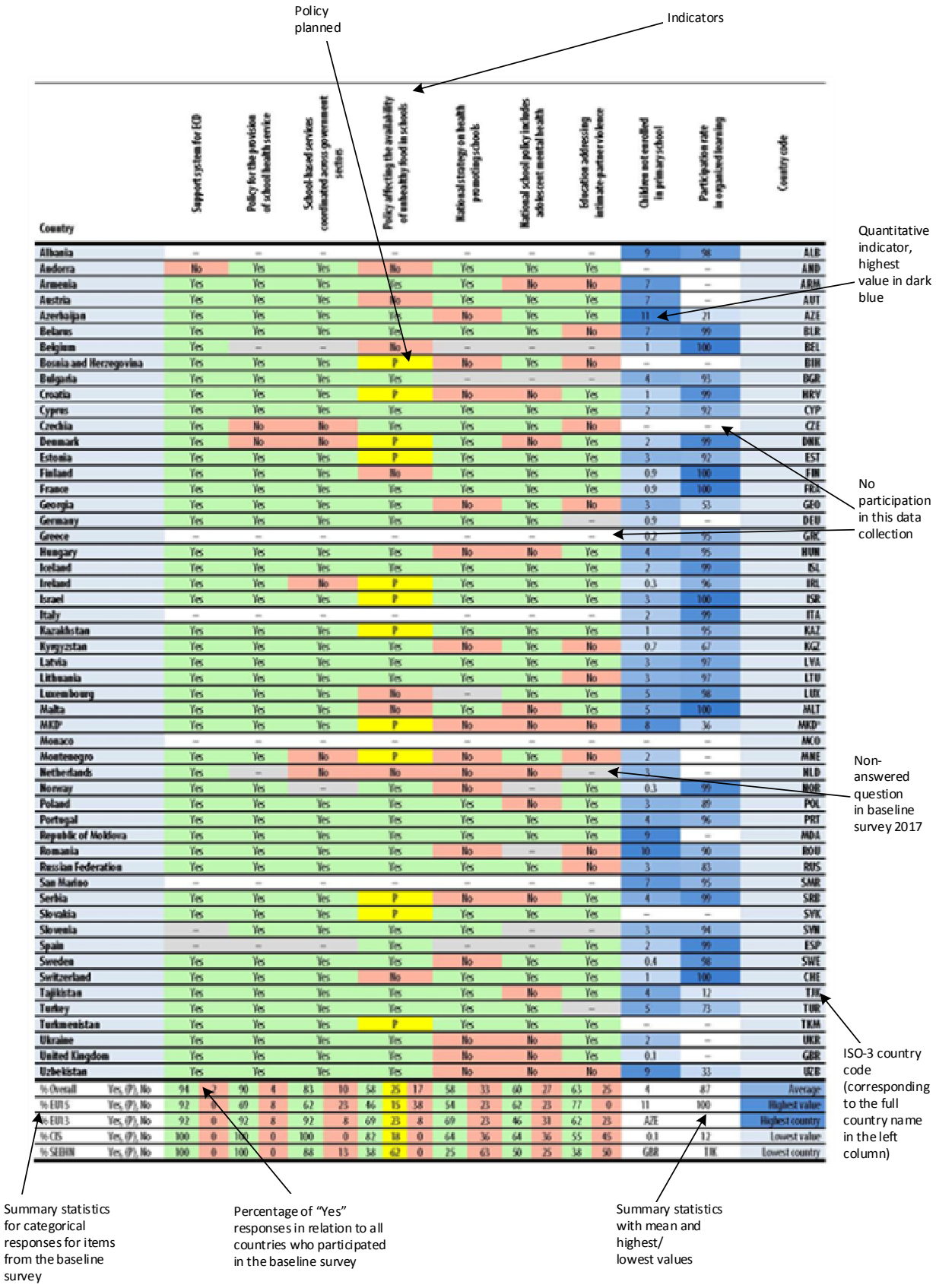
Summary statistics

Summary statistics for each indicator can be found at the bottom of the summary table. For indicators derived from the baseline survey, the summary statistics refer to all participating countries (N = 48). Missing values are not presented in the summary statistics but can be calculated from 100% in each category.

For quantitative indicators, summary statistics were calculated:

- from the total numbers of available answers for this indicator;
- only when there are more than half of the values (53), or 26 countries:
    - except for hospitalization rates (Chapter 4) because the average was still considered informative by the authors of this report;
- typically using percentage points as measures; and
- displaying the average, highest value and lowest value with corresponding country names (based on the available data).

Fig. A1.6. Sample summary table



Country	Support system for ED	Policy for the provision of school health service	School-based services coordinated across government sectors	Policy affecting the availability of unhealthy food in schools	National strategy on health promoting schools	National school policy includes adolescent mental health	Education addressing intimate-partner violence	Children not enrolled in primary school	Participation rate in organized learning	Country code
Albania	–	–	–	–	–	–	–	9	98	ALB
Andorra	No	Yes	Yes	No	Yes	Yes	Yes	–	–	AND
Armenia	Yes	Yes	Yes	Yes	Yes	No	No	7	–	ARM
Austria	Yes	Yes	Yes	No	Yes	Yes	Yes	7	–	AUT
Azerbaijan	Yes	Yes	Yes	Yes	No	Yes	Yes	11	71	AZE
Belarus	Yes	Yes	Yes	Yes	Yes	Yes	No	7	99	BLR
Belgium	Yes	–	–	No	–	–	–	1	100	BEL
Bosnia and Herzegovina	Yes	Yes	Yes	P	No	Yes	No	–	–	BIH
Bulgaria	Yes	Yes	Yes	Yes	–	–	–	4	93	BGR
Croatia	Yes	Yes	Yes	P	No	No	Yes	1	99	HRV
Cyprus	Yes	Yes	Yes	Yes	Yes	Yes	Yes	2	92	CYP
Czechia	Yes	No	No	Yes	Yes	Yes	No	–	–	CZE
Denmark	Yes	No	No	P	Yes	No	Yes	2	99	DNK
Estonia	Yes	Yes	Yes	P	Yes	Yes	Yes	3	92	EST
Finland	Yes	Yes	Yes	No	Yes	Yes	Yes	0.9	100	FIN
France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	0.9	100	FRA
Georgia	Yes	Yes	Yes	Yes	No	Yes	No	3	53	GEO
Germany	Yes	Yes	Yes	Yes	Yes	Yes	–	0.9	–	DEU
Greece	–	–	–	–	–	–	–	0.2	95	GRC
Hungary	Yes	Yes	Yes	Yes	No	No	Yes	4	95	HUN
Iceland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	2	99	ISL
Ireland	Yes	Yes	No	P	Yes	Yes	Yes	0.3	96	IRL
Israel	Yes	Yes	Yes	P	Yes	Yes	Yes	3	100	ISR
Italy	–	–	–	–	–	–	–	2	99	ITA
Kazakhstan	Yes	Yes	Yes	P	Yes	Yes	Yes	1	95	KAZ
Kyrgyzstan	Yes	Yes	Yes	Yes	No	Yes	No	0.7	67	KGZ
Latvia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	3	97	LVA
Lithuania	Yes	Yes	Yes	Yes	Yes	Yes	No	3	97	LTU
Luxembourg	Yes	Yes	Yes	No	–	Yes	Yes	5	98	LUX
Malta	Yes	Yes	Yes	No	Yes	No	Yes	5	100	MLT
MKDª	Yes	Yes	Yes	P	No	No	No	8	36	MKDª
Monaco	–	–	–	–	–	–	–	–	–	MCO
Montenegro	Yes	Yes	No	P	No	Yes	No	2	–	MNE
Netherlands	Yes	–	No	No	No	No	–	3	–	NLD
Norway	Yes	Yes	–	Yes	No	–	Yes	0.3	99	NOR
Poland	Yes	Yes	Yes	Yes	Yes	No	Yes	3	89	POL
Portugal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4	96	PRT
Republic of Moldova	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9	–	MDA
Romania	Yes	Yes	Yes	Yes	No	–	No	10	90	ROU
Russian Federation	Yes	Yes	Yes	Yes	Yes	Yes	No	3	83	RUS
San Marino	–	–	–	–	–	–	–	7	95	SMR
Serbia	Yes	Yes	Yes	P	No	No	Yes	4	99	SRB
Slovakia	Yes	Yes	Yes	P	Yes	Yes	Yes	–	–	SVK
Slovenia	–	Yes	Yes	Yes	Yes	–	–	3	94	SVN
Spain	–	–	–	Yes	–	–	Yes	2	99	ESP
Sweden	Yes	Yes	Yes	Yes	No	Yes	Yes	0.4	98	SWE
Switzerland	Yes	Yes	Yes	No	Yes	Yes	Yes	1	100	CHE
Tajikistan	Yes	Yes	Yes	Yes	Yes	No	Yes	4	12	TJK
Turkey	Yes	Yes	Yes	Yes	Yes	Yes	–	5	73	TUR
Turkmenistan	Yes	Yes	Yes	P	Yes	Yes	Yes	–	–	TKM
Ukraine	Yes	Yes	Yes	Yes	No	No	Yes	2	–	UKR
United Kingdom	Yes	Yes	Yes	Yes	No	No	Yes	0.1	–	GBR
Uzbekistan	Yes	Yes	Yes	Yes	No	No	No	9	33	UZB
% Overall Yes, (P), No	94	7	90	4	83	10	58	25	17	58	33	60	27	63	25	4	87	Average
% EU15 Yes, (P), No	92	8	69	8	62	23	46	15	38	54	23	62	23	77	0	11	100	Highest value
% EU13 Yes, (P), No	92	0	92	8	92	8	69	23	8	69	23	46	31	62	23	AZE		Highest country
% CIS Yes, (P), No	100	0	100	0	100	0	82	18	0	64	36	64	36	55	45	0.1	12	Lowest value
% SEEHN Yes, (P), No	100	0	100	0	88	13	38	62	0	25	63	50	25	38	50	GBR	TJK	Lowest country

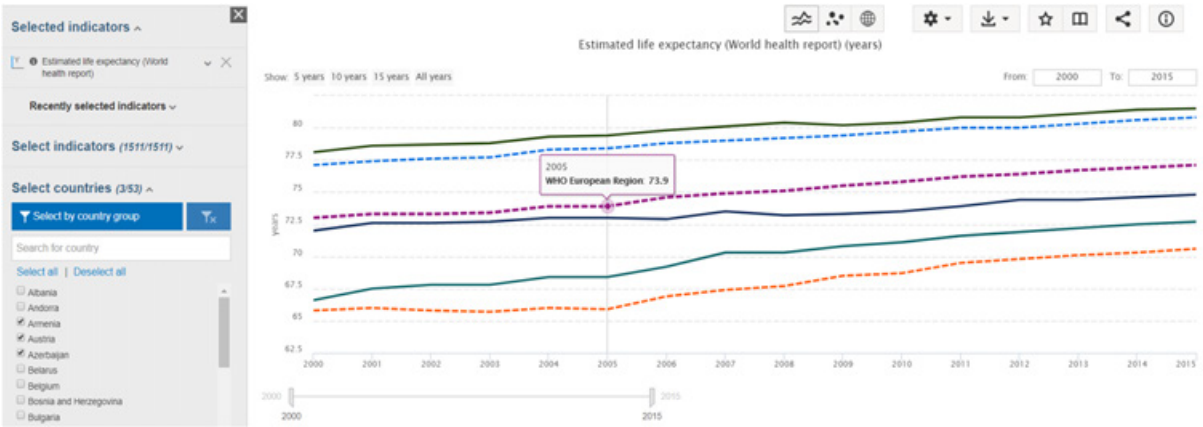
Additional analysis for Chapter 11

In order to investigate the association between child mortality (the probability of dying before the age of 5 years) and a selection of socioeconomic and political variables obtained from the World Bank Group and Transparency International, a number of simple statistical analyses were performed on the available data. These analyses were performed in SPSS version 24 (IBM SPSS Statistics for Windows, Version 24.0. Armonk (NY): IBM Corp. Released 2016.) and include basic correlation and univariate linear regression analyses. Logarithmic transformations were used so that the data met the assumptions of linear regression. The results of each analysis are summarized in the table below; r^2 values (indicator of model-fit) are presented in the chapter as a measure of the association between the predictor and dependant variable, as well as the p-value for each model, as an indicator of statistical significance. Statistical significance was set at $p < 0.05$. The regression coefficients have been omitted for ease of interpretation in the report, but are available from WHO on request. Only univariate analyses were performed and this should be taken into account when interpreting the results.

Explore the data yourself: the European Health Information Gateway

All data displayed in the chapters are available via the European Health Information Gateway. The goal is to enable individuals to draw from the collated data, retrace the report's analysis or conduct their own, thereby increasing access and transparency in data for child and adolescent health. The newly established tool **Health for All explorer** allows anyone to become an explorer of public health data (https://gateway.euro.who.int/en/hfa-explorer/). Fig. A1.7 shows a sample graph that can be created interactively and exported.

Fig. A1.7. Sample interface of the Health for All explorer



The datasets contain evidence from a large diversity of public health topics and often allow for trend analyses over a long period of time. Graphs and maps can be created interactively and exported easily for use in reports or presentations. This is also possible for specific countries and country groupings, allowing comparisons across the Region. Policy-makers, researchers, practitioners and anyone else interested is highly encouraged to use this tool to explore and advocate topics they find relevant.

Annex 2

Mapping of indicators

The WHO Regional Office for Europe mapped its child and adolescent strategy against other international efforts such as the United Nations Sustainable Development Goals (SDGs) and the global strategy for women's, children's and adolescents' health to showcase its complementarity to these efforts. The resulting work, shown in Table A2.1, points to a high degree of reciprocity between these efforts. Annex 3 complements this work by showing specifically the relationship between indicators in this report and the SDGs. This suggests that by implementing a national strategy that is in line with the European strategy, Member States will also be contributing to the aforementioned activities.

Table A2.1. Mapping of the SDGs, the global strategy for women's, children's and adolescents' health, and the European child and adolescent health strategy

SDG indicator	Global strategy for women's, children's and adolescents' health indicator	European strategy monitoring indicator (Fig. if in this report, otherwise indicator name/provenance (country profiles or chapter in report))
1.1.1 Population below the international poverty line	11.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location	Children at risk of poverty and social exclusion (0–15 years)/country profiles
1.4.1 Access to basic services		Fig. 9.3 Fig. 9.4
1.a.2 Government spending on essential services		Public-sector health expenditure, as % of total health expenditure/country profiles
2.2.1 Stunting	6.1 Prevalence of stunting (height for age <−2 standard deviations from the median of the WHO Child Growth Standards) among children under 5 years of age	Stunting/Chapter 10
2.2.2 Wasting/overweight	6.2 Prevalence of malnutrition (weight for height >+2 or <−2 standard deviations from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)	Wasting/Chapter 10 Fig. 10.11 Fig. 10.12
3.1.1 Maternal mortality	1.1 Maternal mortality ratio	Fig. 3.33 Fig. 3.34 How do you assess the quality of prenatal services at national level?/country profiles
3.2.1 Under-5 mortality	3.1 Under-5 mortality rate	Probability of dying before age 5, per 1 000 live births/country profiles, and Chapter 11
3.2.2 Neonatal mortality rate	2.1 Neonatal mortality rate	Early neonatal deaths, per 1 000 live births/country profiles Fig. 4.16 Fig. 4.17
3.3.1 New HIV infections	4.1 Number of new HIV infections per 1 000 uninfected population, by age and sex	New cases, as percentage of total reported cases/country profiles; estimated child HIV rates (0–14 years old)/Chapter 9; adolescent HIV rates (15–24 years)/HIV reported cases/Chapter 9
3.4.2 Suicide mortality rate	5.3 Suicide mortality rate, by age and sex	Fig. 8.8

Table A2.1 contd

SDG indicator	Global strategy for women's, children's and adolescents' health indicator	European strategy monitoring indicator (Fig. if in this report, otherwise indicator name/provenance (country profiles or chapter in report))
3.5.2 Harmful use of alcohol		Fig. 7.1 Fig. 7.2 Fig. 7.3 Fig. 7.4 Fig. 7.5–7.7 Do social welfare services provide support to young people who have family members with alcohol problems?/country profiles
3.7.1 Women over 15 who have family planning needs satisfied with modern methods	7.1 Percentage of women of reproductive age (15–49) who have their need for family planning satisfied with modern methods	Fig. 5.15 Fig. 5.16 Fig. 5.17 Fig. 5.18 Fig. 7.22 Fig. 7.23
3.7.2 Adolescent birth rate	7.2 Adolescent birth rate (10–14, 15–19) per 1 000 women in that age group	Live births to young mothers (under 20 years old)/country profiles and Chapter 11
3.8.1 Universal health coverage		Total health expenditure, purchasing power parity (PPP)$ per capita/country profiles Public-sector health expenditure, as % of total health expenditure/country profiles Fig. 11.6 Is coverage data for major interventions analysed in terms of the following differences, for example: Fig. 3.3 and 3.4. Fig. 3.5 and 3.6 by socioeconomic background; Fig. 3.7 and 3.8. Fig. 3.9 and 3.10. Fig. 3.1 and 3.2 Fig. 3.11 and 3.12 Fig. 3.17–3.21 Fig 3.13 and 3.14 Fig. 4.5 and 4.6 Fig. 4.9 and 4.10 Fig. 5.11 and 5.12
3.a.1 Prevalence of tobacco use among people over 15	5.1 Age-standardized prevalence of current tobacco use among persons 15 years and older, by age and sex	Fig. 7.8 and 7.9 Fig. 7.10 Fig. 7.11
3.b.1 Full vaccination coverage	3.5 Percentage of children fully immunized	Prevalence of vaccines (Chapter 9): diphtheria/country profiles Fig. 9.1 *Haemophilus influenzae* type B (Hib)/country profiles; pneumococcal conjugate vaccine (PCV)/country profiles; human papillomavirus /country profiles; and rotavirus/country profiles Fig. 9.2
3.c.1 Health worker density		Fig. 4.2 Fig. 4.3 Fig. 4.4 Fig. 8.5. Child psychologists per 100 000 child population/country profiles Fig. 3.35 and 3.36 In the last calendar year, what is the number or rate of children and adolescents under 18 treated by a mental health professional for attention deficit hyperactivity disorder (ADHD) and autism/Chapter 8

Table A2.1 contd

SDG indicator	Global strategy for women's, children's and adolescents' health indicator	European strategy monitoring indicator (Fig. if in this report, otherwise indicator name/provenance (country profiles or chapter in report))
4.2.1 Early childhood development under	8.1 Percentage of children under 5 years of age who are developmentally on track in health, learning and psychosocial wellbeing, by sex	Fig. 6.1. Do you have a system in place supporting early childhood development?/country profile
4.2.2 Participation rate in organized learning	8.2 Participation rate in organized learning (one year before the official primary entry age), by sex	Fig. 6.2 Fig. 6.3
5.2.1 Sexual violence by intimate partner	13.2 Proportion of ever-partnered women and girls aged 15 and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	Fig. 3.28 and 3.29 Fig. 6.16 and 6.17
5.2.2 Sexual violence by non-intimate partner		Fig. 3.28 and 3.29 Fig. 6.16 and 6.17
5.6.1 Women over 15 who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care	7.3 Proportion of women aged 15–49 who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care	Fig. 7.22 and 7.23 Fig. 3.28 and 3.29 Fig. 6.16 and 6.17
5.6.2 Countries with laws and regulations that guarantee access to sexual and reproductive health care	7.4 Number of countries with laws and regulations that guarantee women aged 15–49 access to sexual and reproductive health care, information and education	Fig. 9.2 Fig. 5.15 and 5.16 Fig. 5.17 and 5.18
6.1.1 Safely managed drinking-water	14.1 Percentage of population using safely managed drinking-water services	Fig. 9.3
6.2.1 Safely managed sanitation and hygiene	14.2 Percentage of population using safely managed sanitation services including a hand-washing facility with soap and water	Fig. 9.4
10.7.2 Countries that have implemented well-managed migration policies		Total immigrant population/country profiles; child immigrant population (0–14 years)/country profiles Adolescent immigrant population (15–19 years)/country profiles Fig. 3.11 and 3.12 Fig. 3.17–3.21 Fig. 3.15 and 3.16
16.1.1 Victims of international homicide		Child homicide (0–14 years old)/country profiles and Chapter 7
16.2.1 Child discipline		Fig. 3.26 and 3.27
16.2.3 Sexual violence against children	13.5 Proportion of young women and men aged 18–29 who experienced sexual violence by age 18	Fig. 3.28 and 3.29 Fig. 6.16 and 6.17
16.a.1 Existence of independent national human rights institutions in compliance with the Paris Principles		Is there an ombudsman for children with a mandate on children's rights?/Chapter 5 Fig. 5.2 and 5.3

Table A2.1 contd

SDG indicator	Global strategy for women's, children's and adolescents' health indicator	European strategy monitoring indicator (Fig. if in this report, otherwise indicator name/provenance (country profiles or chapter in report))
17.16.1 Countries reporting progress in multistakeholder development effectiveness monitoring frameworks that support the achievement of the SDGs	17.1 Number of countries reporting progress in multistakeholder development effectiveness monitoring frameworks that support the achievement of the SDGs	Fig. 2.11–2.13 Fig 5.4 and 5.5 Fig. 6.6 and 6.7
	2.3 Proportion of infants who were breastfed within the first hour of birth	Fig 10.6
	3.2 Percentage of children with diarrhoea receiving oral rehydration salts (ORS)	Oral rehydration therapy for diarrhoea (0–4 years old)/country profiles and Chapter 9
	3.3 Proportion of children with suspected pneumonia taken to an appropriate health provider	What is the total hospitalization rate for pneumonia for children under 5 (per 1 000 children under 5)?/country profiles and Chapter 9
	3.4 Percentage of infants <6 months who are fed exclusively with breast milk	Fig. 10.4 Fig. 10.5 Fig. 10.2 Fig. 10.3
	6.3 Prevalence of insufficient physical activity among adolescents	Fig. 10.23 and 10.24 Fig. 10.21 and 10.22
	6.5 Proportion of children aged 6–23 months who receive a minimum acceptable diet	Fig. 10.7 and 10.8 Fig. 10.9 and 10.10
	10.2 Current country health expenditure per capita (including specifically on reproductive, maternal, newborn, child and adolescent health financed from domestic sources)	Total health expenditure, PPP$ per capita/country profiles
	10.3 Out of-pocket health expenses as percentage of total health expenditure	Private households' out-of-pocket payments on health, as percentage of total health expenditure/country profiles
	7.5 Proportion of men and women aged 15–24 with basic knowledge about sexual and reproductive health services and rights	Fig. 5.9 and 5.10 Fig. 5.13 and 5.14 Fig. 6.14 and 6.15

Annex 3

Report indicators

Report indicators are shown in Table A3.1. For journal references, please see the reference section of the relevant chapter.

Table A3.1. Report indicators

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
		CHAPTER 1			
1.1	Mortality by age group and country	Mortality of children and adolescents in the European Region, by age group and country	United Nations Inter-agency Group for Child Mortality Estimation (UNIGME)	2017	
1.2	Under-5 mortality since 1980	Under-5 mortality in the European Region since 1980, by country grouping	UNIGME	2017	
1.3	Under-5 mortality by country grouping	Under-5 mortality by country grouping	UNIGME	2017	
1.4	Adolescent pregnancy rate	Adolescent pregnancy rate by country grouping	Global Health Observatory	2015	
		CHAPTER 2			
2.1, 2.2	Having a child and adolescent health strategy in 2017	Do you have a national strategy for child and adolescent health and development that has been adopted within the last five (5) years?	Baseline survey	2017	
2.3, 2.4	Having a budget allocated to the strategy	Does it have a budget allocated by parliament or government?	Baseline survey	2017	
2.5, 2.6	Type of strategy	Is it a standalone strategy or is it part of another strategy?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
		If child and adolescent health was included "as part of other policies or strategies" please explain which one.	Baseline survey	2017	
2.7, 2.8	Plans to review the strategy before 2020	Are there plans to review the existing child and adolescent health strategy before 2020?	Baseline survey	2017	
	Youth participation in child and adolescent health strategy development (2017)	Has youth been involved in the review/development/ implementation of the child and adolescent health strategy?	Baseline survey	2017	
2.9, 2.10	Systems to monitor implementation of the strategy	Are systems in place to monitor implementation of the child and adolescent health strategy against agreed targets or indicators?	Baseline survey	2017	
2.11, 2.12, 2.13	Mechanism for intersectoral planning (2017)	Does a mechanism for intersectoral and cross-government planning and implementation for child and adolescent health exist?	Baseline survey	2017	
		Which sectors are represented in the intersectoral task force/workgroup/committee?	Baseline survey	2017	
		How often does the intersectoral task force/workgroup/committee meet?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
		Can you provide example(s) of government policies that have been considered in terms of their impact upon the health of children and adolescents? Government policies could include, for example, agriculture, transport, housing, justice or development policy, or fiscal decisions.	Baseline survey	2017	
2.14, 2.15	Having an annual report on children and adolescents	Do you produce an annual report on the status of children and adolescents in your country?	Baseline survey	2017	
		CHAPTER 3			
3.1, 3.2	Child and adolescent health coverage data analysed in terms of differences in sex	Is coverage data for major interventions analysed in terms of differences e.g.: - by rural, suburban and specific urban areas? - by socioeconomic background? - by ethnic background? - by migrant status? - by sex?	Baseline survey	2017	
3.3, 3.4	Child and adolescent health coverage data analysed in terms of differences in rural, suburban, and specific urban areas	Is coverage data for major interventions analysed in terms of differences e.g.: - by rural, suburban and specific urban areas? - by socioeconomic background? - by ethnic background? - by migrant status? - by sex?	Baseline survey	2017	
3.5, 3.6	Child and adolescent health coverage data analysed in terms of differences in socioeconomic background	Is coverage data for major interventions analysed in terms of differences e.g.: - by rural, suburban and specific urban areas? - by socioeconomic background? - by ethnic background? - by migrant status? - by sex?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
3.7, 3.8	Child and adolescent health coverage data analysed in terms of differences in ethnic background	Is coverage data for major interventions analysed in terms of differences e.g.: - by rural, suburban and specific urban areas? - by socioeconomic background? - by ethnic background? - by migrant status? - by sex?	Baseline survey	2017	
3.9, 3.10	Child and adolescent health coverage data analysed in terms of differences in migrant status	Is coverage data for major interventions analysed in terms of differences e.g.: - by rural, suburban and specific urban areas? - by socioeconomic background? - by ethnic background? - by migrant status? - by sex?	Baseline survey	2017	
		How is this information shared with the public and used for policy-making?	Baseline survey	2017	
3.11, 3.12	Collecting systematic information on health of refugee children	Do you collect systematic information on the health of migrant and refugee children?	Baseline survey	2017	
3.13, 3.14	Statistics on the health services provided to at-risk groups, e.g. Roma or aboriginal children	Do you keep health statistics on the health services provided to at-risk groups, e.g. Roma or aboriginal children?	Baseline survey	2017	
3.15, 3.16	Statistics on the number of underage migrant or refugee children in care of social services	Do you have statistics on the number of single, underage migrant or refugee children in care of social services?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
3.17, 3.19, 3.21	Providing all care for free for migrant children	In relation to migrant and refugee children, please choose the type of health care free of charge that they are entitled to receive. Migrant: all care, only emergency services, preventative services, care for chronic conditions	Baseline survey	2017	
3.18, 3.20, 3.21	Providing all care for free for refugee children	In relation to migrant and refugee children, please choose the type of health care free of charge that they are entitled to receive. Refugee: all care, only emergency services, preventative services, care for chronic conditions	Baseline survey	2017	
3.22, 3.23		How many children are in institutional care (in total or rate with specified denominator)?	Baseline survey	2017	
3.24, 3.25		How many of the children in institutional care are under 3 (in total or rate with specified denominator)?	Baseline survey	2017	
3.26	Frequency of nationally representative surveys on child maltreatment	How often do you undertake nationally representative population- based surveys on child maltreatment (including abuse and neglect)? Every 1–3 years, every 4–6 years, every 7–10 years, never, other	Baseline survey	2017	
3.27	Frequency of nationally representative surveys on child maltreatment	Who completes the child maltreatment population-based surveys? Children themselves, parents, institutions, others	Baseline survey	2017	
3.28, 3.29	Representative surveys on intimate-partner violence including young people under 18	Does your country undertake nationally representative survey on sexual/intimate-partner violence that includes information on young people under 18?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
3.30, 3.32	Information systems separating out service provision to children	Do you have information systems in place that allow you to separate out service provision related to children and adolescents?	Baseline survey	2017	
3.31, 3.32	Information systems separating out provision to adolescents	Do you have information systems in place that allow you to separate out service provision related to children and adolescents?	Baseline survey	2017	
3.33, 3.34	Collecting data about maternal alcohol consumption	Do you collect systematic information on maternal alcohol consumption?	Baseline survey	2017	
3.35, 3.36	Collecting data on children and adolescents under 18 treated by a mental health professional	Do you have a system in place to collect information on the number of children and young people under 18 treated by a mental health professional?	Baseline survey	2017	
3.37		Please provide the number of prescriptions for mental and behavioural disorders for children and adolescents under 18.	Baseline survey	2017	
		CHAPTER 4			
4.2	General practitioners per 100 000 population	General practitioners, per 100 000 population	WHO European database on human and technical resources for health	2014	
4.3	General paediatricians per 100 000 population	General paediatricians per 100 000 population	WHO European database on human and technical resources for health	2014	
4.4	Nurses per 100 000 population	Practising nurses, per 100 000 population	WHO European database on human and technical resources for health	2014	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
4.5	Collecting data about gaps between staffing levels	Do you collect data about gaps between staffing levels for children and for adolescent health services disaggregated by urban/rural settings, capital/non-capital?	Baseline survey	2017	
4.6, 4.7	Mechanism for continuous education for professionals for adolescent health	Do you have a mechanism for continuous medical education for professionals (doctors, nurses, etc.) specifically for adolescent health?	Baseline survey	2017	
4.9, 4.10	Do adolescents have access to all services without pay?	Do adolescents have access to all services without pay?	Baseline survey	2017	
4.11	Open question	What type of adolescent-friendly health services do you provide?	Baseline survey	2017	
4.12, 4.13	Transition from paediatric to adult services for continuing care	Are there national laws, regulations or policies on the transition from paediatric to adult services for children who need continuing care?	Baseline survey	2017	
4.14, 4.15	Mechanism for assuring the quality of care	Do you have an existing mechanism for assuring the quality of care for children and/or adolescents?	Baseline survey	2017	
4.16, 4.17	Obligation to perform regular perinatal death audits	Is there a legal obligation to perform regular perinatal death audits in hospitals?	Baseline survey	2017	
4.18	Hospitalization rates in under-5s	What is the total hospitalization rate for children under 18 (per 1 000 in the respective age group)?	Baseline survey	2017	
4.19	Hospitalization rates for 5–9-year-olds	What is the total hospitalization rate for children under 18 (per 1 000 in the respective age group)?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
4.20	Hospitalization rates for 10–14-year-olds	What is the total hospitalization rate for children under 18 (per 1 000 in the respective age group)?	Baseline survey	2017	
4.21	Hospitalization rates 0–14 years	What is the total hospitalization rate for children under 18 (per 1 000 in the respective age group)?	Baseline survey	2017	
4.22	Hospitalization rates for 15–18-year-olds	What is the total hospitalization rate for children under 18 (per 1 000 in the respective age group)?	Baseline survey	2017	
4.23, 4.24	Paediatric essential drugs list is public	Have you adopted a paediatric essential drugs list?	Baseline survey	2017	
4.25, 4.26	Paediatric essential drugs list is public	Is the paediatric essential drugs list public?	Baseline survey	2017	
4.27	Paediatric formulations of all essential drugs	Do you have paediatric formulations of all essential drugs?	Baseline survey	2017	
4.28, 4.29	Information about the number of drug prescriptions	Do you collect information about the number of drug prescriptions to children and adolescents under 18?	Baseline survey	2017	
		CHAPTER 5			
5.1	Models of primary child-care systems	General practitioner-led, paediatrician-led or mixed primary care system	Models of Child Health Appraised (MOCHA)	2017	
5.1	Health under United Nations Convention of the Rights of the Child (UNCRC) reporting	Has health consistently been part of the national reporting under the United Nations Convention on the Rights of the Child (UNCRC)?	Baseline survey	2017	
5.2	Having an ombudsman with a mandate on children's rights, including right to health	Does the ombudsman's mandate include children's and adolescents' right to health?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
5.3	Having an ombudsman with a mandate on children's rights, including right to health	Is there an ombudsman for children with a mandate on children's and adolescents' rights?	Baseline survey	2017	
5.4, 5.5, 5.6	Youth participation in child and adolescent health strategy development (2017)	Has youth been involved in the review/development/ implementation of the child and adolescent health strategy?	Baseline survey	2017	
5.7, 5.8	Programme to provide foster care for institutionalized children	Do you have a programme in place to provide foster care for institutionalized children?	Baseline survey	2017	
5.9, 5.10	Policies providing guidance on consent, assent and confidentiality	Are policies in place providing guidance for children, adolescents, parents and health workers on consent, assent and confidentiality?	Baseline survey	2017	
5.11, 5.12	Policies for access to care for adolescents without parental consent	Are there legislation, policies or regulations for access to care for adolescents without parental consent?	Baseline survey	2017	
5.13, 5.14	Data on children's and adolescents' knowledge on sexuality	Do you collect information about children's and adolescents' knowledge on sexuality?	Baseline survey	2017	
5.15, 5.16	Legal access to contraception without parental consent	Is there legal access to contraception without parental consent in your country for adolescents under 18?	Baseline survey	2017	
5.17, 5.18	Legal abortion without parental consent	Is there legal access to abortions without parental consent in your country for adolescents under 18?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
		CHAPTER 6			
6.1		Is coverage data for major interventions analysed in terms of differences e.g.: - by rural, suburban and specific urban areas? - by socioeconomic background? - by ethnic background? - by migrant status? - by sex?	Baseline survey	2017	
6.2	Participation rate in organized learning	Participation rate in organized learning (one year before the official primary entry age)	UNStats	2007–2015	
6.3	Children not enrolled in primary school	Proportion of children not enrolled in primary school	Health for All database (HFA)	2016	
6.4, 6.5	Policy for the provision of school health services	Do you have legislation, policies or regulations for the provision of school health services?	Baseline survey	2017	
6.6, 6.7	School-based services coordinated across government sectors	Are school-based services coordinated across government departments/sectors?	Baseline survey	2017	
6.8, 6.9	National strategy on health promoting schools	Do you have a national strategy on health promoting schools?	Baseline survey	2017	
6.10, 6.11	Policy affecting the availability of unhealthy food in schools	Do you have legislation that affects the availability of unhealthy foods in schools?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
6.12, 6.13	National school policy includes adolescent mental health	Does the national school policy include adolescent mental health?	Baseline survey	2017	
6.14, 6.15	Policy on the provision of sexuality education in school	Do you have a policy of having sexuality education in schools? Primary school, secondary school?	Baseline survey	2017	
6.16, 6.17	Education addressing intimate-partner violence	Does your country undertake age- and gender-appropriate education that addresses sexual/ intimate-partner violence?	Baseline survey	2017	
		CHAPTER 7			
7.1	Lifetime drunkenness, girls 15 (%)	Percentage of young people 15 years of age who have been drunk at least once, by sex	Health Behaviour in School-aged Children database (HBSC)	2014	
7.2	Lifetime drunkenness, boys 15 (%)	Percentage of young people 15 years of age who have been drunk at least once, by sex	HBSC	2014	
7.3	Alcohol consumption 3+ drinks in last 30 days, girls 15 (%)	Percentage of 15-year-olds having drunk any alcoholic beverage on three or more occasions in the last 30 days, by sex	HBSC	2014	
7.4	Alcohol consumption 3+ drinks in last 30 days, boys 15 (%)	Percentage of 15-year-olds having drunk any alcoholic beverage on three or more occasions in the last 30 days, by sex	HBSC	2014	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
7.5	Minimum age to purchase beer	What are the present minimum ages for young people to purchase alcohol? Beer	Baseline survey	2017	
7.6	Minimum age to purchase wine	What are the present minimum ages for young people to purchase alcohol? Wine	Baseline survey	2017	
7.7	Minimum age to purchase spirits	What are the present minimum ages for young people to purchase alcohol? Spirits	Baseline survey	2017	
7.8	Smoking, girls 15 (%)	Percentage of young people of 15 years smoking, by sex	HBSC	2014	
7.9	Smoking, boys 15 (%)	Percentage of young people of 15 years smoking, by sex	HBSC	2014	
7.10	Smoke exposure, 13–15-year-olds (%)	Percentage of young people (13–15 years old) exposed to other smoking people by exposure location	Global Youth Tobacco Survey (GYTS)	2012	
7.11	Ability to buy cigarettes in store, 13–15 years (%)	Percentage of underage people (13–15 years old) who have the ability to buy cigarettes at the store	GYTS	2012	
7.12	Lifetime cannabis use, girls 15 (%)	Percentage of young people of 15 years who have ever used cannabis	HBSC	2014	
7.13	Lifetime cannabis use, boys 15 (%)	Percentage of young people of 15 years who have ever used cannabis	HBSC	2014	
7.14	Bullying others, girls 15 (%)	Percentage of young people of 15 years who have bullied others at school at least twice in the last couple of months, by sex	HBSC	2014	 

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
7.15	Bullying others, boys 15 (%)	Percentage of young people of 15 years who have bullied others at school at least twice in the last couple of months, by sex	HBSC	2014	
7.16	Being bullied, girls 15 (%)	Percentage of young people of 15 years who have been bullied at school at least twice in the past couple of months, by sex	HBSC	2014	
7.17	Being bullied, boys 15 (%)	Percentage of young people of 15 years who have been bullied at school at least twice in the past couple of months, by sex	HBSC	2014	
7.18	Fighting, girls 15 (%)	Percentage of young people of 15 years who have been involved in a physical fight at least three times in the last 12 months, by sex	HBSC	2014	
7.19	Fighting, boys 15 (%)	Percentage of young people of 15 years who have been involved in a physical fight at least three times in the last 12 months, by sex	HBSC	2014	
7.20	Medically attended injuries, girls 15 (%)	Percentage of young people of 15 years who report at least one medically attended injury in the last 12 months, by sex	HBSC	2014	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
7.21	Medically attended injuries, boys 15 (%)	Percentage of young people of 15 years who report at least one medically attended injury in the last 12 months, by sex	HBSC	2014	
7.22	Condom use at last intercourse, girls 15 (%)	Percentage of young people (15 years old) who used a condom at last intercourse, by sex	HBSC	2014	
7.23	Condom use at last intercourse, boys 15 (%)	Percentage of young people (15 years old) who used a condom at last intercourse, by sex	HBSC	2014	
		CHAPTER 8			
8.1, 8.2	Assess the quality of mental health services	Do you have an existing mechanism to assess the quality of mental health services for children and adolescents under 18 years of age?	Baseline survey	2017	
8.3, 8.4	Transition guidance from child to adult mental health services	Is guidance in place for the transition from child to adult mental health services?	Baseline survey	2017	
8.5	Psychiatrists per 100 000	How many child psychiatrists and child psychologists are currently practising in your country?	Baseline survey	2017	
8.6, 8.7	Community services for early interventions	Do you offer community services for early intervention and continuing support to young people with a first episode of a severe mental health problem?	Baseline survey	2017	
8.8	Child suicide rate per 1 million child population (0–14)	Rate of reported cases of child suicide (0–14 years old) per 1 million child population	WHO European Mortality Database (MDB)	2014	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
8.9	15-year-old girls who report high life satisfaction (%)	Percentage of young people of 15 years reporting high life satisfaction, by sex	HBSC	2014	
8.10	15-year-old boys who report high life satisfaction (%)	Percentage of young people of 15 years reporting high life satisfaction, by sex	HBSC	2014	
8.11	15-year-old girls who report fair or poor health	Percentage of young people of 15 years reporting fair or poor health, by sex	HBSC	2014	
8.12	15-year-old boys who report fair or poor health	Percentage of young people of 15 years reporting fair or poor health, by sex	HBSC	2014	
8.13	15-year-old girls with multiple health complaints	Percentage of young people of 15 years with multiple health complaints, by sex	HBSC	2014	
8.14	15-year-old boys with multiple health complaints	Percentage of young people of 15 years of age with multiple health complaints, by sex	HBSC	2014	
8.15	Classmate support, girls 15 (%)	Percentage of young people of 15 years who agree that their classmates are kind and helpful, by sex	HBSC	2014	
8.16	Classmate support, boys 15 (%)	Percentage of young people of 15 years who agree that their classmates are kind and helpful, by sex	HBSC	2014	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
		CHAPTER 9			
9.1	Measles vaccination under 2 years (%)	Percentage of children vaccinated against measles	HFA	2016	
9.2	Human papillomavirus (HPV) vaccination available free of charge	Has your country made HPV vaccination available through national vaccination programmes free of charge?	Baseline survey	2017	
9.3	Homes connected to water supply system (%)	Population with homes connected to water supply system	HFA	2015	
9.4	Access to sewage system (%)	Population with access to sewage system, septic tank or other hygienic means of sewage disposal	HFA	2015	
		CHAPTER 10			
10.1	Partial and exclusive breastfeeding rates at 6 months	Infants breastfed at 6 months (partial or exclusive rates)	HFA Breastfeeding practices and policies in WHO European Region Member States	1988–2015 1999–2013	
10.2	Having a breastfeeding policy	Do you have a policy of initiating exclusive breastfeeding in health facilities?	Baseline survey	2017	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
10.3	Implementation status of Baby-friendly Hospital Initiative	Implementation status of the Baby-friendly Hospital Initiative in 2017	Global nutrition policy survey	2017	
10.4	Breastfeeding under 6 months (%)	Infants breastfed at 6 months (partial or exclusive)	HFA	1988–2012	
10.5	Exclusive breastfeeding under 6 months (%)	Percentage of infants breastfed at age 6 months	Bosi et al. 2016	1999–2013	
10.6	Breastfeeding within one hour after birth (%)	Infants breastfed after one hour	Bosi et al. 2016	2004–2012	
10.7, 10.8	Collecting data on complementary feeding	Do you collect data on complementary feeding habits for children 6–24 months?	Baseline survey	2017	
10.9, 10.10	Collecting data on complementary feeding product marketing	Do you collect data on the marketing of complementary feeding products for children 6–24 months?	Baseline survey	2017	
10.11, 10.12	Collecting data on overweight under 5 years	Do you collect data on the prevalence of overweight/obesity of children under 5?	Baseline survey	2017	
10.13	Childhood Obesity Surveillance Initiative (COSI) member countries	Member countries of COSI	WHO	2015–2016	
10.14	Obesity/overweight, girls 15 (%)	Percentage of young people (15 years old) with overweight and obesity	HBSC	2014	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
10.15	Obesity/overweight, boys 15 (%)	Percentage of young people (15 years old) with overweight and obesity	HBSC	2014	
10.16	Having regulations that restrict marketing to children	Do you have any laws or regulations which restrict marketing to children?	Baseline survey	2017	
10.17	Soft-drink consumption, girls 15 (%)	Percentage of young people of 15 years reporting drinking soft drinks at least once a day, by sex	HBSC	2014	
10.18	Soft-drink consumption, boys 15 (%)	Percentage of young people of 15 years reporting drinking soft drinks at least once a day, by sex	HBSC	2014	
10.19, 10.20	Collecting soft-drink data	Do you collect data about soft-drink consumption for children and adolescents?	Baseline survey	2017	
10.21	Moderate-to-vigorous physical activity (MVPA), girls 15	Percentage of young people of 15 years reporting at least one hour of MVPA daily, by sex	HBSC	2014	
10.22	MVPA, boys 15	Percentage of young people of 15 years reporting at least one hour of MVPA daily, by sex	HBSC	2014	
10.23	Insufficiently active 11–17 year-olds (%) girls	Percentage of school-going adolescents not meeting WHO recommendations on physical activity for health, i.e. doing less than 60 minutes of MVPA daily	HBSC	2014	
10.24	Insufficiently active 11–17 year-olds (%) boys	Percentage of school-going adolescents not meeting WHO recommendations on physical activity for health, i.e. doing less than 60 minutes of MVPA daily	HBSC	2014	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
10.25	Brushing teeth, girls 15 (%)	Percentage of young people of 15 years reporting brushing their teeth more than once a day, by sex	HBSC	2014	
10.26	Brushing teeth, boys 15 (%)	Percentage of young people of 15 years reporting brushing their teeth more than once a day, by sex	HBSC	2014	
		CHAPTER 11			
11.1	Self-reported and estimated child mortality rates in European countries in 2015	Under-5 mortality rate per 1 000 children Probability of dying before the age of 5 per 1 000 children	Global Health Observatory (GHO) HFA	2015 2015	
11.2	Child mortality and its association with gross domestic product (GDP)	Probability of dying before the age of 5 GDP per capita	HFA World Bank Group	2015 2015	
11.3	Child mortality and its association with health expenditure in int$(PPP)	Probability of dying before the age of 5 PPP$ per capita	HFA HFA	2015 2015	
11.4	Child mortality and its association with the Gini Index	Probability of dying before the age of 5 Gini coefficient (income distribution)	HFA World Bank Group	2015 2014	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
11.5	Child mortality and its association with the Corruption Perceptions Index	Probability of dying before the age of 5 Perceived levels of public sector corruption	HFA Transparency International	2015 2015	
11.6	Private out-of-pocket expenditure and its association to corruption	Private households' out-of-pocket payments on health Perceived levels of public sector corruption	HFA Transparency International	2014 2015	
11.7	Child mortality and its association with the Voice and Accountability Index	Probability of dying before the age of 5 Perceptions of the extent to which citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media	HFA World Bank Group	2015 2015	
11.8	Child mortality and its association with Government Effectiveness Estimate	Probability of dying before the age of 5 Perceptions of the quality of public services, civil service and the degree of independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies	HFA World Bank Group	2015 2015	
11.9	Child mortality and its association with political stability and absence of violence/terrorism index	Probability of dying before the age of 5 Perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism	HFA World Bank Group	2015 2015	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
11.10	Child mortality and its association with Rule of Law Estimate	Probability of dying before the age of 5 Perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence	HFA World Bank Group	2015 2015	
11.11	Child mortality and its association with Regulatory Quality Estimate	Probability of dying before the age of 5 Perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development	HFA World Bank Group	2015 2015	
11.12	Adolescent pregnancy rate	Adolescent birth rate per 1 000 girls aged 15–19	United Nations Population Fund (UNFPA)	2006–2015	
11.13	Adolescent pregnancy rate and child mortality	Adolescent birth rate per 1 000 girls aged 15–19 Probability of dying before the age of 5	UNFPA HFA	2006–2015 2015	
11.14	Adolescent pregnancy rate and its association with GDP	Adolescent birth rate per 1 000 girls aged 15–19 GDP per capita	UNFPA World Bank Group	2006–2015 2015	
11.15	Adolescent pregnancy rate and its association with Gini Index	Adolescent birth rate per 1 000 girls aged 15–19 Gini coefficient (income distribution)	UNFPA World Bank Group	2006–2015 2014	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
11.16	Adolescent pregnancy rate and its association with the Corruption Perceptions Index	Adolescent birth rate per 1 000 girls aged 15–19 Perceived levels of public sector corruption	UNFPA Transparency International	2006–2015 2015	
11.17	Adolescent pregnancy rate and its association with Voice and Accountability Index	Adolescent birth rate per 1 000 girls aged 15–19 Perceptions of the extent to which citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media	UNFPA World Bank Group	2006–2015 2015	
11.18	Adolescent pregnancy rate and its association with Government Effectiveness Estimate	Adolescent birth rate per 1 000 girls aged 15–19 Perceptions of the quality of public services, civil service and the degree of independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies	UNFPA World Bank Group	2006–2015 2015	
11.19	Adolescent pregnancy rate and its association with political stability and absence of violence/terrorism index	Adolescent birth rate per 1 000 girls aged 15–19 Perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism	UNFPA World Bank Group	2006–2015 2015	
11.20	Adolescent pregnancy rate and its association with Rule of Law Estimate	Adolescent birth rate per 1 000 girls aged 15–19 Perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence	UNFPA World Bank Group	2006–2015 2015	

Table A3.1 contd

Fig. number (if applicable)	Indicator short title	Indicator title in full	Data source	Year	Relevant Sustainable Development Goal (SDG)
11.21	Adolescent pregnancy rate and its association with Regulatory Quality Estimate	Adolescent birth rate per 1 000 girls aged 15–19	UNFPA	2006–2015	
		Perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development	World Bank Group	2015	

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