Transforming the health and social equity landscape: promoting socially just and inclusive growth to improve resilience, solidarity and peace DRAFT FOR CONSULTATION





Transforming the health and social equity landscape: promoting socially just and inclusive growth to improve resilience, solidarity and peace

Draft for consultation. Not for distribution

© World Health Organization 2023

All rights reserved. This information material is intended for a limited audience only. It may not be reviewed, abstracted, quoted, reproduced, transmitted, distributed, translated or adapted, in part or in whole, in any form or by any means.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

This report uses data from Eurostat, EU Statistics on Income and Living Conditions [2004-2021]. The responsibility for all conclusions drawn from the data lies entirely with the author(s).

Contents

Foreword	iv
Acknowledgements	V
Abbreviations	vii
Executive summary	viii
1. Introduction.	1
1.1 Background	1
1.2 Methodology	3
2. Changing health, economic and social inequities in Europe	6
2.1 Inequities in health, well-being and health systems	6
2.2 Economic trends and implications for health equity	23
2.3 Inequities in social capital and implications for health equity	38
3. Emerging themes	46
3.1. Invest in young people	46
3.2. Develop responsive social and health protection systems	48
3.3. Ensure that all policies and services deliver higher trust in institutions and a policy impact for people	_
3.4. Promote equitable digital and green economic recovery that promotes well-b	eing.52
3.5. Ensure mechanisms for equitably distributing health and care resources	53
3.6. Policy considerations	56
4. Conclusions	60
References	61
Annex 1. Details of the methodology used	72
Annex 2. Country clusters	81
Annex 3. Country data for selected figures	83

Foreword

[To come]

Acknowledgements

Authors

Ben Barr

WHO Collaborating Centre for Policy Research on Determinants of Health Equity, University of Liverpool, United Kingdom

Emma Wright

WHO Collaborating Centre for Policy Research on Determinants of Health Equity, University of Liverpool, United Kingdom

Sophie Baird

WHO Collaborating Centre for Policy Research on Determinants of Health Equity, University of Liverpool, United Kingdom

Alexandros Alexiou

WHO Collaborating Centre for Policy Research on Determinants of Health Equity, University of Liverpool, United Kingdom

Andy Pennington

WHO Collaborating Centre for Policy Research on Determinants of Health Equity, University of Liverpool, United Kingdom

Anne-Marie Bagnall

Centre for Health Promotion Research at Leeds Beckett University, United Kingdom

Chris Brown, Head of the WHO European Office for Investment for Health and Development) was responsible for the strategic development and coordination of the report, with contributions and insights from Amanda Shriwise (WHO Consultant), Anastasia

Dementieva, Antonella Biasiotto, Sara Darias-Curvo (WHO Consultant), Isabel Yordi Aguirre (Regional Technical Officer, Gender Equality and Rights) and Milena Selivanov.

Roman Mogilevskii and Mariia Ianova (Iamshchikova) of the University of Central Asia provided data and supported the development of the findings with insight from Member States of the WHO European Region in central Asia.

Scientific Advisory Group of Experts to the HESRi: Chris Brown (Chair), Isabel Yordi Aguirre, Matthias Franz Wilhelm Braubach, Paula Braveman, Giuseppe Costa, Paula Franklin, Peter Goldblatt, Scott Greer, Louise Haagh, Rachel Hammonds, Johanna Hanefeld, Heli Hätönen, Heikki Hiilamo, Daniel La Parra, Julia Lynch, Jennie Popay, Ivo Rakovac, Aaron Reeves, Amanda Shriwise, Laura Sochas, Marc Suhrcke, Denny Vågerö and Margaret Whitehead.

Representatives from Member States: Denmark, Finland, Germany, Greece, Hungary, Iceland, Italy, Lithuania, North Macedonia, Portugal, Slovenia and Türkiye.

Representatives from international organizations: EuroHealthNet, European Institute for Gender Equality, European Public Health Alliance, Food and Agriculture Organization, International Labour Organization, National University of Ireland, Nobody Left Outside Initiative, Organization for Economic Co-operation and Development, Public Health Wales and the United Nations International Children's Emergency Fund.

External expert partners on current economics and investing in health from the WHO New Economics Expert Group provided particular insight on the emerging global cost-of-living/economic crisis and the implications for inequities.

Internal experts from WHO regional offices provided insight within their specialist subject areas: WHO Barcelona Office for Health Systems Financing; WHO European Office for Prevention and Control of Noncommunicable Diseases; WHO Europe Behavioural and Cultural Insights Unit; Division of Country Health Programmes; Division of Country Health Policies and System; Regional Technical Officer, Gender Equality and Rights; WHO Consultants for the Well-being Economies; Lead for Global Change and Health, WHO Regional Office for Europe; Regional Technical Officer, Data and Digital Health programme; and Division for Country Health Policies and Systems.

Support for this publication was provided in part by the National Institute for Health Research Applied Research Collaboration, North West Coast.

Abbreviations

ASMR age-standardized mortality rate

COVID-19 coronavirus disease of 2019

CPI Consumer Price Index

ESCAP (United Nations) Economic and Social Commission for Asia and the Pacific

EU European Union

GDP gross domestic product

HESRi Health Equity Status Report initiative

ILO International Labour Organization

NUTS nomenclature of territorial units for statistics (classification system)

OECD Organization for Economic Co-operation and Development

SAGE Scientific Advisory Group of Experts

SARS-CoV-2 severe acute respiratory syndrome coronavirus 2

UNICEF United Nations International Children's Emergency Fund

UHC universal health coverage

WHO-5 World Health Organization Five Well-Being Index

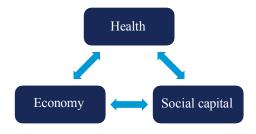
Executive summary

The WHO European Region is at a critical stage. For the second time in as many years, countries are confronting an economic and health crisis, and leaving people behind during these turbulent times threatens social solidarity, peace and security.

The report, entitled *Transforming the health and social equity landscape: promoting socially just and inclusive growth to improve resilience, solidarity and peace*, explores the interrelationships between health, the economy and social capital (Fig. ES1). It examines how Member States can work to build social cohesion and invest in people's health to improve resilience and promote an equitable recovery.

It builds on the findings of the Pan-European Commission on Health and Sustainable Development (known as the Monti Commission), which highlight that leaving people behind from economic and social progress engenders wider social fractures.

Fig. ES1. Interactions between health, the economy and social capital



The report aims to:

- understand how health equity and the social and economic determinants of health have changed across the WHO European Region in the light of recent crises;
- learn from the experience of Member States and international agencies about approaches that maximize the health equity benefits of actions across social, economic and health sectors; and
- support policies and alliances for health equity for recovery and resilience.

¹ The draft report is available for consultation both via the WHO Health in the Well-being Economy High Level Forum App and on the WHO Regional Office for Europe website from 1 to 31 March 2023 (https://www.who.int/europe/news-room/events/item/2023/03/01/default-calendar/who-europe-high-level-forum-on-health-in-the-well-being-economy).

The cost of living is rising at a time when countries and their citizens are still enduring the extensive effects of the coronavirus disease of 2019 (COVID-19) pandemic. New vulnerabilities are being layered on top of the enduring impacts of previous crises; they are widespread and unequally impact people's health and economic and social conditions.

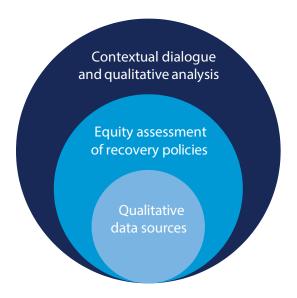
Failure to mitigate these short- longer-term consequences exacerbates vulnerabilities and leaves people inadequately protected against future challenges.

The pandemic has revealed how health, the economy and the social fabric of our communities are interwoven. Recovery requires action across all three fronts. When people are not adequately supported, they turn away from social solidarity and trust. These networks of relationships between people, and with governments and other institutions (often referred to as social capital) underpin stability across the Region. Their disruption threatens the peace and cohesion required for a healthy population and a healthy economy.

The findings and proposed options for action set out in this report are based on the following activities (Fig. ES2).

- 1. Analysis of those WHO Health Equity Status Report initiative indicators for which data were available since the onset of the COVID-19 pandemic in 2020 to reveal how equity trends changed during the pandemic by age, socioeconomic status, gender, sex and, where possible, ethnicity and migrant status.
- 2. A review of the policies of major international organizations related to the recovery that explored the potential for these policies to support equity and healthy recovery for all and highlighted common priorities, as well as potential unintended impacts and their health equity impacts.
- 3. A programme of engagement with policy- makers from a representative number of Member States of the WHO European Region, academic experts and international organizations, with oversight by the Scientific Advisory Group of Experts to WHO on health equity. This supported the contextualisation of the analysis and findings, an informed interpretation of the data, and an understanding of the responses of countries and international organizations to the pandemic and increased cost of living.

Fig. ES2. The iterative process of developing the findings and policy considerations



Health and health service inequity

Since the COVID-19 pandemic, inequities have been widening across multiple health and well-being indicators. Higher levels of mortality struck the poorest countries in the WHO European Region, where investment in health systems was lowest: during the pandemic, 600 000 excess deaths in the Region were attributable to low human development and health system investment.

Inequities in well-being have widened considerably. People on low incomes are now three times more likely to report low well-being compared with those on a high income. This gap has widened by 50% since the pandemic. Low well-being is a sign that people are not thriving; it undermines solidarity, peace, security and stability. Mental health has also deteriorated considerably, particularly for young people. An additional 40 out of every 100 young people reported mental health problems in 2022 compared with 2016.

Disabilities have also increased, particularly for the most disadvantaged, with people on a low income twice as likely to have a limiting illness compared with those on a high income. This gap has widened by 5% since the pandemic. A systematic review of differential impact between ethnic groups showed that the pandemic had a greater impact on minority ethnic groups and migrants compared with the general population. The comprehensive report that follows explores the drivers for these inequalities, which are systemic and societal.

Health services are increasingly under strain and unmet needs are increasing, particularly for the most disadvantaged people. Those on a low income are 70% more likely to have unmet needs for health care compared with those on a high income. Following the pandemic, an additional 14 people per 1000 population have an unmet need for health care. However, the resources to address these needs are not shared fairly, with the most disadvantaged regions within countries having on average 20% fewer doctors compared with the country as a whole. The comprehensive report underpinning this executive summary demonstrates how underinvestment by countries in their people, including in health services, costs lives.

Economic inequity

Economic exclusion drives poverty and poor health. The COVID-19 pandemic and subsequent crises have led to increased unemployment across the WHO European Region. During the pandemic, young people (16–24 years), women and low-skilled workers were the hardest hit; youth unemployment has not yet returned to pre-pandemic levels, and may be on the rise again in some countries. This raises particular concerns for health equity because the economic exclusion of young people can have long-term health effects.

The pandemic catalysed an unprecedented social protection response, including increased spending on social protection of an average of 2.4 percentage points of gross domestic product in 2020. This highlights the capacity of existing policy levers; with the increasing cost of living further threatening recovery, now is not the time to remove them. For countries concerned about young people's mental health, youth inclusion and resilience, social protection measures are not optional – they are vital.

Following the pandemic, the cost-of-living crisis has emerged at a time when people already have a limited capacity to cope. Some central Asian countries have experienced increases in poverty of up to 50%. In 2022 food prices increased by 40–70% in central Asia, the Caucasus, central Europe and southern Europe. Food insecurity was already rising in these parts of the WHO European Region in 2021. The United Nations Children's Fund has estimated that this crisis will lead to 10 million more people in poverty and 4500 more infant deaths in central Europe, the Caucasus, the Russian Federation and central Asia.

Although the social protection measures implemented during the pandemic seem to have mitigated some of the poverty risk, at least in EU countries, more transformative processes to protect everyone were lacking. Indeed, the measures did not protect all people equally: a large

proportion of the increased spending went to employed, unemployed and older people. Poverty still increased among people with fewer years of education and, where measures to support families and children were inadequate, women were disproportionately pushed out of the workforce.

The findings of this report demonstrate that when people do not feel the benefits of mitigation measures and protection, their trust in institutions and governments falls, along with solidarity. This creates and exacerbates social fractures across societies.

The mitigation and recovery strategies of international agencies focus on two main investment strands: digital and green. Digital technologies provide opportunities for countries to accelerate economic growth and connect people with services and jobs. Furthermore, the political commitment around the green transition in addressing the climate crisis has accelerated focus for investment in the green economy.

Digital and green transitions have the potential to address some of the health, social and economic inequities highlighted in this report, for example, through creating jobs and regenerating communities. In health, digital services for health-seeking and diagnostics offer the potential for managing excess demands on health care services and addressing gaps in the physical provision of medical staff in communities.

However, the focus of digital and green transitions in the policies for recovery of international agencies overlook inequities in two ways: (i) there is a lack of acknowledgement of how these sectors can be used for equitable recovery; and (ii) existing inequities in these sectors are overlooked.

Current green and digital economic activity is concentrated in more affluent regions and large digital divides remain: people living in disadvantaged communities are three times more likely to have never used the internet compared with those in more affluent regions. Women are also underrepresented in green and digital industries. Previous rapid economic transitions have tended to widen health inequity and there is a risk that disinvestment in carbon- intensive industries will adversely affect some disadvantaged communities. It is vital that existing inequities are addressed before further expansion threatens to leave more people behind and recovery plans are designed to promote the digital and green economies equitably.

Social inequity

Trust in others and in institutions is fundamental for the collective action required to address the challenges that countries face during these crises and for recovery. Different population groups have had very different experiences during the COVID-19 pandemic. Trust in others is 50% lower in those on a low income compared with those on a high income, and this gap widened during the pandemic. Trust in the government particularly declined in those out of work and was 40% lower after the pandemic in this group, than before.

The pandemic particularly highlighted the disadvantage and discrimination faced by minority ethnic groups and migrants. Lack of trust in authority, as represented by governments and health systems, was reported as a factor influencing increased health inequities in marginalized ethnic and minority populations across the WHO European Region.

Policy considerations

Based on the main themes identified in the evidence review, analysis of recovery plans, and dialogue with countries and international organizations, five focus areas for action, highlighting options that can be taken jointly across the health, economic, and social/community sectors.

Invest in young people

Turning our back on young people's health and their social and economic well-being today has consequences for cohesion, inclusive growth and healthy populations tomorrow that will threaten political stability and the resilience of our public systems.

The economic and social inclusion and mental health of young people should be prioritized, particularly for those falling behind because they have fewer resources and assets to defend themselves against recent shocks. Investment in young people provides the greatest returns for health, well-being, a flourishing economy and high trust societies. Neglecting to do so may have serious long-term effects, not just to individuals but also to the human social, economic and health capital that is needed to recover fairly and thrive in the next decade.

What can be done to protect the mental well-being of young people?

- If systematically used in the public and business domains, youth-responsive planning and policy tools have the potential to transform the lives of young people.
- Crises affect young people, particularly those in poor health with physical, emotional
 and educational challenges, in a different way to adults because of the ways in which
 young people seek help. Services can be made available by integrating a mental health
 and well-being lens into employment practices and active labour market programmes.
 Joining this up with social protection measures is an efficient way of delivering
 services to reduce inequalities among young people.
- The health and care sector should monitor and aim to increase the share of funding that is allocated to children's and young people's mental health services, particularly across the transition from childhood into adulthood, and increase investment in prevention.
- Ensure that employment programmes routinely monitor their impacts on mental health and well-being, and that mental health services routinely monitor their impacts on employment and economic outcomes, and assess variations in uptake and outcomes across age groups and other equity dimensions.
- The health and social care sector should review and support pathways into health and care jobs for young people, as well as their career progression and workplace wellbeing.

Develop responsive and integrated social and health protection systems

Responsive and integrated social and health protection systems that can rapidly identify and respond to changing patterns of risk need to be developed, along with support packages. This will ensure social and health protection systems adapt to address multiple insecurities while building resilience to future shocks.

Countries should invest in social protection because it is the key to building resilience, promoting a just ecological and technological transition and investing in human capabilities. By recognizing that young people and those with fewer assets and resources are more likely to experience less stable livelihoods, countries can invest in social protection as an effective strategy to promote social cohesion and trust in government.

Rapidly changing patterns of inequities are leading to coverage gaps and new vulnerabilities; therefore, systems need to rapidly adapt. Integrating health and mental health and employment

is a way of addressing these gaps, through which employers can benefit from stronger human capital.

Investment in preventing poverty protects future escalating costs associated with poverty and poor health. Preventing poverty saves lives now.

What can be done to develop adaptive and integrated social and health protection systems?

- Extend national social protection systems to ensure nationally defined adequate income guarantees and universal access to health care, including medicines and mental health services and support.
- As people face food, fuel and housing insecurity, adaptive social health protection
 systems are required to avoid the forecasted increase in poverty of vulnerable people in
 the next 10 years. These social protection measures should aim to manage prices and
 availability of essential goods such as fuel and food, and support housing and improve
 living conditions through rent caps and insulation and fuel efficiency measures for
 homes.
- Establish shared information systems across sectors to enable the rapid identification of at-risk groups and allocation of benefits to people in most need at times of crisis.
- Integrate social protection systems into local housing, health, education and employment services so that there is no wrong door into social protection support and support for addressing the causes of poverty.
- Review existing systems to identify gaps in support and groups left behind, and design measures to ensure equity in relation to gender, age, poverty and marginalized groups.
- Involve civil society organizations representing social protection recipients in the design of social protection schemes and civic partnerships to support uptake, particularly for marginalized groups.
- Embed mechanisms for impact assessment and evaluation across equity dimensions and use them to adapt and refine the social protection response.

Ensure that all policies and services deliver higher trust in institutions and a greater policy impact for people

It is no longer enough to design and deliver effective policy for services that does not also increase trust in institutions. The alarming decline in trust in institutions and the gap in trust between communities is a threat to European solidarity and inclusive development.

In itself, trust is beneficial to health and well-being, as well as being critical to reducing inequalities and for societies to be able to recover and prosper sustainably. Where people are repeatedly left behind, and where policies and investments have little impact, trust declines and recovery and prosperity challenges will remain.

Loss of trust in others and the government by people who are disadvantaged because of their economic position, ethnicity, gender, age or citizenship widens social fractures and undermines the social contract. Trust and social cohesion can be fostered through enhanced participation; transparent decision-making; open, accessible information; and the provision of reliable, fair public services and business activities.

Diversity is an asset for healing social fractures, and equal opportunities is a compass for building human social and economic capital. Ensuring that people's voices are heard and can shape decision-making is vital to rebuilding trust. This is likely to require experimentation and innovation in developing new approaches to decision-making in partnership with the population.

What can be done to invest in governance that rebuilds trust?

- Develop transparent, equity-sensitive information systems to support a rapid, effective response to public health and other crises.
- Invest in democratic governance at the local and national levels to enhance
 representation and participation in a fair and transparent manner. This includes the
 health system enabling affected communities to participate in resource allocation and
 service design decisions.
- Use the diverse experiences, including the lived experience of marginalized and at-risk groups, to ensure that the reality of people's lives is recognized and addressed in policy design and delivery.
- Promote and enforce non-discriminatory laws, including those relating to access to and uptake of health care.

- Work with civil society organizations to engage marginalized groups in developing and designing inclusive health and social protection systems, as well as healthy public policies.
- Build systems to ensure transparency and integrity in procurement, lobbying and commercial interests that are adverse to health. There is a wide range of tools that governments can use to shape the private sector in improving health for all. These include using fair tax that incentivizes healthy, inclusive and sustainable business.

Promote equitable digital and green economic recovery that promotes well-being

The main engine for economic recovery within the WHO European Region and beyond is investment in the green and digital economies. The delivery of services through digital technologies supports livelihoods and brings opportunities for telehealth, social capital and governance. However, in the absence of access to high-speed internet and digital literacy, digital solutions may not deliver the intended goals and may, in fact, worsen social, economic and health inequities. People need the skills and resources to be able to participate in the digital world.

Green transitions need to recognize that those with the poorest health are more likely to have a higher exposure to poor quality air, lack of green space and limited resources to afford green solutions such as electric vehicles and green home improvements. This limits the benefit to disadvantaged people that can be realized by these technologies, unless an equity lens is applied to the green economy.

Opportunities must be maximized to promote health and well-being for all by expanding digital and green economies and taking action to mitigate unintended equity risks. This is necessary because reorientating the economy to promote population and planetary well-being are crucial for health equity. Inclusive economic transitions that do not increase inequity are possible but require the involvement of affected communities in designing the solutions, as well as careful coordination among health, social protection and labour market programmers. Digital equity is a necessary condition for equitable recovery.

What can be done for equitable and just digital and green recovery?

 Integrate health and well-being equity indicators into economic models and decisionmaking.

- Combine the expansion of digital service provision within the health, education and other sectors with actions to extend digital access and skills for disadvantaged places and people.
- Enable the health sector in disadvantaged communities to support the digital and green sectors through implementing procurement and employment policies in communities at risk of being left behind in the digital and green transitions.
- Involve communities that are adversely affected by economic transitions in developing place-based strategies to coordinate health, training, employment and social protection actions.
- Assess and monitor the equity impacts of digital and green investment in terms of uptake of services, employment and economic benefits, as well as well-being outcomes (e.g. stratified by age, gender, socioeconomic status and disability).

Ensure mechanisms for equitably distributing health and care resources

It is necessary to maximize people's abilities to participate in life through the distribution of health and care resources for all. In order to end premature mortality and inequities that prevent people from thriving, health services need to increase their impact and coverage in underserved areas.

The health sector is an economic sector that drives local and national economies. Therefore, increasing service coverage in underserved areas is also a mechanism for stimulating their economic inclusion in the local economy, which is an enabler of recovery. Explicit mechanisms are needed to address equity in health system recovery. The issue of distribution needs to be considered urgently. New investments and existing resources should be allocated based on objective measures of need. This reflects the principle of proportionate universalism, whereby actions are universal (rather than targeted) but with a scale and intensity relative to need, taking into account the social gradient in health.

Action is needed to equitably distribute health and care resources because, as countries face fiscal challenges, there is a risk not only that investment in the resources needed for health are reduced but also that services in disadvantaged communities are cut the most, with preventive services being disproportionately affected. This could cost lives and lead to greater long-term costs. Explicitly allocating health resources to subnational areas based on objective measures of need reduces health inequities. Health care investment in disadvantaged places

boosts economic growth, thereby helping to level up places that have been left behind economically. Health system recovery that prioritizes disadvantaged communities can help to address multiple challenges by providing career opportunities for young people, supporting integrated and adaptive social protection systems, fostering trust and social cohesion, and supporting the development of a digital and green economy.

What can be done to equitably distribute health and care resources?

- Evaluate the backlog of care by equity dimensions and prioritize care provision based on level of disadvantage and need not just on length of wait.
- Implement explicit mechanisms to ensure that health care resources are distributed to places in proportion to need, for example needs- weighted capitation for allocating new health care investment.
- Aim to shift resources to prevention, earlier in the life-course and mental health services, and monitor progress in achieving this.
- Prioritize training and capacity-building for the health and social care workforce in disadvantaged places and communities, including financial incentives, training in community engagement and outreach, and investment in and partnerships with civil society organizations working in disadvantaged communities.
- Monitor the distribution of health system investment and the impact across population groups.
- Set standards to measure the quality of care in underserved areas to improve the impact of and access to services.

1. Introduction

1.1 Background

The WHO European Region is at a critical stage. For the second time in as many years, countries are confronting an economic and health crisis (1), and leaving people behind during these turbulent times threatens solidarity, peace and security.

The rising cost of living is emerging at a time when countries and their people are still enduring the extensive effects of the coronavirus disease of 2019 (COVID-19) pandemic. New vulnerabilities are being layered on top of the enduring burden from previous crises. However, such burdens are not felt equally across society. Fig. 1 illustrates the widespread nature of the multiple social and economic impacts of crises that have occurred since the pandemic (2). Failure to mitigate these short and longer-term consequences exacerbates vulnerabilities and leaves people inadequately protected for future challenges (3,4).

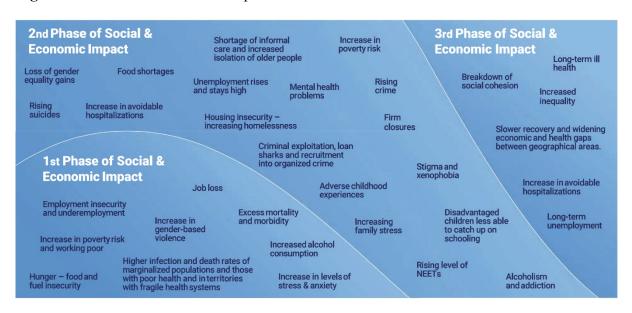


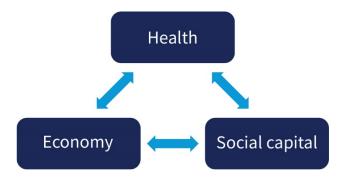
Fig. 1. Waves of socioeconomic impact from COVID-19

Source: WHO Regional Office for Europe (2).

The COVID-19 pandemic has revealed that health, the economy and the social fabric of our communities are interrelated (Fig. 2) (2). Recovery requires action across all three fronts. Equitable economic recovery will be an important driver of health and health equity. Health systems are a key economic sector and good health is necessary for an inclusive economy.

When people are not adequately supported, they turn away from social solidarity and trust. These networks of relationships among people and with governments and other intuitions (often referred to as social capital) underpin stability across the Region. Disruption of these networks threatens the peace and cohesion required for a healthy population and a healthy economy.

Fig. 2. The interactions between health, the economy and social capital



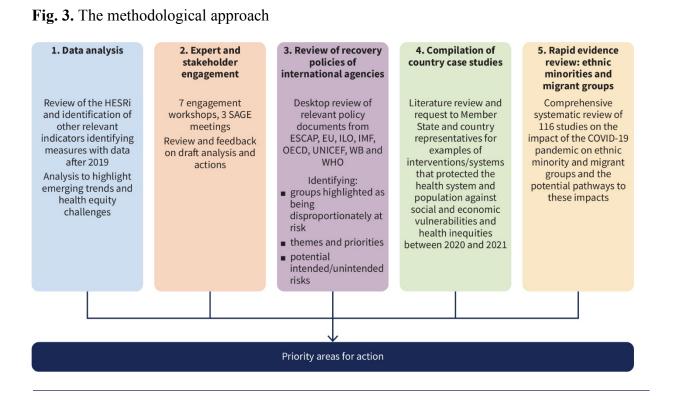
This report explores the interrelationships between these three components. It examines how Member States can work to build social cohesion and invest in people's health to improve resilience and promote equitable recovery. This builds on the findings of the Pan-European Commission on Health and Sustainable Development (known as the Monti Commission) (5), which highlights that leaving people behind from economic and social progress engenders wider social fractures.

This report aims to:

- **understand** how health equity and the social and economic determinants of health have changed across the WHO European Region in the light of recent crises;
- **learn** from the experiences of Member States and international agencies about approaches that maximize the health equity benefits of actions across social, economic and health sectors; and
- **support** policies and alliances for health equity for recovery and resilience.

1.2 Methodology

This report is an interim update of the WHO Health Equity Status Report initiative (HESRi) (6), which set a baseline in 2019 for monitoring health equity status and health equity policy progress within Member States of the WHO European Region. It reviews the available data and evidence on how health equity has changed from that baseline. Within this rapid stocktake, key priorities for action are highlighted that address new emerging concerns arising from the current crises, building on learning from the response to these crises. This supports the implementation of the priorities outlined in the WHO European Programme of Work 2020–2025 to leave no one behind and strengthen European alliances for achieving healthy prosperous lives for all (7). The work involved five complementary workstreams (Fig. 3). (Methodological details are given in Annex 1.)



First, the HESRi indicator set was reviewed to identify equity measures across five conditions for a healthy life for which data was available since the onset of the COVID-19 pandemic in 2020 (Fig. 4). Alternative sources were identified where more recent data was available. The analysis focused on how equity trends had changed during the pandemic.

Fig. 4. Action areas for creating the conditions for dignity, to thrive and to contribute to society



Source: reproduced from WHO Regional Office for Europe (8).

Secondly, a programme of engagement with academic experts, Member States of the WHO European Region and international organizations iteratively informed the analysis and focus of actions. These partners contextualized the findings and informed the understanding of how the crisis responses of Member States and international organizations have impacted people across the Region. Regular oversight and input were provided by the Scientific Advisory Group of Experts (SAGE) to the WHO European Health Equity Status Report initiative.

Thirdly, a critical review was conducted of the policies of major international organizations related to the recovery, including the European Union (EU), International Labour Organization (ILO), International Monetary Fund, Organisation for Economic Co-operation and Development (OECD), United Nations Children's Fund (UNICEF), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), WHO and World Bank; these are the main organizations that are shaping investments and setting the conditions for policy. The potential of these recovery policies to support equity and healthy recovery for all was explored, and their common priorities, potential unintended impacts and their health equity impacts were highlighted.

Fourthly, case studies were included to illustrate responses to COVID-19 challenges at the national and subnational levels, with a particular focus on the resilience of health systems and on economic and social protection measures. Various information sources were used to identify the challenges and opportunities for advancing health equity. Annex 1 provides

further information on this process, which used guiding questions on the implementation of measures that have protected people from vulnerabilities and inequities in health, as well as the challenges, barriers and limitations to successful implementation.

Lastly, as data related to the impact on marginalized groups was lacking from many data sources, a systematic review was conducted of academic studies on the impact of the COVID-19 pandemic on minority ethnic and migrant groups in the WHO European Region. Methods are published on the International Prospective Register of Systematic Reviews website (9).

Chapter 2 outlines the changing trends in health, economic and social inequities derived from the data analysis and the systematic review, and highlights common issues and potential mitigations proposed by international organizations based on the review of recovery policies. The combined analysis identified five themes (outlined in Chapter 3), along with practical actions that can be taken to address the identified issues and case studies from Member States.

2. Changing health, economic and social inequities in Europe

The 2019 Health Equity Status Report captured progress across the region in implementing a range of policies to reduce health inequities (8). It highlighted gaps in the essential conditions needed to live a healthy, prosperous life that lead to persistent or increasing health inequities. It also demonstrated how investment in these conditions can reduce gaps in health between socioeconomic groups within political mandates of 2–4 years, thereby challenging the notion that health inequity is too complex an issue to address in a short period of time. Much has changed since 2019. This section explores emerging trends in health inequity through the interrelationships between health, economic and social factors in the following areas.

- Inequities in health, well-being and health systems: an analysis of mortality data starkly highlights the unequal impact of the COVID-19 pandemic between and within countries. The changing inequities in mental health, well-being and disabilities are explored, particularly for young people (16–24 year olds), ethnic minority groups and migrants. Additionally, the widening inequity gaps in the health care system are examined.
- Economic trends and implications for health equity: an analysis of the compound effects of the pandemic and subsequent cost-of-living crisis on unemployment, food prices, poverty and social protection highlighted lessons learned for developing more adaptive and integrated systems. Looking towards recovery, focus on the digital and green sectors provides an opportunity for a new economic approach centred on equity and well-being, including measures to help address the existing inequities in these sectors and support equitable economic transition.
- Inequities in social capital and the implications for health equity: the impact of the crises have had an impact on social trust is outlined and how this differs between population groups, and the actions needed to rebuild trust. In particular, actions across social protection and health systems are essential for building trust and healing social fractures.

2.1 Inequities in health, well-being and health systems

2.1.1 Mortality

Even before the COVID-19 pandemic, gains in life expectancy across the WHO European Region had begun to slow; however, the COVID-19 pandemic caused the first recorded

decline in life expectancy across the Region (10). Fig. 5 shows the level of excess mortality for each Member State (coded by country cluster; Annex 2), measured as the difference between the actual mortality rate in 2020–2021 and the expected mortality rate if prepandemic trends had continued. The impact of the pandemic varied considerably between countries, with lower-income countries being most adversely affected. Excess mortality was closely correlated with the level of human development: countries with higher levels of human development had much lower levels of excess mortality than those with lower levels of human development. An exception was central Asian countries, which experienced relatively low levels of excess mortality although they have a low Human Development Index (11). This may be due to lower severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission in countries with lower urbanization and more dispersed rural communities.

As well as between countries, inequities were also apparent within countries. Fig. 6 shows the differences in excess mortality between more and less socioeconomically deprived subnational regions. The relationship between excess mortality and regional socioeconomic disadvantage within countries was mixed. In some countries, the mortality effects of the pandemic were clearly more severe in more disadvantaged regions. This was particularly true in Greece, Belgium, Czechia and the United Kingdom. In other countries, the association was in the other direction (i.e. the mortality effects were more severe in more advantaged regions). The variation is probably due to the dynamics of the disease transmission. For example, the first cases of COVID-19 in Europe occurred in the relatively affluent northern regions of Italy, and these regions were subsequently more adversely affected. In many countries, the relatively more affluent capital regions were also often the most adversely affected owing to their better transport links and higher population density.

Even in countries where excess mortality was not associated with deprivation at regional level, analysis based on individual measures of socioeconomic status or across neighbourhoods has shown that COVID-19 outcomes were more severe for more disadvantaged groups. For example, this was the case in Sweden (13), Italy(14) and Spain (15).

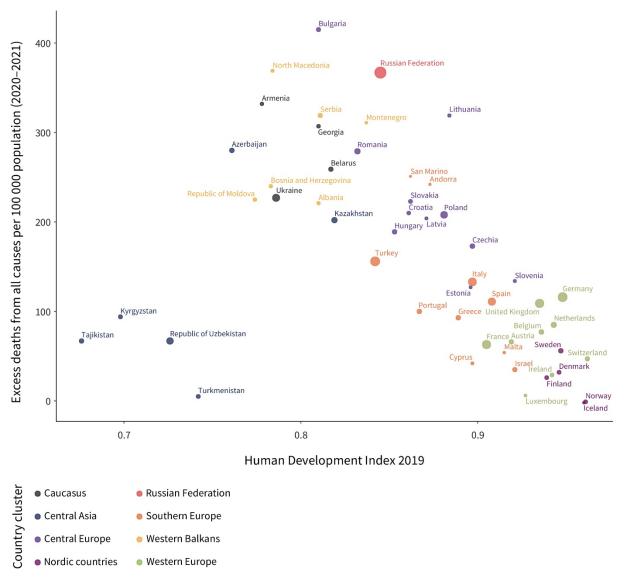


Fig. 5. Excess all-cause mortality across the WHO European Region, 2020–2021

Source: country-level excess all-cause mortality estimates were obtained from WHO (12) and the 2019 Human Development Index by country was obtained from the United Nations Development Programme (11).

Note: the included countries are listed in Annex 3.

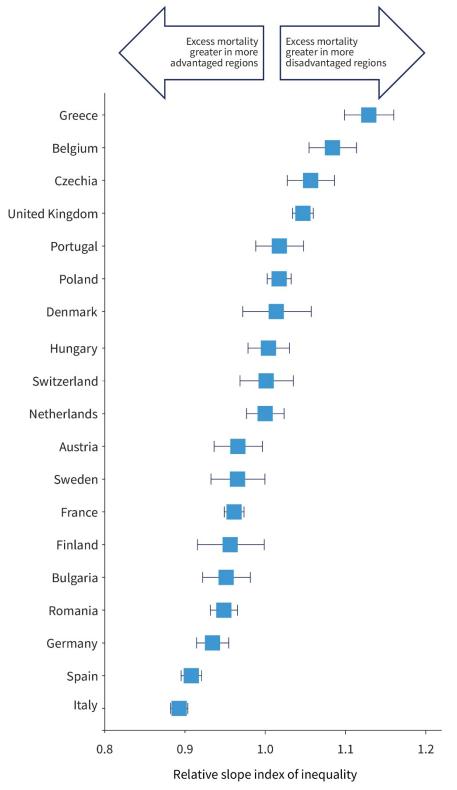


Fig. 6. Association between relative deprivation and excess mortality, 2020–2021

Sources: Multiple Eurostat sources and national statistics offices (see Annex 1).

Notes: values of >1 indicate a positive association between deprivation levels and excess mortality, (i.e. more-deprived regions had higher excess mortality rates compared with less-deprived regions; values of <1 indicate that less-deprived regions had higher excess mortality rates). Included countries are listed in Annex 3. For a description of methods, see Annex 1, Data analysis: indicators of excess mortality.

2.1.2 Disability

People with disabilities were particularly vulnerable during the COVID-19 pandemic, which has increased the burden of limiting illness, particularly for more disadvantaged groups. Strong inequities in limiting illnesses were already apparent across the WHO European Region: groups with fewer years of education were almost twice as likely to report a limiting illness compared with groups with higher education levels. During the pandemic, this gap widened further. By 2021, among people with fewer years of education the rate of limiting illness had increased by 2 percentage points compared with the pre-pandemic levels (Fig. 7).

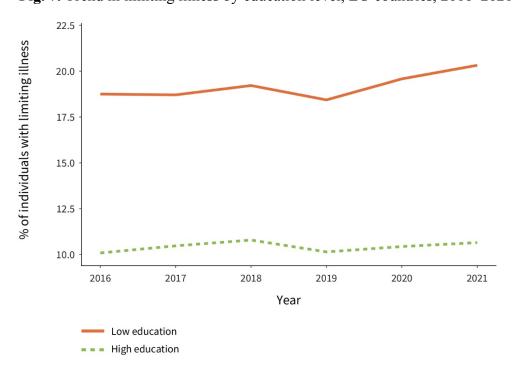


Fig. 7. Trend in limiting illness by education level, EU countries, 2016–2021

Source: Eurostat EU-SILC survey (16).

Notes: data indicate self-perceived long-standing limitations in usual activities owing to health problems, and include the "severely limited" and "limited but not severely" responses. Aggregate values were calculated using the appropriate survey weighting. Included countries are listed in Annex 3.

The economic and social costs of increased disability rates are substantial; for example, in the United Kingdom claims for disability benefits doubled between 2021 and 2022, and are forecast to cost an additional £7.5 billion (€8.6 billion) between 2023 and 2026 over the previous estimate (17). People with disabilities are also at a greater risk of poverty and are likely to be disproportionately affected by recent increases in the cost of living.

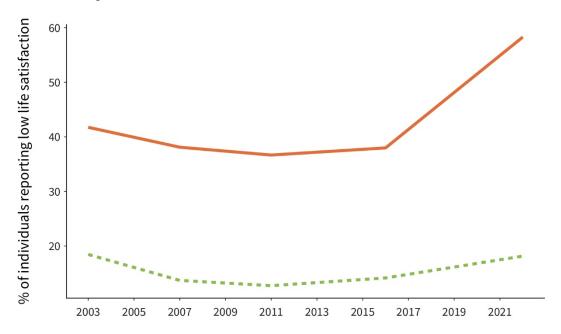
2.1.3 Mental health and well-being

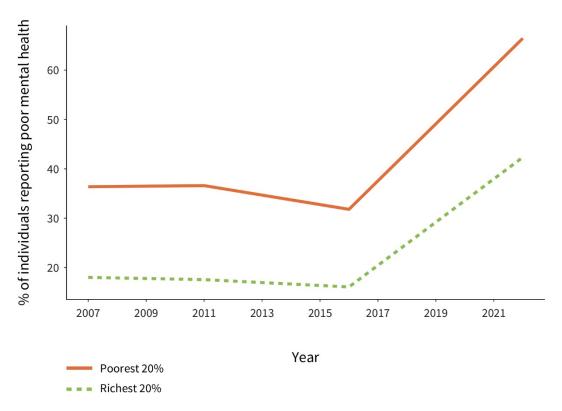
Previous crises have shown that economic turmoil has negative impacts on mental health (4), in particular, on psychological well-being, depression, anxiety disorders, insomnia, alcohol abuse and suicide (3,18).

The COVID-19 pandemic followed a similar pattern, with the Global Burden of Disease study estimating a 30% increase in cases of major depressive disorder and a 26% increase in cases of anxiety disorders during the pandemic (19,20). Women were more affected than men, and younger people (especially those aged 20–24 years) were more affected than older adults. As the emerging cost-of-living crisis closely follows the pandemic, people already have a reduced capacity to cope with the increased mental health burden.

OECD reported that depression has doubled among young people (21), and in the United Kingdom, mental disorders among young people more than doubled between 2017 and 2022 (22). The present report compared mental health and well-being scores in 2007, 2011 and 2016 from the Eurofound European Quality of Life Survey (23) to the respective scores in the 2022 Eurofound Living, Working and COVID-19 e-survey (Fig. 8) (24). The analysis showed overall increased rates of poor mental health (compared with 2016), which were slightly greater for the poorest group, thereby widening inequities. A more pronounced increase was seen for life satisfaction, which had particularly deteriorated in the poorest group: the rate of low life satisfaction was twice as high in the poorest group than the richest group in 2016, but by 2022 it was three times higher in the poorest group.

Fig. 8. Trends in reporting (a) low life satisfaction and (b) poor mental health in the poorest and richest quintiles



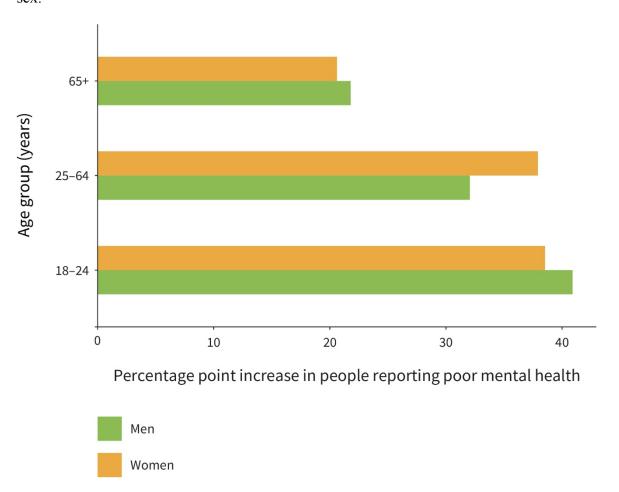


Sources: data for 2007–2016 are from the Eurofound EQLS (25) and data for 2017–2022 are from the LWC19 survey (26).

Notes: (a) low life satisfaction was defined as a response score of ≤5 to the question "how satisfied are you with your life these days" (scale: 1, very dissatisfied; 10, very satisfied); (b) poor mental health was defined as a score of <50 on WHO Five Well-Being Index (27). Aggregate values were calculated using the appropriate survey weighting. Included countries are listed in Annex 3.

A comparison of age groups showed that all groups reported an increase in poor mental health from 2016 to 2022; however, those in the 18–24-year age group reported the greatest increase (Fig. 9). In 2016 14% of 18–24 year olds scored <50 on the WHO Five Well-Being Index (WHO-5) (27); by 2022, this figure was 54%, indicating an additional 40 out of every 100 young people reporting poor mental health in 2022 compared with 2016. Similarly high levels of mental health problems were reported amongst young people across Europe using the Center for Epidemiological Studies-Depression scale (28) in the in the COVID-19 International Student Well-being Study (29).

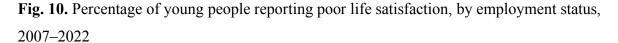
Fig. 9. People reporting poor mental health in 2022 compared with 2016, by age group and sex.

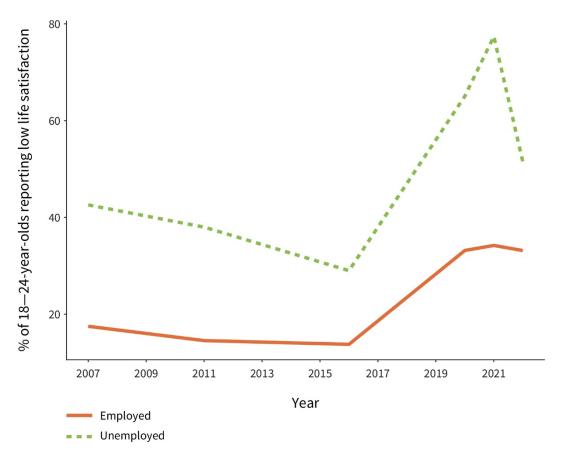


Sources: data for 2007–2016 are from the Eurofound EQLS (25) and data for 2017–2022 are from the LWC19 survey (26).

Notes: Poor mental health was defined as a score of <50 on WHO-5 (27). Aggregate values calculated using the appropriate survey weighting. Included countries are listed in Annex 3.

Fig. 10 highlights the relationship between employment and mental well-being in young peoples during the COVID-19 pandemic, showing a peak in the percentage of young people reporting low life satisfaction during the pandemic. The increase was particularly stark in the unemployed group, in which a higher proportion of people already reported low life satisfaction before the pandemic.





Sources: data for 2007–2016 are from the Eurofound EQLS (25) and data for 2017–2022 are from the LWC19 survey (26).

Notes: low life satisfaction was defined as a response score of \leq 5 to the question "how satisfied are you with your life these days" (scale: 1, very dissatisfied; 10, very satisfied). Aggregate values were calculated using the appropriate survey weighting. Included countries are listed in Annex 3.

International organizations have raised the deteriorating mental ill health of young people as a major concern for recovery. ILO highlighted this concern early in the COVID-19 pandemic, recognizing that young people were disproportionately affected by its economic and

employment consequences (30). The multiple pathways through which young people's mental health has been adversely affected include disruption to:

- their employment and education
- their relationships with peers and family
- child and adolescent mental health services.

This disruption, in addition to the lack of involvement of young people in decision-making during the pandemic, has led to their disillusionment with political processes (31). This toxic combination risks the emergence of social fractures alongside deteriorating mental health and well-being in young people. WHO has also highlighted that the COVID-19 pandemic caused prolonged disruption to places and settings in which young people usually seek mental health support and protection (Amanda Shriwise, Mental health, social inclusion and young people aged 18–29 in the WHO European Region, unpublished), including schools, universities, community and training centres, workplaces, and religious and faith-based institutions.

OECD has called for bold action to address the mental health needs of young people to prevent permanent scars on their aspirations and outcomes (21). It has outlined several approaches for putting young peoples' well-being at the centre of recovery, including by involving young people in the implementation of recovery efforts, and by assessing and anticipating policy impacts disaggregated by age group, as well as their intersections with socioeconomic status, geographical area, gender, race, ethnicity and disability status. WHO outlined how barriers can be addressed to improve the health and well-being of young people (Amanda Shriwise, Mental health, social inclusion and young people aged 18–29 in the WHO European Region, unpublished). It suggests forming a coalition between health, education and employment sectors to address poor mental health during the transition between education and employment. In addition, it indicates that employers should have adequate support and training to identify and support mental health in the workplace. To achieve this, the employment and economic sector need to design activities with mental health and well-being as core outcomes.

2.1.4 Ethnic minority groups and migrants

The systematic review of studies on the impact of the COVID-19 pandemic on ethnic minority and migrant groups identified 385 studies, including 14 evidence reviews. These

studies showed that minority ethnic groups across the WHO European Region not only were at an increased risk of SARS-CoV-2 infection (32) but also had disproportionately higher levels of mortality (33). A global review of the impact of the pandemic on refugees, asylum seekers and undocumented migrants (34) also reported a worsening situation for these populations during the pandemic.

The studies highlighted four main pathways though which these inequities were generated: discrimination, pre-existing inequities, lack of human rights protections and a lack of trust in authorities. Fig. 11 shows the number of studies that reported each pathway as a contributing factor.

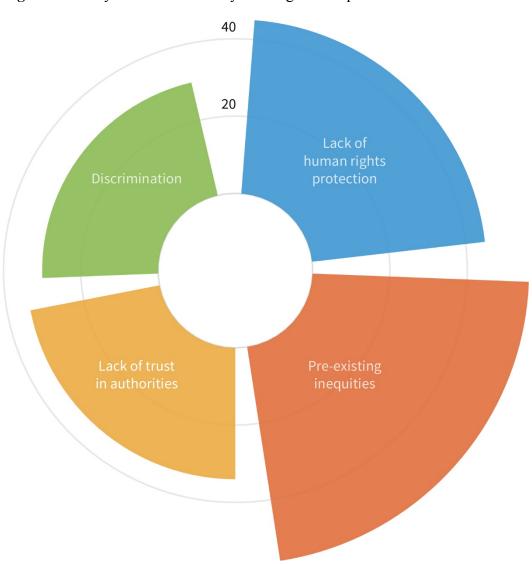


Fig. 11. Pathways of ethnic minority and migrant inequities

Note: some of the included studies included multiple pathways.

Several studies highlighted how ethnic inequities arising during the pandemic were partly caused by pre-existing inequities in social conditions (35), including differences in living conditions, the inequitable distribution of resources and digital access, food insecurity, housing insecurity, and job risks. In some contexts, inequitable access to health services for ethnic minority and migrant groups was linked to a lack of rights related to citizenship (34). Discrimination was reported as leading to unequal access to health services in some countries (36–39). Stigma and discrimination in the workplace environment were also reported by health care professionals from minority ethnic groups (40,41). Lack of trust in authority, as represented by governments and health systems, was reported as a factor that increases health inequities in minority ethnic groups and migrants by reducing the effectiveness of public health measures such as vaccination (38). Some ethnic and minority populations reported distrust in authorities that was often related to historical mistreatment by the authorities.

2.1.5 The health system

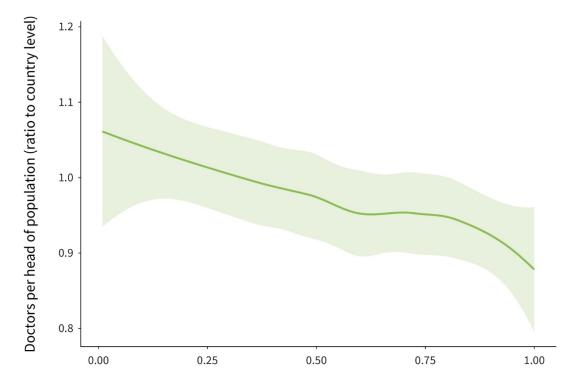
As health systems responded to the demands of the COVID-19 pandemic and subsequent backlog of unmet needs, international organizations have sought to support Member States in upholding and extending the principles of universal health coverage (UHC). WHO outlined its position in 2021 by describing how the pandemic response needed to build capacity for both emergency preparedness and health system resilience through investment in a strong public health and primary care foundation (42). The report highlighted specific actions for Member States to address pre-existing inequities and the unequal impact of the pandemic, through extending coverage of health protection and provision, ensuring the participation of marginalized groups, supporting financial protection for vulnerable populations, and monitoring inequities in health to inform policies, planning and investment. Expanding UHC is a core priority of the WHO European Programme of Work 2020–2025 that focuses on integration and continuity of care, financial protection, workforce challenges and governance (7).

However, the pandemic has highlighted that underinvestment and unequal investment in health has left some communities vulnerable. These inequities may cast a long shadow as already stressed health systems struggle to catch up with the increasing demand (43).

When the COVID-19 pandemic struck in 2020, the inequitable distribution of resources in health systems left more disadvantaged communities vulnerable. The inverse care law, which

states that the availability of health care tends be lower in populations with greater needs, was in operation across Europe. Fig. 12 shows that in EU countries with available data, subnational areas with greater deprivation and health needs tended to have 20% fewer doctors per head of population than the national average.

Fig. 12. Distribution of doctors across subnational areas relative to within-country deprivation across 21 European countries, 2020



Relative deprivation of subnational regions

Source: Eurostat (44).

Notes: the regional deprivation measure derived from regional measures of unemployment, young people not in education employment or training, life expectancy pre-covid, severe material deprivation and gross domestic product (GDP) per capita. Aggregate values were calculated using regional population size weighting. Included countries are listed in Annex 3.

The 2022 WHO report, *Health and care workforce in Europe: time to act (43)*, also highlighted that many Member States across the WHO European Region entered the COVID-19 pandemic with an insufficient health and care workforce that was unevenly distributed.

The pandemic highlighted how during times of crises, underinvestment in health systems in some parts of the Region increased vulnerability. An analysis of the association of 2020–2021 excess mortality with (i) country-level human development and (ii) health care expenditure showed that both factors influenced how a country fared during the pandemic. An incremental increase in the Human Development Index (11) for Member States was associated with a reduction in excess deaths. This trend also occurred with increased government expenditure on health care, which highlights that investment saves lives. If the levels of health care investment and human development in all Member States in the WHO European Region with below average levels had improved to the Regional average level, this would have prevented an estimated 600 0000 excess deaths during the pandemic.

2.1.5.1 Unequal access to health care for migrants and ethnic minority groups The systematic review on the impact of the COVID 10 pendemic on ethnic min

The systematic review on the impact of the COVID-19 pandemic on ethnic minority and migrant groups indicated worsening access to health services for these groups (34). Migrants often experienced inequities in accessing health care services because lack of citizenship affected their rights. Other barriers to accessing health care services included language barriers, lack of digital literacy or knowledge of which services are available and how to access them, lack of health facilities (particularly in very rural or unrecognized settlements), gaps in transport infrastructure, and economic barriers (such as insecure employment that does not include sick pay) (16,45–48).

2.1.5.2 Rising unmet needs among disadvantaged groups

As the COVID-19 pandemic began to disrupt health care, unmet needs started to rise, with the greatest increase in more disadvantaged groups, thereby widening the existing inequities (Fig. 13).

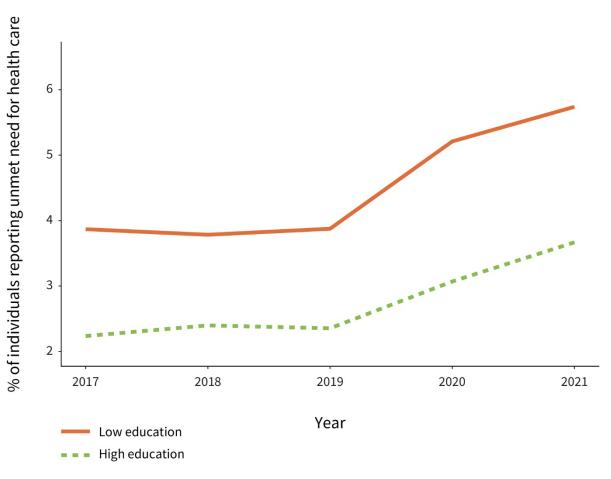


Fig. 13. Percentage of people in EU countries who reported needing health care but being unable to access it, 20016–2021

Source: Eurostat EU-SILC survey (16).

Notes: Self-reported unmet needs for medical examination (all reasons) for the total population of 16 years of age and older. Aggregate values were calculated using the appropriate survey weighting. Included countries are listed in Annex 3.

Although less data are available on trends in unmet health care needs in central Asia, data from Kyrgyzstan highlights some concerning trends. Fig. 14 shows the increase in out-of-pocket expenditure on medications and tests during 2020, with a 500% increase in spending on medications for people living in rural areas. Similarly, unmet needs for health care in Kyrgyzstan increased between 2019 and 2020 (Fig. 15), particularly for men and younger people. Furthermore, young women in Kyrgyzstan had a marked reduction in uptake of contraception (data not shown).

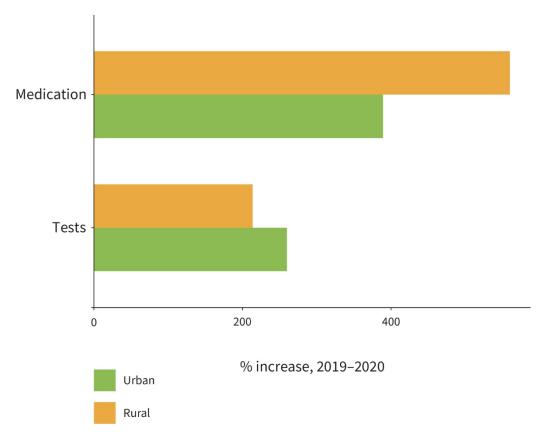


Fig. 14. Household expenditure on medications and medical tests in Kyrgyzstan, 2019–2020

Source: Kyrgyzstan Integrated Household Survey, Esenaliev et al. (49).

Note: data indicate the change in absolute out-of-pocket spending on health care.

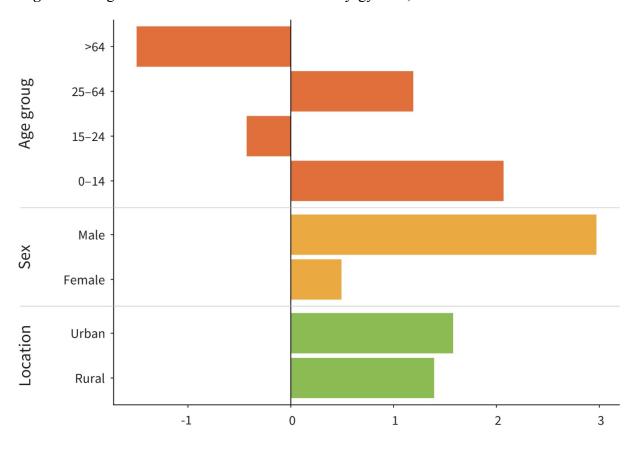


Fig. 15. Change in unmet need for health care in Kyrgyzstan, 2019–2020

Percentage point change in unmet needs

Source: Kyrgyzstan Integrated Household Survey, Esenaliev et al. (49).

Note: data show the percentage of people who reported that they needed health care but were unable to access it, grouped by age, sex and geographical location.

Health services across the WHO European Region are at breaking point owing to a combination of increased demand, a huge backlog of unmet needs that accumulated during the pandemic, and shortages to the health and care workforce (43). Governments have put strategies in place to address these issues. However, in order to build resilient health systems that work for the whole population, it is crucial that health equity and prevention are central to these strategies.

The WHO European Observatory Health Systems and Policies has outlined the approaches that Member States are taking to address unmet needs and the backlog of care (50). These include:

- increasing the workforce;
- developing competencies and improving working conditions;
- improving productivity through capacity and demand management and investing in capital and infrastructure; and
- developing new models of care.

It describes the potential equity risks of these actions and states that they should be monitored. These programmes represent an opportunity to shift more care towards primary health and community care and to prioritize medical and social outreach to vulnerable groups to address inequities in the health system (50). Although the need is recognized to address health equity in the plans in order to recover health system resilience the most appropriate mechanisms for Member States to achieve this are not always clear. Approaches aimed at increasing productivity and efficiency should not achieve those goals at the expense of equity. For example, this could mean that equity is used as an explicit criterion when prioritizing patients on waiting lists.

2.2 Economic trends and implications for health equity

Economic crises have recognized health consequences (51), with recessions often having short-term consequences for mental health and longer-term scarring effects, particularly for young people, people with disabilities, and people who lose their livelihoods during economic downturns. Government policies can mitigate these effects through social protection and active labour market programmes (52).

The WHO European Region has been through two recessions since 2019, the first driven by the COVID-19 pandemic and the second caused by a cost-of-living crisis precipitated by the war in Ukraine. As yet, the health effects of these recessions are unclear, although some trends highlight potential risks. Ambitious plans have been made for recovery in some Member States, with international organizations emphasizing the need for a green economic

recovery that makes the most of new digital technologies. These plans hold great potential, but come with some risks to equity that will need to be mitigated.

2.2.1 Employment and unemployment

Many people experienced reduced working hours or job loss during the COVID-19 pandemic. ILO reported that the groups hardest hit by job losses were young people, women, self-employed people, and low- and medium-skilled workers (53) – which created a disproportionate impact with the potential for unequal recovery. The European Institute for Gender Equality reported that progress in gender equality has stalled and the gender gap in employment rates and education level have grown (54). With the closure of schools and child care facilities during the pandemic, three times more women than men reported taking on the majority of unpaid care work (55).

Although unemployment increased in all age groups during the pandemic, for older age groups this returned to pre-pandemic levels in most countries in 2021. However, youth unemployment increased more during the pandemic compared with other age groups, particularly in central and southern Europe, and had not returned to pre-pandemic levels by 2021 (30). A European Parliament commissioned study emphasized that disruption to youth employment during the pandemic was driven by the sectors affected, prevalence of temporary contracts and reduction in work-based opportunities such as apprenticeships, which hindered the school-to-work transition (56). Many parts of the Region saw a further increasing trend in youth unemployment was seen in 2022 (Fig. 16).

The adverse employment prospects of young people raise particular concerns for health equity, as previous evidence has shown that economic exclusion of young people can have long-term scarring effects (58). ILO has outlined a need for investment in active labour market policies that target young people, for example through wage subsidies and job search and public employment programmes. This includes good quality apprenticeships and skills training, particularly to support the school-to-work transition (30). A practical example is the My First Salary Programme in Serbia (see Case study 1).

Case study 1. My First Salary Programme in Serbia

This Serbian initiative provided a salary subsidy grant for the first employment of high school or university graduates below the age of 30 years (59). It was designed to lower the high youth unemployment rate, reduce the waiting time for a first job (2 years in 2020) and bridge the gap between supply and demand in the job market. The programme ran from August to December 2020 and was co-designed by young unemployed people, business leaders and the Government of Serbia.

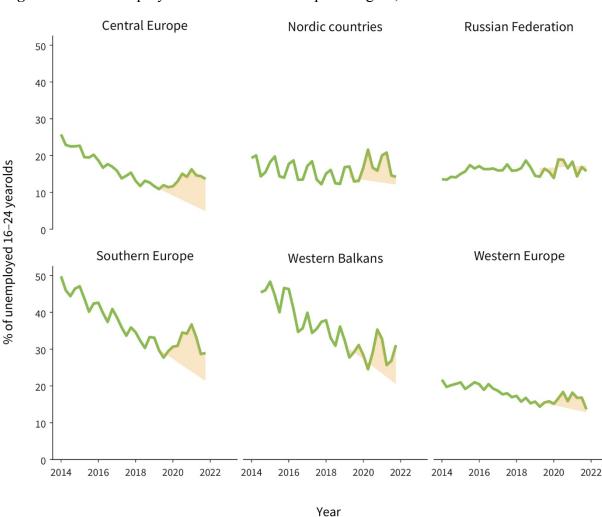


Fig. 16. Youth unemployment in the WHO European Region, 2014–2022

Source: ILO (57).

Notes: data are for the age group 16–24 years. The pink shaded area indicates the gap between the actual trend in 2020–2022 and the expected trend prior to the COVID-19 pandemic. Data indicate the number of unemployed young people as a percentage of the labour force. Aggregate values were calculated using the appropriate population size weighting. Included countries are listed in Annex 3.

The linked problems of decreasing employment rates and deteriorating mental health among young people requires a joint solution. Mental health and employment are often interdependent: poor mental health reduces employability (56) and unemployment contributes to mental ill health (60), leading to a downward spiral between unemployment and poor mental health. Therefore, the deteriorating mental health of young people is of concern not only for the health sector but also for the employment sector. To address this, ILO, OECD and other organizations have advocated approaches that integrate mental well-being interventions into educational and employment initiatives for young people whose school-to-work trajectories have been disrupted by the COVID-19 pandemic (30,31,61,62). An important component of these approaches is that young people should be involved in identifying the policy priorities and designing the programmes. The development of these programmes provides an opportunity to fully integrate health and employment services. Considerable evidence has highlighted that health is often one of the greatest barriers to employment and that better integration enables better health and better employment outcomes (63,64).

The important role of the health sector in supporting the employment of young people is often underrecognized. The care economy is a major employer of young people (particularly young women) and accounts for one third all female youth employment in high-income countries (30). ILO modelling indicates that investment in the care economy could create almost 18 million new jobs for young people globally by 2030 (30). Therefore, the health sector has a crucial role to play in supporting the economic inclusion and employment of young people by ensuring high-quality training and working conditions, supporting the transitions into employment for disadvantaged young people, and enabling career progression.

2.2.2 Social protection: the rising cost of living and increasing poverty risk

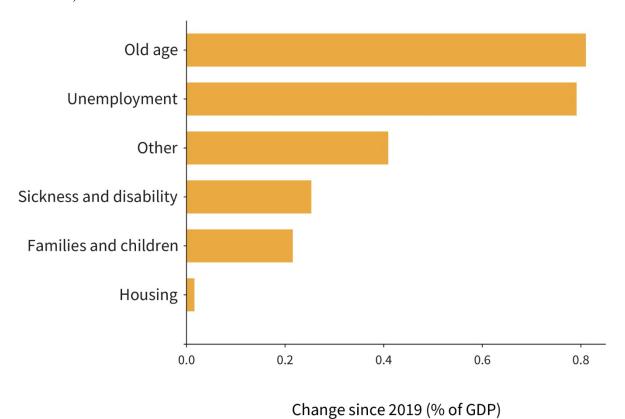
The combined health and economic crisis of the COVID-19 pandemic has indicated how closer integration between health and social protection systems can help to achieve the joint outcomes of UHC, preventing poverty and rebuilding social capital.

There is growing evidence that social protection systems lead to direct health benefits over relatively short time periods (65,66) and that investment in social protection also promotes social cohesion and trust in government (67). Social protection programmes can reduce the

cost barriers to health services, and reducing out-of-pocket payments for health services can prevent health crises that precipitate people into poverty.

The pandemic and rising cost of living has put more people at risk of poverty, with some people experiencing financial insecurity for the first time. The pandemic also catalysed an exceptional introduction of new social protection measures: Member States across the WHO European Region introduced 600 new social protection measures between 2020 and 2022 (68). Government expenditure on social protection increased by an average of 2.4 percentage points of GDP between 2019 and 2020 (in those countries with available data), largely due to increased spending on benefits for unemployed (including those on furlough) and older people (Figs 17 and 18).

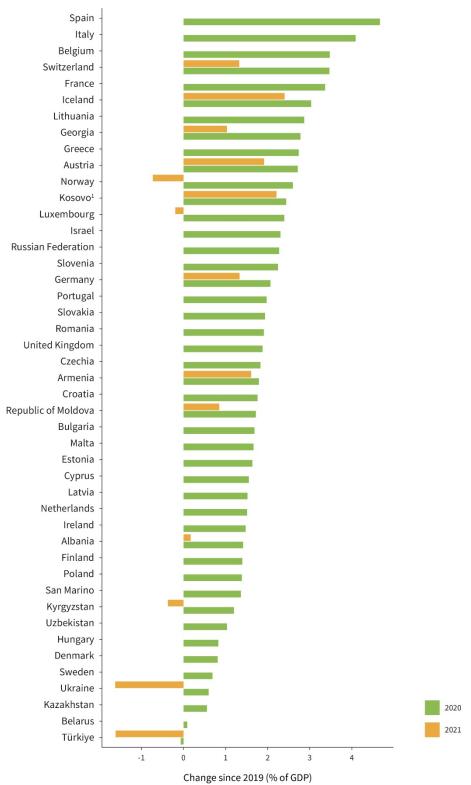
Fig. 17. Change in expenditure on social protection since 2019 as a percentage of GDP, by function, 2020



Source: International Monetary Fund (69).

Notes: values are given as a percentage of GDP by General government sector for a selection of Classification of Functions of Government codes, as specified. "Other" expenditure is defined here with the codes GF1003, GF1007, GF1008 and GF1009. Included countries are listed in Annex 3.

Fig. 18. Change in expenditure on social protection since 2019 as a percentage of GDP, 2020 and 2021



Sources: International Monetary Fund (69), GDP values used in calculations were supplied by the World Bank (70).

Notes: values are given as a percentage of GDP by General government sector for the Classification of Functions of Government code "Social protection". Aggregate values were calculated using GDP weighting.

The large increase in investment in social protection, particularly in western Europe and the EU, was partly effective at reducing the immediate impact of the pandemic on poverty, although its effectiveness was not shared equally. Fig. 19 shows that in the EU, although the poverty level was stable and largely unaffected by the pandemic for people with a degree (high education level), for people with fewer years of education (low education level), the poverty rate was already higher and accelerated slightly during the pandemic.

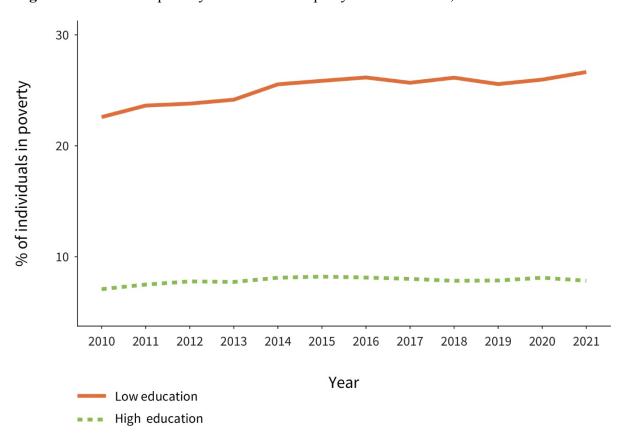


Fig. 19. Trends in the poverty rate across Europe by education level, 2010–2021

Source: Eurostat EU-SILC survey (16).

Notes: people at risk of poverty were defined as those with an income below the poverty threshold (60% of the national median-equivalized disposable income). Aggregate values were calculated using the appropriate survey weighting. Included countries are listed in Annex 3.

Fig. 20 shows the relative change in poverty based on national poverty thresholds during the COVID-19 pandemic in selected non-EU countries. Central Asian countries have experienced the greatest impact, with large increases in the poverty rate in both Kyrgyzstan and Kazakhstan.

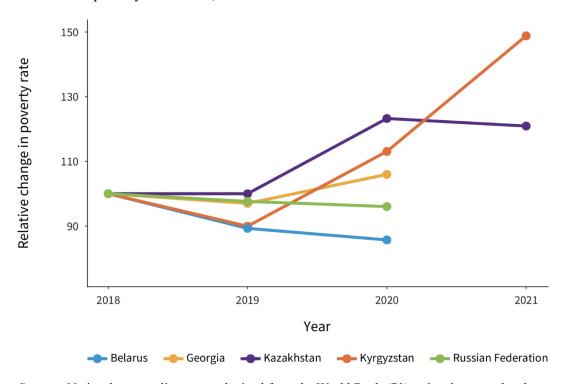


Fig. 20. Relative change in the poverty rate since 2018 in selected non-EU countries, based on national poverty thresholds, 2018–2021

Sources: National poverty lines were obtained from the World Bank (71) national poverty levels were compiled from the Asian Development Bank (72) and 2021 data for Kyrgyzstan and Kazakhstan were obtained from national statistics offices.

Note: data are normalized to 2018 values, and indicate the relative change in the proportion of the population living below the national poverty line, as defined by each country from that time.

Kyrgyzstan had a high pre-pandemic poverty rate, so the 50% relative increase in 2021 represents a large absolute increase: 11 more people out of every 100 were living in poverty in 2021 compared with 2018. The additional increase from 2020 to 2021 may reflect the reduction in social protection expenditure in 2021 (shown in Fig. 18). In Kazakhstan, the initial poverty rate was much lower; therefore, the relative increase represents a smaller absolute increase, with 1 additional person out of every 100 living in poverty in 2021 compared with 2018.

Food insecurity in central Asia, central Europe and the Balkans also increased during the pandemic (73). Fig. 21 shows the actual subregional trends in food insecurity during the COVID-19 pandemic and those predicted before the pandemic.

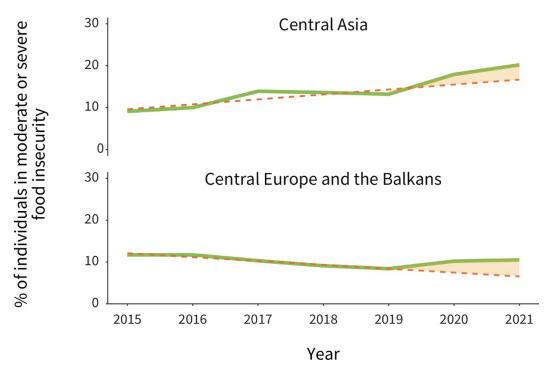


Fig. 21. Food insecurity in central Asia, central Europe and the Balkans, 2015–2021

Source: Food and Agriculture Organization of the United Nations (74).

Notes: data are based on statistics on the prevalence of moderate or severe food insecurity (as a percentage) in the total population (annual value). The shaded area indicates the increase in food insecurity since the COVID-19 pandemic. Included countries are listed in Annex 3.

The Other Front Line Alliance provides a platform to showcase stories from people in their own words about their experiences and hardships of the pandemic (75). Box 1 illustrates that the most disadvantaged families reached the limits of their resources during the pandemic (75).

Box 1. Voices of Stolipinovo, Bulgaria

After the loss of work and lack of income came deprivation.

Families immediately cut spending on everything but the most basic item – food. Internet and television were cut. Any other luxury goods were impossible to afford.

People sold or pawned their gold possessions or jewellery for money for food. Many in need also resorted to quick and risky loans.

Source: Other Front Line Alliance (75).

Since 2020, food price increases have been exacerbating inequities between and within countries. Fig. 22 shows that by early 2022, food was 40% more expensive in the Caucasus and central Asia than it had been in 2017. For the EU where we have more recent data, the upsurge in food prices has been greatest in southern and central Europe, with food prices increasing by 70% in southern Europe by the end of 2022.

The increase in the Food Price Index has had a much larger impact on families on low incomes because the essential items on which the Index is based take up a higher proportion of their food budget. Food insecurity is an important cause of ill health, both in low-income countries and among households living in poverty in high-income countries (76).

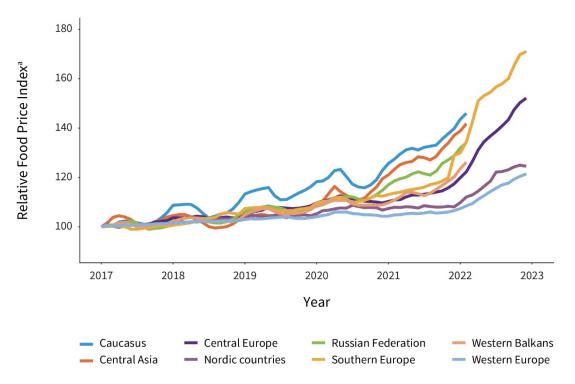


Fig. 22. Food Price Index across the WHO European Region, 2017–2022

Source: data for EU countries are based on the Eurostat Food Prices Monitoring Tool, using the harmonized index of consumer prices (77). Data for other countries were provided by the World Bank (78).

Notes: data are standardized to January 2017 values. Aggregate values were calculated based on country cluster averages. Included countries are listed in Annex 3.

UNICEF estimates that in central Europe, the Caucasus, the Russian Federation and central Asia the war in Ukraine and subsequent recession will push an additional 10 million people into poverty, including 4 million children, and will lead to an additional 4500 infant deaths and 120 000 years of lost schooling (79). These huge and avoidable health impacts will fall

on the most disadvantaged groups. Although unemployment, falling wages and increases in prices increase the risk of poverty and food insecurity, these risks can be mitigated by expanding the current social protection measures (80).

2.2.2.1 Developing adaptive social protection and improving coverage

Although the COVID-19 pandemic saw one of the largest social protection responses globally, international agencies have highlighted groups that were often missed in this response. Many of the essential occupations that were so important for enabling life to continue during the crisis have the most precarious employment conditions and insufficient social protection coverage (81). The coverage of social protection schemes for young people is also low. ESCAP highlighted that women were disproportionately affected by the pandemic, but were often excluded from social protection measures (82). In many countries, pandemic-specific social protection responses focused on unemployed and older people (Fig. 17). According to the ILO social monitor, only 69 of the 600 measures introduced in response to the pandemic across the WHO European Region targeted children and families (68).

Recovery proposals from many international organizations emphasize the need to address gaps in social protection coverage. However, this represents a fiscal challenge, particularly for low- and middle-income countries. Analysis by ESCAP demonstrated that universal child benefits, disability benefits and old-age pensions, even if offered at conservative levels, would lift more than one third of people out of poverty. Although this would require an investment of 2–6% of GDP, it is affordable, particularly considering the costs of not doing it.

The recent pandemic, rising cost-of-living and climate change have highlighted that crises are becoming increasingly frequent and complex. This has renewed interest from international agencies in promoting shock-responsive or adaptive social protection systems. These measures can rapidly adapt social protection systems to new risks (e.g. pandemics, energy crises) through early identification of the population segments at risk, and enable the rapid mobilization of support to prevent them from being realized (83). Adaptive and shock-responsive social protection systems require multisectoral partnerships, alongside civic engagement and effective information systems. For example, in Liverpool (United Kingdom), the Citizens Advice on Prescription scheme involved a civil society organization proactively

contacting groups that were identified as vulnerable using data from health services (84). The groups were then supported to access social protection schemes and connected with community organizations, which enabled them to stay socially included during the pandemic (see Case study 2).

Case study 2. Citizens Advice on Prescription, Liverpool (United Kingdom)

The Citizens Advice on Prescription scheme involved case workers from Citizens Advice Liverpool, a United Kingdom charity with expertise in helping people to access social protection by contacting people identified as vulnerable during the COVID-19 pandemic (84). Across Liverpool, an integrated data system had been developed to help identify vulnerable groups and offer an intelligence-led approach to the pandemic response and recovery. The Citizens Advice case workers then provided advice and support to enable people to access pre-existing and COVID-19-related social protection schemes, supported them to meet other social welfare needs, and address social isolation by connecting them to community organizations. During the pandemic, 10 000 people were supported through the scheme. The programme continues to support people at risk of poverty, as identified by health care workers across the health system.

2.2.3 A green and digital economic recovery

Green and digital economic transitions are the twin pillars of economic recovery plans across international organizations. This is part of the so-called just transitions to environmental sustainability, as outlined in the ILO's *Global Accelerator on Jobs and Social Protection for Just Transitions (62)*. Vulnerable and poorer people disproportionately experience the effects of climate change and, therefore, stand to gain substantial benefits from the success of green policies. The transition to green and digital economies can help to create good jobs, particularly for young people: ILO estimates that redirecting public investment towards the digital, care and green economies could result in 139 million additional jobs globally by 2030, of which more than 30 million would be taken by young people (aged 15–29 years). In addition, the longer-term health impacts of decarbonization are likely to be substantial. A recent study found that if the United Kingdom were to achieve its promise of net-zero greenhouse gas emissions by 2050, there would be significant reductions in mortality (85).

Throughout the pandemic, there was an extensive reliance on technology to virtually connect people as in-person interactions were interrupted. Across the world, within a short space of time, the continuance of businesses, teaching and learning, work, accessing health care and socializing in one's own home became commonplace through the use of digital technologies. OECD reported that the COVID-19 pandemic accelerated a digital transformation that had been under way for decades (86). The European Commission has pledged to ensure that the "EU is fit for the digital age" as one of its six political priorities through activities including secure data access and sharing, use of data for research, faster diagnosis and improved health, and strengthening citizen empowerment (87).

The health sector was at the forefront of the digital revolution as health services across the WHO European Region adapted to maintain provision. Digital health services were used to maintain continuity of care, with WHO advocating for health sectors to expand their use of digital tools to support the health and care workforce (43).

Digital innovations are often harnessed in positive ways for society. Iceland has used a digital platform to enhance civic participation in politics and governmental policy development that supports the fostering of trust in government and promotes democracy (Case study 3).

Case study 3. Better Iceland: digital public participation

The Better Iceland platform is a tool that has been implemented nationally following the success of its use in Reykjavik (88). Through the digital platform, citizens can submit ideas for policies or investments and other citizens can then debate these and vote on them. In Reykjavik, the most popular proposals were then considered and voted on by the city council in collaboration with neighbourhood councils. To date, 700 projects in Reykjavik have been designed from the bottom up rather than top down in this way, with just over 58% of the city's population reported to have used the platform.

2.2.3.1 Reducing the equity risks of green and digital transition.

The recovery plans of international organizations recognize that there may be winners and losers from the adoption of environmental and digital policies, and highlight a need for mitigation measures to prevent these policies from exacerbating existing inequities (62). Employment in the green sector will require the so-called greening of skills and knowledge,

with a particular emphasis on engineering, biochemistry, biophysics and environmental sciences (89). Equitable investment in such skills will require the widening of representation in these roles. Given that across the EU women only make up 21% of the scientific and engineering workforce, there is the risk that expanding these sectors may widen existing gaps based on gender and skills (90).

Disinvestment from carbon-intensive industries is likely to hit some communities harder, leading to job losses (91). This could particularly affect older men in these communities, who may also find it difficult to adapt to new opportunities (92). OECD highlighted that environmental policies that promote the greening of residential buildings may favour homeowners over the private rented sector (92), where homes are more likely to be old and inefficient (93).

ESCAP highlighted the gender digital divide across Asia and the Pacific (82), in which women and girls are disproportionately affected, with their employment and education opportunities hampered as a consequence. As societies become more reliant on digital connectivity, people with fewer resources and/or the skills required to participate in this new world can become further excluded and isolated (94).

Fig. 23 shows inequity in access to the internet, with more disadvantaged regions in the EU having on average much larger populations of people who never use the internet.

Regional and local authorities need to invest in digital infrastructure to narrow this gap. As outlined in the United Nations Secretary-General's Road map for digital cooperation, Member States need to ensure a universal baseline level of connectivity across society (97). Ultimately, digital equity is a necessary condition for equitable recovery. Box 2 illustrates the impact of digital exclusion.

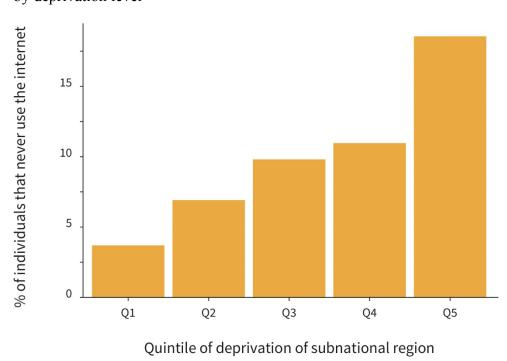


Fig. 23. Percentage of people who have never used the internet, selected European countries, by deprivation level

Sources: Eurostat EU-SILC and ICT surveys (16,95). Regional (NUTS 2²) data on internet use (ICT survey) against regional (NUTS 2) data on deprivation (derived from regional measures of unemployment, young people not in education employment or training, life expectancy pre-COVID-19, severe material deprivation and GDP

Notes: Q1: least deprived NUTS 2 regions; Q5: most deprived NUTS 2 regions. Included countries are listed in Annex 3.

Box 2. The reality of digital exclusion, United Kingdom

Being one of the over a million people who do not have access to an internet connection in the United Kingdom and neither the tools or wherewithal to navigate the services that are increasingly moving online is creating untold high levels of anxiety and desperate feelings of isolation. Detached from the wider social and public life results in spiralling low mood and apprehension of the future.

Something as basic as logging on to a Universal Credit account proves to be challenging. "I can't let my job coach adviser know when I am in hospital, I am unable to upload a sick note or put in any messages.... This is quite scary... what if I don't receive my benefit, how will I manage then?"

Source: Other Front Line Alliance (75).

_

² Nomenclature des Unités Territoriales Statistiques, an economic classification system for the European Union and United Kingdom, in which NUTS 1 includes all major socioeconomic regions, NUTS 2 includes basic regions for the application of regional policies and NUTS 3 includes small regions for specific diagnoses (96).

In the past, rapid economic transitions have negatively affected public health and health equity (98–100). Learning from these experiences can ensure that health for all is protected and improved during times of rapid change. Past experience has shown that adverse health effects occur from the loss of resources for those who are left behind, as well as from the loss of power and control (101). Places with more local control over the transition were less adversely affected. For example, in the 1980s the successful economic transition of Saarland, a former mining and steel region in Germany is credited to the fact that devolved federal governance arrangements allowed a more gradual, locally managed process (101). An important part of strategies for a just transition must include the involvement of affected communities in designing the solutions.

2.3 Inequities in social capital and implications for health equity

2.3.1 Changing patterns of social trust

The relationship between trust and health is complex, particularly during a crisis such as the COVD-19 pandemic. During the pandemic, trust in government and in others may have led to greater compliance with public health guidance, including vaccination. People are more likely to follow guidance if they trust the source and trust that others will also follow it. International comparative studies have found that both trust in others and trust in government is associated with lower infection and mortality rates (102). However, trust is important to public health in more ways than just for ensuring compliance with guidance.

Different groups of people had very different experiences in terms of trust during the pandemic. In some communities, increased acts of cooperation during the early phases of the pandemic were important and seen as having a positive impact on health and well-being. Box 3 highlights how communities worked together to support each other during this time (75).

Box 3. Experience of COVID-19, England (United Kingdom)

We have been blown away by how the many gifts, skills and talents of our neighbours have been offered in creative and exciting ways. We are seeing teachers and children's workers creating online resources for their neighbours (not just their own children), sharing education resources they recommend, and offering their time to remotely support adults now home schooling. A mindfulness share group is moving to a Facebook Group offering meditations and tips for relaxation. We have people offering to deliver seeds, tools, and resources required to start growing their own food, and ideas for food that grows in less than 2 months. We have people offering their time and cars to drive to pick up prescriptions and go shopping for anyone in our neighbourhood and people checking in on neighbours to see if there is anything they need. Some of these are a reimagining of things already present (people who already are involved in the community or support their neighbours), and some are new ways people are sharing themselves.

Source: Other Front Line Alliance (75).

Such community support was a life-line for many during the pandemic and civil society organizations often played a crucial role, particularly in supporting marginalized groups (103). However, this support took place in the context of reduced capacity in these organizations through reduced funding and working restrictions on volunteers.

In all, 60% of nongovernmental and civil society organizations surveyed across Europe reported negative effects of the pandemic, including reduced operations and downsizing (104). Smaller organizations were more likely to be negatively affected, with 50% reporting a reduced number of volunteers during the pandemic.

Furthermore, given the importance of this sector's role in supporting resilience in times of crises, it may be surprising that only half of those responding to an EU-funded survey had received any government support (104). Community capacity in terms of civil society organizations and participation in volunteering is also socially patterned: participation is lower in more disadvantaged communities and capacity tends to be more adversely affected in these communities during a crisis (104–106). Therefore, communities with the greatest increase in demand often experience the greatest reduction in capacity to meet that demand.

These inequities may contribute to disadvantaged groups having lower levels of trust in others. Fig. 24 shows that the people on the lowest incomes are much less likely to report having high trust in others compared with those with high incomes.

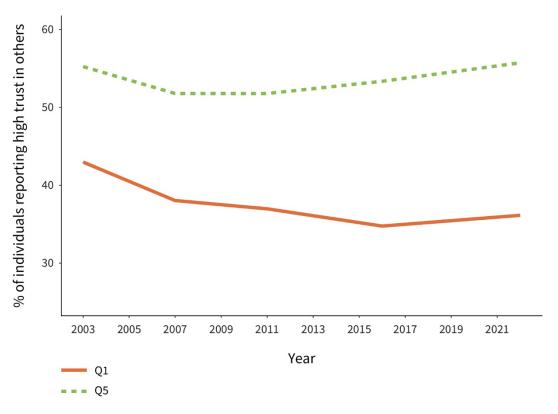


Fig. 24. Proportion of people in EU countries reporting high levels of trust in others

Source: Values up to 2016 were obtained from the Eurofound EQLS (25) and values for later years from equivalent questions in the LWC19 survey (26).

Note: Q1: lowest income quintile; Q5: highest income quintile. High trust in others was defined as a response score of ≥6 to the question "Trust in people" (scale: 1, You can't be too careful; 10, Most people can be trusted). Aggregate values calculated using the appropriate survey weighting. Included countries are listed in Annex 3.

In the 10 years before the pandemic, trust in others had been declining in low-income groups; however, it was increasing in high-income groups, thereby widening the gap. The pandemic appears to have increased levels of trust in others in both socioeconomic groups but to a greater extent in the high-income group, thus further widening inequities.

2.3.2 Experiences of minority ethnic groups and migrants

The COVID-19 pandemic particularly highlighted the disadvantage and discrimination faced by minority ethnic groups and migrants. Some unequal patterns in trust underlie these unequal impacts of the pandemic. The systematic review of studies on this issue highlighted that vaccine uptake was consistently lower among minority ethnic groups and migrants in Europe (107,108). This was often related to distrust in authorities caused by historical mistreatment, as well as to misinformation and concerns about side-effects (Box 4).

Box 4. Quote from an adult Roma person

I think... the vaccine is testing people; they're just using people as guinea pigs... we experience discrimination for many years.

Source: Lockyer et al. (109).

Lack of trust in authority (represented by governments and health systems) was reported as a factor influencing the increased health inequities in marginalized ethnic and minority populations across the WHO European Region. Fear and lack of trust can reduce the motivation to use health services or to adhere to government guidelines (38). Misinformation spread in minority ethnic populations through, for example:

- lack of access to accurate scientific data and failure to present information in a culturally competent way (45);
- lack of trust in government, leading to increased reliance on social media and, therefore, increased exposure to misinformation (110);
- lack of confidence in the government's response to the pandemic because of a lack of involvement in decision-making and a sense of being forgotten about (111);
- lack of sensitivity to cultural traditions and practices by health services (36); and
- lack of representation in research or the development of health services (39,109).

Several studies linked unequal access to health care during the pandemic for minority groups and migrants to direct discrimination, for example, in referrals to mental health services, palliative care (36). emergency and routine hospital procedures and general practitioner visits (37), and maternity care (38,39). Stigma and discrimination were also reported in the context of the work environment for health care professionals, including abuse directed at health care professionals from minoritized ethnic groups; or structural racism, as evidenced by required adjustments at work that compromise religious obligations (40,41); or additional expectations for members of these groups to work in hazardous situations (112,113).

Discrimination put members of ethnic minority groups and migrants at greater risk during the pandemic. In turn, this was often a source of increased stigma and discrimination. Several studies reported that minority ethnic groups experienced discrimination during the pandemic because they were perceived as having an increased risk of infection (Box 5) (37,113–119).

This is an important point for public health officials to note when communicating evidence about the increased risk experienced by some marginalized groups.

Box 5. Experience of ethnic minority communities in the United Kingdom

When he got back [from work], the door locks were changed and she [the landlady] said "I'm really sorry but I can't have you in here because I'm too frightened, you're a cab driver, you're seeing all these people you're going to infect the whole house you know, I'm sorry I can't have you in here."

Black African woman

The heightened awareness of the fact that it's impacting black and minority ethnic communities has given rise to...justifying hate... and we've seen some of this manifested online towards our community.

British Asian community service provider

Sources: Denford et al. (116); Mahmood et al. (117).

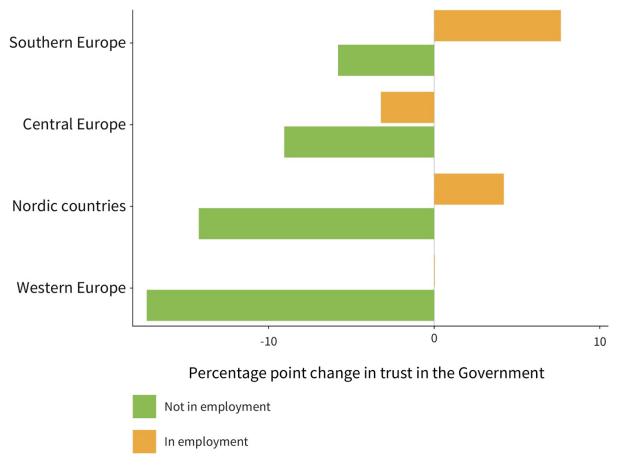
2.3.3 Trust in government

In general, levels of trust in national governments decreased during the pandemic (120). However, this trend markedly differed between those who were in employment and those out of employment. Figs 25 and 26 show that the percentage of people reporting trust in government sank to a much greater level among those not in employment compared with those who were in employment at the time of the survey. In particular, western European, and Nordic countries reported levels of trust had declined considerably among people out of work; the decline in these countries was from a previous relatively high level.

Reduced trust among unemployed people may reflect the fact that in some countries financial support during the pandemic was often focused on employed people and, to some extent, to unemployed people, whereas less support was available to people outside the labour market. In general, people who are more financially stable have higher levels of trust in national institutions and governments (122), and trust in government is lower in more disadvantaged groups and young people (123). This highlights the importance of social protection and of supporting the poorer members of society in order to promote trust and protect social cohesion. OECD found that people generally trust local government more than the national government (123). A key factor underlying the lack of trust in government was low

participation in decision-making: half of the survey respondents said that the political system in their country does not let them have a say in government decision-making.

Fig. 25. Percentage point change in people reporting that they tend to trust the Government, by country cluster, 2019–2022



Source: Eurobarometer survey, Leibniz Institute for the Social Sciences (121).

Notes: data are the percentage of persons who responded as "Tend to trust" to the question "Do you tend to trust [the government] or tend not to trust it?". Aggregate values were calculated using socioeconomic group and country population size weighting. Included countries are listed in Annex 3.

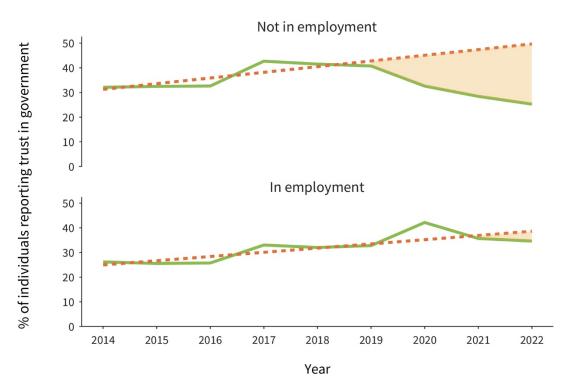


Fig. 26. Percentage of people reporting that they tend to trust the Government, EU countries, 2014–2022

Source: Eurobarometer survey, Leibniz Institute for the Social Sciences (121).

Notes: data indicate the percentage of people who responded "Tend to trust" to the question "Do you tend to trust [the government] or tend not to trust it?". Aggregate values were calculated using socioeconomic group and country population size weighting. Included countries are listed in Annex 3.

2.3.4 Crisis in trust and actions to rebuild trust

A central theme across recovery plans was the need to rebuild trust within society and between people and their institutions. Building trust is central to the aims of the United Nations, as outlined in the Secretary-General's report, *Our Common Agenda (124)*. Concerns have been raised that "we are in a crisis of trust and that people are turning their backs on the values of trust and solidarity in one another – the very values we need to rebuild our world and secure a better, more sustainable future for our people and our planet."(124). This has been exacerbated by instability and fear engendered by the pandemic, which has led to increasing human rights concerns such as discrimination against certain groups (125). A key issue facing international organizations is the need to renew the social contract between governments and the people. Central to achieving this aim is rebuild trust in institutions and between groups in society. OECD highlighted a decline and polarization in trust, particularly between generations, and that addressing this is necessary to prevent further disengagement

from democratic processes (31). The pandemic recovery provides an opportunity to create the foundations for future well-being and public trust.

The approaches proposed by international organizations to promote trust and heal social fractures include several components (126). First, there is the need to improve democratic governance at the local and national levels to enhance representation, decentralized decision-making (31), and participation and transparency in decision-making that is free of corruption and of the influence of private interests (126). This includes strengthening the capacity of public administrations and of employers' and workers' organizations to participate in social dialogue (127). Secondly, there is a need to provide public services that are responsive, reliable and fair to ensure universal social protection and health and education coverage. Thirdly, many international organizations have emphasized a need to provide open, accessible information to help the public to better understands what government is doing. To this end, the Secretary-General has proposed a global code of conduct that promotes integrity in public information (124). Lastly, renewal of the social contract needs to be anchored in universal human rights with the adoption of comprehensive laws against discrimination based on race or ethnicity, age, sex, gender, religion, disability, and sexual orientation or gender identity.

3. Emerging themes

Several themes emerged from the evidence review, analysis of recovery plans, and dialogue with countries and international organizations. These were further refined with stakeholders to ensure that they support the development of policies across Member States and international organizations that promote health equity. The themes reflect:

- new and emerging equity trends;
- areas of policy innovation that are emerging from the crisis responses of Member States; and
- intended and unintended health equity consequences of recovery plans.

The five main themes relate to (i) young people, (ii) social protection, (iii) trust, (iv) green and digital recovery, and (v) equitable resources for health.

3.1. Invest in young people

Young people hold the key to the future: they are growing up in a world beset by crises, but are also central to the transformation needed to build a better and fairer society. Investment in young people is necessary to build these foundations. The evidence is clear that investment in the health and well-being of young people provides greater returns than investment later in the life-course (128). Given the adversity faced by young people during the COVID-19 pandemic (19–21), neglecting to invest in them will have long-term scarring effects with multiplicative impacts across the life-course, which will affect the future of society and the economy (58). Several studies have shown that the conditions in which people grow up have long lasting impacts on their view of and engagement with society, with consequences for future trust, cohesion and social unrest (129). Turning our backs on young people today may lead to an increasingly divided future – not just in terms of health but also socially, economically and politically.

Importantly, to address inequities, programmes need to recognize that some groups of young people are particularly disadvantaged, for example those with fewer years of schooling or with learning difficulties. The *Rinnalla kulkien* programme in Finland specifically targets these groups (Case study 4).

Case study 4. Rinnalla kulkien (Walking beside) in municipalities, Finland

Rinnalla kulkien is a local/ regional project that targets young people aged 18–25 years who became unemployed during the COVID-19 pandemic (130). The core target group is young people who may be less likely to find new employment, that is, those without secondary education, those who became unemployed directly after graduation and those with difficulties in terms of language skills or learning. Participants are assigned a mentor who works with them several times a week to ensure a fast transition to either working life or further education.

Social protection systems need to be adapted to the specific ways in which crises affect young people, particularly those in poor health or with disabilities or learning difficulties. For example, Wales is piloting a basic income scheme for young people leaving care to provide a more solid foundation on which to build their adult lives from. (Case study 5) (131).

Case study 5. Basic Income pilot for care leavers, Wales

In 2022 Wales began piloting a basic income scheme for more than 500 young people leaving care who are not supported by traditional family structures (131,132). This involves a monthly payment for 2 years to support the transition into adult life. The pilot, which will run until 2025, aims to provide independence and security to young people who have faced immense challenges during their childhood by empowering them to make decisions about their future. Alongside providing the income, local authorities and advisory services will work with young people to provide advice and support in developing financial and budgeting skills.

To support recovery in the mental health and economic inclusion of young people, the health sector needs a triple shift in how it allocates resources: a shift to mental health, a shift to young people and a shift to prevention. The health sector is also an essential stakeholder in economic recovery. This can be improved through mental health services routinely monitoring the impacts on employment and economic outcomes and designing programmes to optimize these outcomes. The health sector is a key employer of young people and can enhance that role by ensuring support pathways into employment in health and care jobs,

particularly for disadvantaged groups, alongside good career progression and workplace well-being policies.

3.2. Develop responsive social and health protection systems

The rapidly changing nature of the COVID-19 pandemic underlined the need for social protection measures that can adapt to emerging crises. Many countries achieved this during the pandemic, but some population groups were insufficiently supported by these measures, such as young people and migrants. Many international agencies have called for more shock-responsive social protection measures to be implemented alongside universal income guarantees. Health and other sectors need to join up social and health protection systems to achieve this.

The experience since 2019 has shown how rapidly crises can emerge, from the COVID-19 pandemic and its subsequent economic effects to the war in Ukraine, which has precipitated massive increases in the cost of key resources needed for health, such as food and energy. These crises have demonstrated the importance of countries being able to rapidly adapt social protection systems in order to adequately protect their citizens. Social protection is key to building resilience, promoting inclusive economic growth and investing in human capabilities. Preventing poverty saves lives now and protects against future escalating costs. Investing now to prevent poverty makes economic sense because it is likely to save a greater public expenditure in the future (82). Many countries did extend social protection coverage during the pandemic. For example, Spain launched a minimum living income scheme (Case study 6). However, in many countries these measures have now been reversed.

Case study 6. Minimum Living Income scheme, Spain

The COVID-19 pandemic accelerated the launch in Spain of a social security benefit that guarantees a minimum living income to households either unemployed or earning below a certain threshold (133). The benefit was introduced in June 2020 and is still in place. It is means tested and only available to people with legal citizenship (who have legally lived in Spain for at least 1 year); therefore, it is not available to migrants. At the start of 2022, it rose by 3%, so eligible households will now receive between €5900 and €13000 depending on their circumstances.

The pandemic highlighted both the speed with which new vulnerabilities can arise and that Member States are able to mount rapid effective responses to these vulnerabilities. In the current cost of living crisis, there is an opportunity to learn from this experience and establish adaptive social protection systems that are fit for the future. The health sector has a key role to play in developing such systems, not least in expanding UHC to ensure that using health services does not cause financial hardship. Furthermore, the health sector often has the most relevant information on the need for social protection and can utilize this to better target support. Increasing social protection uptake, particularly among marginalized groups, should be a core activity for the health and care services.

Adaptive social protection systems need to be:

- intelligent and utilize all of the available information from all sectors to identify need and allocate resources. Linking up health and social protection intelligence systems improves the assessment of population needs by enabling the identification of emerging risks, as well as coverage gaps in both systems and how they overlap. This also enables the identification of interacting risks, for example people at risk of both poverty and disability. Social protection systems often underestimate the poverty rate in people with disabilities, who face additional health and social care costs.
- integrated and embedded across services, in particular those related to health, social care, education, housing and employment. This is a two-way process: such services should be a gateway into accessing social protection support, and social protection should be more than just the passive transfer of resources rather, it should be an entry point to support that addresses the causes of poverty. For example, this could be achieved through addressing health, employment or educational barriers.
- inclusive and designed for equity in relation to sex, gender, age and poverty, as well as minority or marginalized groups.
- civically engaged by involving recipients in their design, for example people with disabilities or from marginalized groups, and involving civil society organizations in supporting coverage and uptake.
- evaluated by ensuring mechanisms are in place to monitor uptake across equity
 dimensions and assess their impact not just on income, poverty and employment but
 also on health and well-being. Monitoring data should be used to proactively adapt,
 iterate and refine the social protection response.

3.3. Ensure that all policies and services deliver higher trust in institutions and a greater policy impact for people

Stakeholders have highlighted the importance of trust, which was central to the effectiveness of the public health response to the COVID-19 pandemic (102,123). Trust both in others and in institutions shapes the political acceptability of policy responses to crises; however, current trends show an alarming and unequal decline. Divided societies do not invest in public goods; therefore, actions across government and civil society should aim to deliver both equitable public services and rebuild trust and social cohesion (134).

The solutions to many of the challenges countries face, from the COVID-19 pandemic to rising poverty, inequity and climate change, require collective action. Trust is fundamental to both collective action and its democratic legitimacy. For example, raising sufficient resources through taxation to support the provision of effective social protection depends on a strong social contract that relies on trust (135). However, the relationship between social protection and trust works in both directions: increasing inequity undermines trust, which in turn undermines the social contract needed to support policies that redistribute resources, thereby further increasing inequity (136). The provision of effective universal social protection promotes trust and social cohesion; during the pandemic, the evidence shows that governments with more effective social protection maintained higher levels of trust.

The importance of trust for health is not just about government policy: good social support networks are also good for health (137,138). During the pandemic, social support and the role of civil society organizations were crucial, particularly for marginalized groups and when governments failed to act quickly. The capacity for such social support within communities depends on trusting relationships, as well as on formal and informal resources such as people's time.

We live however in increasingly divided times (139), and the unequal distribution of social capital within society contributes to the unequal distribution of health and well-being. The WHO European Health Equity Status Report showed that differences in trust explain 6% of the health gap between most and least affluent quartiles of adults in Member States of the WHO European Region (8). Minority ethnic groups and migrants were often more severely affected by the pandemic. The reasons underlying this are complex including racism, discrimination and the underlying socioeconomic inequities that disproportionately affect

these groups (32–41). However, they also include distrust in government and other institutions in that some groups owing to their history of discrimination.

Actions to rebuild trust need to recognize that different groups in society have very different experiences of government and the wider society. Many groups have improved levels of trust in others and in institutions and are included in decision-making processes, but this is not the case for all groups. The pandemic highlighted marked polarization, by income, age, sex, gender, employment status and ethnicity (120). Therefore, a one-size-fits-all approach is unlikely to address these social fractures. Active support and engagement with marginalized groups is needed, for example the work with Roma communities in North Macedonia (Case study 7).

Case study 7. Engaging Roma communities, North Macedonia

During the COVID-19 pandemic, community boards were set up in Roma communities in North Macedonia to bring Roma leaders and influencers together with representatives from municipal authorities and health, education, police and social protection services (140). The boards received training on emergency preparedness, which enabled them to map the available assets and vulnerable people in order to plan the optimal use of resources. The community boards provided a trusted and credible channel of communication between communities and public bodies and stakeholders at local level. This type of community engagement can facilitate communication, dialogue and joint action to effectively focus community resources during emergency preparedness and response. However, engaging community leaders, establishing relationships, and building trust with community groups is vital to the success of these types of initiatives.

Fortunately, trust and social cohesion can be fostered, even in a crisis. Rebuilding trust, particularly in the communities that have been left behind, is crucial for addressing health equity. The health sector has an important part to play, for example, in developing participatory mechanisms to involve the public in decision-making and the prioritization of actions to rebuild the health sector. The health sector is often a trusted source of information that can be built on to ensure that information systems are able to disaggregate information across equity dimensions and, thereby, enable a timely response to a crisis.

3.4. Promote equitable digital and green economic recovery that promotes well-being

Digital and green economies are the twin pillars of recovery plans, and have great potential for promoting well-being and reducing social and health inequities. As with previous major transitions, this economic transition comes with health equity risks related to pre-existing inequities; for example, currently these sectors disproportionately employ men, who have greater educational opportunities. There is a need to learn from previous experiences of radical economic transitions and for adversely affected communities to be involved in decision-making and supported through social protection in addition to employment and health programmes.

The world has been shaken by recent catastrophic events. In order to avoid continued cycles of crises and make the most of digital and technological advances, economic recovery will need to promote well-being and address climate change and environmental damage. When faced with such crises, countries and international organizations are challenged to adapt and innovate, so prioritizing investment in digital and green economies is central to their recovery plans. Minimizing the impact of climate change and environmental improvements are likely to increase health equity, but to ensure that no one is left behind in the expansion of the digital and green sectors, countries must address existing inequities in these sectors. In the past, rapid economic transitions have devasted the health and well-being of disadvantaged communities (98–100). It is essential to learn from these experiences in order to avoid repeating these tragedies and to protect and improve the health of all during a time of rapid change.

Digital technologies have the potential to improve well-being by providing better access to more information and services, including health services, but represent a major risk of inequity unless mitigating action is taken (141). For example, as the digital health system in Denmark increasingly became a vehicle to access vital services during the pandemic, solutions were put in place to ensure that digitally excluded people were not disadvantaged (Case study 8).

Case study 8. Narrowing the digital divide, Denmark

The Danish sundhed.dk e-health portal is a well-established electronic health platform for people to access information about their health and even to consult virtually with a health care professional (142). During the COVID-19 pandemic, use of the e-health portal doubled, and people increasingly relied on technology to access services (143). In 2021 in Denmark 92% of people over the age of 15 years used digital communication to access public services.

Citizens who were unable to access the e-health portal owing to limited resources or skills could delegate access to their health data to their relatives. When in-person activities restarted, they could request a paper EU Digital COVID Certificate to access events/areas. Expanding access to health data and granting delegated access to carers are two ways to support people who are less digitally literate to benefit from digitalized health care.

An equitable green and digital recovery needs to have well-being and equity as its core principles and involve the most-affected communities as partners. The health sector has an important part to play in promoting an equitable green and digital recovery. In the provision of digital services, it can also invest in building the digital skills and social infrastructure to enable citizens to participate. The development of digital platforms can provide an opportunity the health sector to develop skills and jobs in the communities it serves, particularly those that may be adversely affected by declines in other industries. Along with other public sectors, the health sector is often a major employer and procurer of services in disadvantaged communities. In its role as an anchor institution, it can lead the way in developing a fair digital and green economy. For example, this could include supporting and procuring from local green and digital business in disadvantaged communities, and ensuring career pathways into caring professions for those affected by economic transition. This community wealth building approach to local economic change has been shown to have clear health benefits (8).

3.5. Ensure mechanisms for equitably distributing health and care resources

The COVID-19 pandemic demonstrated that ensuring that resources are shared between people and places in proportion to need is a necessary prerequisite for equitable health system resilience. Mechanisms for this are particularly important in times of recovery, but also need

to be sustained and embedded within health systems (144–146). These priorities are critical to ensuring the protection of fragile human capital and social inclusion, which are vital for health and well-being. Therefore, increased action, resource and innovation are needed in the areas of mental health, social protection, spatial planning and equitable resource allocation.

Disadvantaged places and people are often left behind through unequal investment in the resources required for health and well-being, despite often having the greatest need. To build back public services and the economy equitably following the pandemic and subsequent cost-of-living crisis, measures need to be in place to ensure that new investments are proportionate to need and prioritize the most disadvantaged.

As countries face fiscal challenges, there is a risk not only that they reduce investment in the resources needed for health but that this happens inequitably. Experience from previous austerity programmes has shown that budgets cut are often greatest in the most disadvantaged communities, with preventive services facing greater cuts than acute services. The reasons for this are complex but the consequences are clear. In the United Kingdom, cuts to local government funding between 2013 and 2017 reduced life expectancy by an average of 1.3 months for men and 1.2 months for women for each £100 reduction in funding per person, thereby increasing health inequities (145). Cuts to youth services led to large increases in the number of young people being taken into care by the government, which adversely affected these young people but also cost the government more than it saved by the reduced spending on prevention (140). Policies that explicitly allocate resources to subnational areas based on objective measures of need have been shown to reduce health inequities (144).

Explicit mechanisms are needed to ensure equity in health system recovery. New investments and existing resources should be allocated based on objective measures of need, for example, using a place-based needs-weighted capitation formula (147). This reflects the principle of proportionate universalism, according to which actions are universal (rather than targeted) and delivered at a scale and intensity relative to need, taking into account the social gradient in health (148).

The development of competencies and new roles in the health care workforce needs to include skills and capacity for outreach into marginalized communities, including investing in the civil society organizations that work in those communities. Plans to increase the health workforce need to include incentives that prioritize increasing capacity in the most

disadvantaged communities. For example, in France during the COVID-19 pandemic, health care staff were incentivized to work in areas with a higher COVID-19 burden and, therefore, in greater need (Case study 9).

Case study 9. Incentivized health care workforce, France

France was severely impacted during the initial stages of COVID-19 pandemic (149). In response, the urgent economic plan included financial bonuses to aid the retention of front-line health care workers. The earlier bonuses (in 2022) were higher (up to &1,500) for hospital workers dealing directly with COVID-19 patients and lower for those in working in less-affected areas (starting from &500).

When addressing the backlog of care, the risk is that Member States will prioritize short-term solutions to acute issues, which may receive greater media attention, at the expense of primary care and public health services. However, this may lead to longer-term harms and increase inequities. Similarly, it is important to give the same emphasis to addressing unmet mental health needs as unmet physical health needs. Mental health services are often not given the same level of priority as those focused on physical conditions. As mental health conditions have a steeper social gradient than other conditions, this can increase inequity. Rebuilding mental health systems provides an opportunity to ensure continuity of support across the life-course, in particular across transitions from childhood to adulthood, with the capacity to meet the increasing mental health needs of young people.

There is a real opportunity to address health system inequities across the WHO European Region by eliminating the inverse care law that is in effect in many countries (150). However, health system recovery can also help to address other health equity challenges that the Region faces. In developing the health and care workforce for the future, it can enable opportunities for young people, particularly those from disadvantaged backgrounds, for training and good careers that promote health and well-being. Integrating health and social protections systems can ensure their rapid adaptation to target support to groups in need as crises emerge. The health system can take the lead in fostering trust and social cohesion, for example by increasing transparency and involving communities in decision-making. Expanding UHC and health system recovery contribute to the development of a digital and

green economy. The health system can lead the way in ensuring that this happens equitably by supporting the economies of disadvantaged communities.

3.6. Policy considerations

Based on the five key themes identified in the evidence review, analysis of recovery plans, and dialogue with countries and international organizations, policy considerations are as follows.

Invest in young people

- If systematically used in the public and business domains, youth-responsive planning and policy tools have the potential to transform the lives of young people.
- Crises affect young people, particularly those in poor health with physical, emotional
 and educational challenges, in a different way to adults because of the ways in which
 young people seek help. Services can be made available by integrating a mental health
 and well-being lens into employment practices and active labour market programmes.
 Joining this up with social protection measures is an efficient way of delivering services
 to reduce inequalities among young people.
- The health and care sector should monitor and aim to increase the share of funding that is allocated to children's and young people's mental health services, particularly across the transition from childhood into adulthood, and increase investment in prevention.
- Ensure that employment programmes routinely monitor their impacts on mental health and well-being, and that mental health services routinely monitor their impacts on employment and economic outcomes, and assess variations in uptake and outcomes across age groups and other equity dimensions.
- The health and social care sector should review and support pathways into health and care jobs for young people, as well as their career progression and workplace wellbeing.

Develop responsive and integrated social and health protection systems

- Extend national social protection systems to ensure nationally defined adequate income guarantees and universal access to health care, including medicines and mental health services and support.
- As people face food, fuel and housing insecurity, adaptive social health protection systems are required to avoid the forecasted increase in poverty of vulnerable people in the next 10 years.
- Establish shared information systems across sectors to enable the rapid identification of at-risk groups and allocation of benefits to people in most need at times of crisis.
- Integrate social protection systems into local housing, health, education and employment services so that there is no wrong door into social protection support and support for addressing the causes of poverty.
- Review existing systems to identify gaps in support and groups left behind, and design measures to ensure equity in relation to gender, age, poverty and marginalized groups.
- Involve civil society organizations representing social protection recipients in the design of social protection schemes and civic partnerships to support uptake, particularly for marginalized groups.
- Embed mechanisms for impact assessment and evaluation across equity dimensions and use them to adapt and refine the social protection response.

Ensure that all policies and services deliver higher trust in institutions and a greater policy impact for people

- Develop transparent, equity-sensitive information systems to support a rapid, effective response to public health and other crises.
- Invest in democratic governance at the local and national levels to enhance
 representation and participation in a fair and transparent manner. This includes the
 health system enabling affected communities to participate in resource allocation and
 service design decisions.
- Use the diverse experiences, including the lived experience of marginalized and at-risk groups, to ensure that the reality of people's lives is recognized and addressed in policy design and delivery.
- Promote and enforce non-discriminatory laws, including those relating to access to and uptake of health care.

- Work with civil society organizations to engage marginalized groups in developing and designing inclusive health and social protection systems, as well as healthy public policies.
- Build systems to ensure transparency and integrity in procurement, lobbying and commercial interests that are adverse to health. There is a wide range of tools that governments can use to shape the private sector in improving health for all. These include using fair tax that incentivizes healthy, inclusive and sustainable business.

Promote equitable digital and green economic recovery that promotes well-being

- Integrate health and well-being equity indicators into economic models and decisionmaking.
- Combine the expansion of digital service provision within the health, education and other sectors with actions to extend digital access and skills for disadvantaged places and people.
- Enable the health sector in disadvantaged communities to support the digital and green sectors through implementing procurement and employment policies in communities at risk of being left behind in the digital and green transitions.
- Involve communities that are adversely affected by economic transitions in developing place-based strategies to coordinate health, training, employment and social protection actions.
- Assess and monitor the equity impacts of digital and green investment in terms of uptake of services, employment and economic benefits, as well as well-being outcomes (e.g. stratified by age, gender, socioeconomic status, disability).

Ensure mechanisms for equitably distributing health and care resources

- Evaluate the backlog of care by equity dimensions and prioritize care provision based on level of disadvantage and need not just on length of wait.
- Implement explicit mechanisms to ensure that health care resources are distributed to
 places in proportion to need, for example needs-weighted capitation for allocating new
 health care investment.
- Aim to shift resources to prevention, earlier in the life-course and mental health services, and monitor progress in achieving this.

- Prioritize training and capacity-building for the health and social care workforce in disadvantaged places and communities, including financial incentives, training in community engagement and outreach, and investment in and partnerships with civil society organizations working in disadvantaged communities.
- Monitor the distribution of health system investment and the impact across population groups.
- Set standards to measure the quality of care in underserved areas to improve the impact of and access to services.

4. Conclusions

The pandemic and subsequent crises have transformed the health equity landscape. Responses to these crises have inadequately addressed vulnerabilities, leading to waves of inequity that not only widen the health divide but also threaten solidarity, peace and social justice. Five priorities for action were identified based on a dialogue with Member States and international partners, and data and policy analyses. Health, economic, social and community sectors need to work together to:

- promote the mental health and well-being of young people through economic and social inclusion;
- develop adaptive social and health protection measures to protect well-being and mitigate the effects of rapidly evolving crises;
- rebuild trust and promote social cohesion within and between societies and trust in institutions and government;
- optimize health and well-being opportunities for all optimized in the expansion of digital and green economies; and
- ensure mechanisms for equitably distributing health and care resource between people and places.

Since health, the economy and society intersect, urgent action on inequities that have arisen in all three areas is necessary for recovery and resilience, both today and for future generations.

References³

- 1. Finch D. The cost-of-living crisis is a health emergency too [website]. In: The Health Foundation/News and comment/Blogs. London: The Health Foundation; 2022 (https://www.health.org.uk/news-and-comment/blogs/the-cost-of-living-crisis-is-a-health-emergency-too).
- 2. Health inequity and the effects of COVID-19: assessing, responding to and mitigating the socioeconomic impact on health to build a better future. Copenhagen: WHO Regional Office for Europe; 2020 (https://apps.who.int/iris/handle/10665/338199).
- 3. Martin-Carrasco M, Evans-Lacko S, Dom G, Christodoulou NG, Samochowiec J, González-Fraile E et al. EPA guidance on mental health and economic crises in Europe. Eur Arch Psychiatry Clin Neurosci. 2016;266(2):89–124. doi: 10.1007/s00406-016-0681-x.
- 4. Impact of economic crises on mental health. Copenhagen: WHO Regional Office for Europe; 2011 (https://www.euro.who.int/__data/assets/pdf_file/0008/134999/e94837.pdf).
- Pan-European Commission on Health and Sustainable Development [website].
 In: WHO/Europe/Groups and networks. Copenhagen: WHO Regional Office for Europe; 2023 (https://www.who.int/europe/groups/pan-european-commission-on-health-and-sustainable-development).
- 6. Health Equity Status Report initiative [website]. In: WHO/Europe/Initiatives. Copenhagen: WHO Regional Office for Europe; 2022 (https://www.who.int/europe/initiatives/health-equity-status-report-initiative).
- 7. European Programme of Work 2020–2025: united action for better health. Copenhagen: WHO Regional Office for Europe; 2021 (https://apps.who.int/iris/handle/10665/339209).
- 8. Healthy, prosperous lives for all: the European Health Equity Status Report. Copenhagen: WHO Regional Office for Europe; 2019 (https://apps.who.int/iris/handle/10665/326879).
- 9. Bagnall A-M, Pilkington G, Maynard M, Apekey T, Griffiths A, Matu J et al. Impacts of the COVID-19 pandemic on ethnic and migrant inequalities: a rapid evidence review. PROSPERO. 2022;CRD42022354668 (https://www.crd.york.ac.uk/prospero/display record.php?ID=CRD42022354668).
- 10. Mortality and life expectancy statistics [website]. Luxembourg: Eurostat; 2022 (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Mortality and life expectancy statistics).
- 11. Human Development Index (HDI) [website]. New York: United Nations Development Programme; 2023 (https://hdr.undp.org/data-center/human-development-index#/indicies/HDI).
- Global excess deaths associated with COVID-19 (modelled estimates)[website].
 In: WHO/Data/Data Sets. Geneva: World Health Organization; 2022 (https://www.who.int/data/sets/global-excess-deaths-associated-with-covid-19-modelled-estimates).
- 13. Gustafsson PE, Sebastian MS, Fonseca-Rodriguez O, Connolly A-MF. Inequitable impact of infection: social gradients in severe COVID-19 outcomes among all confirmed SARS-CoV-2 cases during the first pandemic wave in Sweden. J Epidemiol Community Health. 2022;76(3):261–7. doi: 10.1136/jech-2021-216778.

³ All references were accessed 13 February 2023.

- 14. Di Girolamo C, Bartolini L, Caranci N, Moro ML. Socioeconomic inequalities in overall and COVID-19 mortality during the first outbreak peak in Emilia-Romagna Region (Northern Italy). Epidemiol Prev. 2020; 44(5–6 Suppl 2):288–96. doi: 10.19191/EP20.5-6.S2.129.
- 15. Marí-Dell'Olmo M, Gotsens M, Pasarín MI, Rodríguez-Sanz M, Artazcoz L, Garcia de Olalla P et al. Socioeconomic Inequalities in COVID-19 in a European urban area: two waves, two patterns. Int J Environ Res Public Health. 2021;18(3):1256. doi: 10.3390/ijerph18031256.
- 16. Arora VS, Karanikolos M, Clair A, Reeves A, Stuckler D, McKee M. Data resource profile: the European Union Statistics on Income and Living Conditions (EU-SILC). Int J Epidemiol. 2015;44(2):451–61. doi: 10.1093/ije/dyv069.
- 17. Johnson P. It's not only the NHS in trouble: the whole country is getting sicker. London: Institute for Fiscal Studies; 2022 (https://ifs.org.uk/articles/its-not-only-nhs-trouble-whole-country-getting-sicker).
- 18. Parmar D, Stavropoulou C, Ioannidis JPA. Health outcomes during the 2008 financial crisis in Europe: systematic literature review. BMJ. 2016;354:i4588. doi: 10.1136/bmj.i4588.
- 19. COVID-19 Mental Disorders Collaborators. Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. Lancet. 2021;398(10312):1700–12. doi: 10.1016/S0140-6736(21)02143-7.
- 20. Mental health and COVID-19: early evidence of the pandemic's impact: scientific brief, 2 March 2022. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/352189).
- 21. Health at a glance: Europe 2022: state of health in the EU cycle. Paris: Organisation for Economic Co-operation and Development; 2022 (https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-europe-2022 507433b0-en). doi: 10.1787/507433b0-en.
- 22. Mental health of children and young people in England 2022: wave 3 follow up to the 2017 survey. Leeds: NHS Digital; 2022 (https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2022-follow-up-to-the-2017-survey).
- 23. European Quality of Life Surveys (EQLS) [website]. Dublin: Eurofound; 2023 (https://www.eurofound.europa.eu/surveys/european-quality-of-life-surveys).
- 24. Living, working and COVID-19 e-survey [website]. Dublin: Eurofound; 2023 (https://www.eurofound.europa.eu/surveys/living-working-and-covid-19-e-survey).
- 25. European Foundation for the Improvement of Living and Working Conditions. European Quality of Life Survey integrated data file, 2003–2016, 3rd edition. Study no. 7348 [data collection]. Colchester: UK Data Service; 2018. doi: 10.5255/UKDA-SN-7348-3 (https://doc.ukdataservice.ac.uk/doc/7348/mrdoc/UKDA/UKDA_Study_7348_Information.htm).
- 26. Living, working and COVID-19 data [dataset]. Dublin: Eurofound; 2020 (http://eurofound.link/covid19data).
- 27. The World Health Organisation five well-being index (WHO-5) [website]. London: Anna Freud Centre; 2023 (https://www.corc.uk.net/outcome-experience-measures/the-world-health-organisation-five-well-being-index-who-5/).
- 28. Center for Epidemiological Studies Depression [website]. Washington (DC): American Psychological Association; 2023 (https://www.apa.org/pi/about/publications/caregivers/practice-settings/assessment/tools/depression-scale).
- 29. COVID-19 International Student Well-being Study [website]. In: Research groups/Centre for Population, Family and Health/Research. Antwerp: University of Antwerp; 2023

- (https://www.uantwerpen.be/en/research-groups/centre-population-family-health/research2/covid-19-internation/).
- 30. Global employment trends for youth 2022: investing in transforming futures for young people. Geneva: International Labour Organization; 2022 (https://www.ilo.org/global/publications/WCMS 853329/langen/index.htm).
- 31. Delivering for youth: how governments can put young people at the centre of the recovery. Paris: Organisation for Economic Co-operation and Development 2022 (https://www.oecd.org/coronavirus/policy-responses/delivering-for-youth-how-governments-can-put-young-people-at-the-centre-of-the-recovery-92c9d060/).
- 32. Jaljaa A, Caminada S, Tosti ME, D'Angelo F, Angelozzi A, Isonne C et al. Risk of SARS-CoV-2 infection in migrants and ethnic minorities compared with the general population in the European WHO region during the first year of the pandemic: a systematic review. BMC Public Health. 2022;22(1):143. doi: 10.1186/s12889-021-12466-1.
- 33. Siddiq S, Ahmed S, Akram I. Ethnicity and outcomes in COVID-19 in the United Kingdom: a systematic review and meta-analysis. medRxiv preprint. 2021. doi: 10.1101/2021.11.07.21266027.
- 34. Badanta B, González-Cano-Caballero M, Fernández-García E, Lucchetti G, de Diego-Cordero R. The consequences of the COVID-19 pandemic on the refugee population: a rapid review. Perspect Public Health. 2022:17579139221093159. doi: 10.1177/17579139221093160.
- 35. Yang K, Qi H. Research on health disparities related to the COVID-19 pandemic: a bibliometric analysis. Int J Environ Res Public Health. 2022;19(3):1220. doi: 10.3390/ijerph19031220.
- 36. Bajwah S, Koffman J, Hussain J, Bradshaw A, Hocaoglu MB, Fraser LK et al. Specialist palliative care services response to ethnic minority groups with COVID-19: equal but inequitable-an observational study. BMJ Support Palliat Care. 2021:bmjspcare-2021-003083. doi: 10.1136/bmjspcare-2021-003083.
- 37. Gillard S, Dare C, Hardy J, Nyikavaranda P, Rowan Olive R, Shah P et al. Experiences of living with mental health problems during the COVID-19 pandemic in the UK: a coproduced, participatory qualitative interview study. Soc Psychiatry Psychiatr Epidemiol. 2021;56(8):1447–57. doi: 10.1007/s00127-021-02051-7.
- 38. Fernandez Turienzo C, Newburn M, Agyepong A, Buabeng R, Dignam A, Abe C et al. Addressing inequities in maternal health among women living in communities of social disadvantage and ethnic diversity. BMC Public Health. 2021;21(1):176. doi: 10.1186/s12889-021-10182-4.
- 39. John JR, Curry G, Cunningham-Burley S. Exploring ethnic minority women's experiences of maternity care during the SARS-CoV-2 pandemic: a qualitative study. BMJ Open. 2021;11:e050666. doi: 10.1136/bmjopen-2021-050666.
- 40. Hamed A, Latif A, Haris M, Patel S, Patel MI, Mustafa SAR et al. The impact of keeping a religious beard in the COVID-19 pandemic: an online cross sectional survey study exploring experiences of male medical healthcare professionals. medRxiv preprint. 2020. doi: 10.1101/2020.11.01.20224022.
- 41. Hassan SM, Ring A, Tahir N, Gabbay M. The impact of COVID-19 social distancing and isolation recommendations for Muslim communities in North West England. BMC Public Health. 2021;21(1):812. doi: 10.1186/s12889-021-10869-8.

- 42. Building health systems resilience for universal health coverage and health security during the COVID-19 pandemic and beyond: WHO position paper. Geneva: World Health Organization; 2021 (https://apps.who.int/iris/handle/10665/346515).
- 43. Health and care workforce in Europe: time to act. Copenhagen: WHO Regional Office for Europe; 2022 (https://apps.who.int/iris/handle/10665/362379).
- 44. Health personnel by NUTS 2 regions historical data (1993–2021). In: Data Browser [database]. Luxembourg: Eurostat; 2023 (https://ec.europa.eu/eurostat/databrowser/product/view/HLTH_RS_PRSRG).
- 45. Abu-Freha N, Alsana H, El-Saied S, Azbarga Z, Aloka M, Goda T et al. COVID-19 vaccination among the Arab Bedouin population: lessons learned from a minority population. Int J Public Health. 2022:67:1604133. doi: 10.3389/ijph.2022.1604133.
- 46. Açıkalın ŞN, Eminoğlu C, Erçetin ŞŞ. Effects of COVID-19 on integration of women refugees into Turkish society. Int Migr. 2021;10.1111/imig.12929. doi: 10.1111/imig.12929.
- 47. Gosselin A, Melchior M, Carillon S, Gubert F, Ridde V, Kohou V et al. Deterioration of mental health and insufficient COVID-19 information among disadvantaged immigrants in the greater Paris area. J Psychosom Res. 2021;146:110504. doi: 10.1016/j.jpsychores.2021.110504.
- 48. Holt E. COVID-19 vaccination among Roma populations in Europe. Lancet Microbe. 2021;2(7):e289. doi: 10.1016/S2666-5247(21)00155-5.
- 49. Esenaliev D, Kröger A, Steiner S. The Kyrgyz Integrated Household Survey (KIHS): a primer. No 62, Data Documentation, DIW Berlin, German Institute for Economic Research. 2011 (https://econpapers.repec.org/paper/diwdiwddc/dd62.htm).
- 50. van Ginneken E, Reed S, Siciliani L, Eriksen A, Schlepper L, Tille F et al. Addressing backlogs and managing waiting lists during and beyond the COVID-19 pandemic. Copenhagen: WHO Regional Office for Europe; 2022 (https://apps.who.int/iris/handle/10665/358832).
- 51. Barr B, Taylor-Robinson D, Scott-Samuel A, McKee M, Stuckler D. Suicides associated with the 2008–10 economic recession in England: time trend analysis. BMJ. 2012;345. doi: 10.1136/bmj.e5142.
- 52. Stuckler D, Basu S, Suhrcke M, Coutts A, McKee M. The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. Lancet. 2009;374:315–23. doi: 10.1016/S0140-6736(09)61124-7.
- 53. ILO monitor: COVID-19 and the world of work, 7th edition. Geneva: International Labour Organization; 2021 (http://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS 767028/lang--en/index.htm).
- 54. Gender equality index 2022: the COVID-19 pandemic and care. Vilnius: European Institute for Gender Equality; 2022 (https://eige.europa.eu/publications/gender-equality-index-2022-covid-19-pandemic-and-care).
- 55. Caregiving in crisis: gender inequality in paid and unpaid work during COVID-19. Paris: Organisation for Economic Co-operation and Development; 2021 (https://www.oecd.org/coronavirus/policy-responses/caregiving-in-crisis-gender-inequality-in-paid-and-unpaid-work-during-covid-19-3555d164/).
- 56. Konle-Seidl R, Picarella F. Youth in Europe: effects of COVID-19 on their economic and social situation. In: Think Tank. Luxembourg: European Parliament; 2021 (https://www.europarl.europa.eu/thinktank/en/document/IPOL STU(2021)662942).
- 57. Data [website]. In: ILOSTAT [database]. Geneva: International Labour Organization; 2022 (https://ilostat.ilo.org/data/).

- 58. Wood D, Crapnell T, Lau L, Bennett A, Lotstein D, Ferris M et al. Emerging adulthood as a critical stage in the life course. In: Halfon N, Forrest CB, Lerner RM, Faustman EM, editors. Handbook of life course health development. Cham: Springer International Publishing; 2018:123–43.
- 59. My first salary [website]. In: Observatory of Public Sector Innovation. Paris: Organisation for Economic Co-operation and Development; 2020 (https://oecd-opsi.org/innovations/my-first-salary/).
- 60. Wilson H, Finch D. Unemployment and mental health [website]. In: The Health Foundation/Publications/Long reads and data analysis. London: The Health Foundation; 2021 https://www.health.org.uk/publications/long-reads/unemployment-and-mental-health).
- 61. Youth and COVID-19: impacts on jobs, education, rights and mental well-being. Geneva: International Labour Organization; 2020 (http://www.ilo.org/global/topics/youth-employment/publications/WCMS 753026/lang--en/index.htm).
- 62. Global accelerator on jobs and social protection for just transitions [website]. In: ILO/Topics/2030 Agenda for sustainable development. Geneva: ILO ;2023 (https://www.ilo.org/global/topics/sdg-2030/WCMS 846674/lang--en/index.htm).
- 63. Clayton S, Bambra C, Gosling R, Povall S, Misso K, Whitehead M. Assembling the evidence jigsaw: insights from a systematic review of UK studies of individual-focused return to work initiatives for disabled and long-term ill people. BMC Public Health. 2011;11:170. doi: 10.1186/1471-2458-11-170.
- 64. Saunders M, Barr B, Mchale P, Hamelmann C. Key policies for addressing the social determinants of health and health inequities. Copenhagen: WHO Regional Office for Europe; 2017 (Health Evid Network (HEN) synthesis report 52; https://apps.who.int/iris/handle/10665/326286).
- 65. Hillier-Brown F, Thomson K, Mcgowan V, Cairns J, Eikemo TA, Gil-Gonzále D et al. The effects of social protection policies on health inequalities: evidence from systematic reviews. Scand J Public Health. 2019;47(6):655–65. doi: 10.1177/1403494819848276.
- 66. Thomson RM, Igelström E, Purba AK, Shimonovich M, Thomson H, McCartney G et al. How do income changes impact on mental health and wellbeing for working-age adults? A systematic review and meta-analysis. Lancet Public Health. 2022;7(6): e515–28. doi: 10.1016/S2468-2667(22)00058-5.
- 67. Burchi F, Loewe M, Malerba D, Leininger J. Disentangling the relationship between social protection and social cohesion: introduction to the special issue. Eur J Dev Res. 2022;34:1195–215. doi: 10.1057/s41287-022-00532-2.
- 68. Social monitor: social protection for child rights and well-being in central and eastern Europe, the Caucasus and central Asia. New York: United Nations Children's Fund; 2015 (https://www.unicef.org/eca/media/1081/file/Social Monitor Regional Report.pdf).
- 69. Government finance statistics. In: IMF Data: access to macroeconomic and financial data [database]. Washington (DC): International Monetary Fund; 2023 (https://data.imf.org/?sk=a0867067-d23c-4ebc-ad23-d3b015045405).
- 70. GDP (constant 2015 US\$). In: Data [database]. Washington (DC): World Bank; 2023 (https://data.worldbank.org/indicator/NY.GDP.MKTP.KD).
- 71. Poverty headcount ratio at national poverty lines (% of population). In: Data [database]. Washington (DC): World Bank; 2023 (https://data.worldbank.org/indicator/SI.POV.NAHC).

- 72. Basic Statistics 2022 (CSV). In: Data Library [database]. Mandaluyong: Asian Development Bank; 2023 (https://data.adb.org/media/9646).
- 73. Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development, United Nations Children's Fund, World Food Programme, World Health Organization. The state of food security and nutrition in the world 2022: repurposing food and agricultural policies to make healthy diets more affordable. Rome: Food and Agriculture Organization of the United Nations; 2022 (https://www.fao.org/documents/card/en/c/cc0639en).
- 74. Suite of food security indicators. In: FAOSTAT [database]. Rome: Food and Agriculture Organization of the United Nations; 2023 (https://www.fao.org/faostat/en/#data/FS).
- 75. Global voices for social justice [website]. Other Front Line Alliance; 2020 (https://otherfrontline.org/).
- 76. Gundersen C, Ziliak JP. Food insecurity and health outcomes. Health Aff (Millwood). 2015;34:1830–9. doi: 10.1377/hlthaff.2015.0645.
- 77. European Food Prices Monitoring Tool [website]. In: Sectors/Food and drink industry/Competitiveness of the European food industry. Brussels: European Commission; 2023 (https://single-market-economy.ec.europa.eu/sectors/food-and-drink-industry/competitiveness-european-food-industry/european-food-prices-monitoring-tool en).
- 78. A global database of inflation [website]. Washington (DC): World Bank; 2023 (https://www.worldbank.org/en/research/brief/inflation-database).
- 79. Richardson D, Otchere F, Musatti A. The impact of the war in Ukraine and subsequent economic downturn on child poverty in Eastern Europe and Central Asia. Florence: United Nations Children's Fund Office of Research Innocenti; 2022 (https://www.unicef.org/eca/reports/impact-war-ukraine-and-subsequent-economic-downturn-child-poverty-eastern-europe).
- 80. Loopstra R, Reeves A, McKee M, Stuckler D. Food insecurity and social protection in Europe: Quasi-natural experiment of Europe's great recessions 2004–2012. Prev Med. 2016;89:44–50. doi: 10.1016/j.ypmed.2016.05.010.
- 81. International Labour Organization, United Nations Children's Fund, World Health Organization, United Nations Economic Commission for Europe, United Nations Issue-based Coalition on Social Protection, United Nations Sustainable Development Group. COVID-19 and social protection in Europe and Central Asia. Copenhagen: WHO Regional Office for Europe; 2020 (https://socialprotection.org/discover/publications/covid-19-and-social-protection-europe-and-central-asia-moment-opportunity).
- 82. Beyond the pandemic: building back better from crises in Asia and the Pacific. Bangkok: United Nations Economic and Social Commission for Asia and the Pacific; 2021 (https://www.unescap.org/kp/2021/beyond-pandemic-building-back-better-crises-asia-and-pacific#).
- 83. Programme guidance: strengthening shock-responsive social protection systems. New York: United Nations Children's Fund; 2019 (https://www.unicef.org/documents/programme-guidance-strengthening-shock-responsive-social-protection-systems).
- 84. Health programme [website]. Liverpool: Citizens Advice Liverpool; 2023 (https://www.citizensadviceliverpool.org.uk/citizens-advice-on-prescription-liverpool).
- 85. Milner J, Turner G, Ibbetson A, Eustachio Colombo P, Green R, Dangour AD et al. Impact on mortality of pathways to net zero greenhouse gas emissions in England and Wales: a

- multisectoral modelling study. Lancet Planet Health. 2023;S2542-5196(22)00310-2. doi: 10.1016/S2542-5196(22)00310-2.
- 86. Digital transformation in the age of COVID-19: building resilience and bridging divides. Digital economy outlook, 2020 supplement. Paris: Organisation for Economic Co-operation and Development; 2020 (https://www.oecd.org/digital/digital-economy-outlook-covid.pdf).
- 87. EU4Health programme 2021–2027: a vision for a healthier European Union [website]. In: European Commission/Public health/Funding. Brussels: European Commission; 2023 (https://health.ec.europa.eu/funding/eu4health-programme-2021-2027-vision-healthier-european-union en).
- 88. Better Iceland [website]. Reykjavik: Citizens Foundation Iceland; 2023 (https://www.citizens.is/portfolio_page/better-iceland/).
- 89. Vona F, Marin G, Consoli D, Popp D. Green skills. 30 April 2015. (CESifo Working Paper Series No. 5323; https://ssrn.com/abstract=2603553#).
- 90. Women in science and engineering [website]. In: Eurostat/Products/Eurostat News. Luxembourg: Eurostat; 2021(https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20210210-1).
- 91. Alves Dias P, Kanellopoulos K, Medarac H, Kapetaki Z, Miranda-Barbosa E, Shortall R et al. EU coal regions: opportunities and challenges ahead. Luxembourg: European Parliament; 2018 (https://op.europa.eu/en/publication-detail/-/publication/de175603-896a-11e8-ac6a-01aa75ed71a1/language-en).
- 92. The inequalities—environment nexus: towards a people-centred green transition Paris: Organisation for Economic Co-operation and Development; 2021 (https://www.oecd.org/greengrowth/the-inequalities-environment-nexus-ca9d8479-en.htm).
- 93. McCarthy L, Ambrose A, Pinder J. Energy (in)efficiency: Exploring what tenants expect and endure in the private rented sector in England. Sheffield: Sheffield Hallam University; 2017. doi: 10.7190/cresr.2020.8936189508.
- 94. The territorial impact of COVID-19: managing the crisis and recovery across levels of government. Paris: Organisation for Economic Co-operation and Development; 2021 (www.oecd.org/coronavirus/policy-responses/the-territorial-impact-of-covid-19-managing-the-crisis-and-recovery-across-levels-of-government-a2c6abaf).
- 95. Individuals who used the internet, frequency of use and activities. In: Data Browser [database]. Luxembourg: Eurostat; 2023 (https://ec.europa.eu/eurostat/databrowser/view/isoc r iuse i/default/table?lang=en).
- 96. Background [website]. In: NUTS Nomenclature of territorial units for statistics. Luxembourg: Eurostat; 2023 (https://ec.europa.eu/eurostat/web/nuts/background).
- 97. Road map for digital cooperation: implementation of the recommendations of the High-level Panel on Digital Cooperation Report of the Secretary-General. New York: United Nations; (A/74/821; https://www.un.org/en/content/digital-cooperation-roadmap/).
- 98. Naik Y, Abbs I, Elwell-Sutton T, Bibby J, Spencelayh E. Using economic development to improve health and reduce health inequalities. London: The Health Foundation; 2020. doi: 10.37829/HF-2020-HL07.
- 99. Stuckler D, King L, McKee M. Mass privatisation and the post-communist mortality crisis: a cross-national analysis. Lancet. 2009;373(9661):399–407. doi: 10.1016/S0140-6736(09)60005-2.
- 100. Nosrati E, Ash M, Marmot M, McKee M, King LP. The association between income and life expectancy revisited: deindustrialization, incarceration and the widening health gap. Int J Epidemiol. 2018;47(3):720–30. doi: 10.1093/ije/dyx243.

- 101. Whitehead M, Pennington A, Orton L, Nayak S, Petticrew M, Sowden A et al. How could differences in "control over destiny" lead to socio-economic inequalities in health? A synthesis of theories and pathways in the living environment. Health Place. 2016;39:51–61. doi: 10.1016/j.healthplace.2016.02.002.
- 102. COVID-19 National Preparedness Collaborators. Pandemic preparedness and COVID-19: an exploratory analysis of infection and fatality rates, and contextual factors associated with preparedness in 177 countries, from Jan 1, 2020, to Sept 30, 2021. Lancet. 2022; 399(10334): 1489–512. doi: 10.1016/S0140-6736(22)00172-6.
- 103. Davies J, Wallis A, Jeffers J, Bisp M, Rose M, Rasool N et al. Making an impact: small and medium-sized voluntary sector organisations' responses to the COVID-19 pandemic. London: The Kings Fund; 2021 (https://www.kingsfund.org.uk/blog/2021/01/small-medium-voluntary-sector-organisations-responses-covid-19).
- 104. Europe-wide NGO pandemic impact survey report. Brussels: European Commission; 2022 (https://ied.eu/wp-content/uploads/2022/08/RESEARCH_REPORT__Europe-wide_NGO_Pandemic_Impact__EN.pdf).
- 105. Clifford D. Disparities by deprivation: the geographical impact of unprecedented changes in local authority financing on the voluntary sector in England. Environ Plan Econ Space. 2021;53(8):2050–67. doi: 10.1177/0308518X211034869.
- 106. Dederichs K. Volunteering in the United Kingdom during the COVID-19 pandemic: who started and who quit? Nonprofit Volunt Sect Q. 2022;0(0). doi: 10.1177/08997640221122814.
- 107. Crawshaw AF, Farah Y, Deal A, Rustage K, Hayward SE, Carter J et al. Defining the determinants of vaccine uptake and undervaccination in migrant populations in Europe to improve routine and COVID-19 vaccine uptake: a systematic review. Lancet Infect Dis. 2022;22(9): e254–66. doi: 10.1016/S1473-3099(22)00066-4.
- 108. Hussain B, Latif A, Timmons S, Nkhoma K, Nellums LB. Overcoming COVID-19 vaccine hesitancy among ethnic minorities: a systematic review of UK studies. Vaccine. 2022;40(25):3413–32. doi: 10.1016/j.vaccine.2022.04.030.
- 109. Lockyer B, Islam S, Rahman A, Dickerson J, Pickett K, Sheldon T et al. Understanding COVID-19 misinformation and vaccine hesitancy in context: findings from a qualitative study involving citizens in Bradford, UK. Health Expect. 2021;24(4):1158–67. doi: 10.1111/hex.13240.
- 110. Aktürk Z, Linde K, Hapfelmeier A, Kunisch R, Schneider A. COVID-19 vaccine hesitancy in people with migratory backgrounds: a cross-sectional study among Turkish- and German-speaking citizens in Munich. BMC Infect Dis. 2021;21(1):1214. doi: 10.1186/s12879-021-06940-9.
- 111. Armstrong M, Aker N, Nair P, Walters K, Barrado-Martin Y, Kupeli N et al. Trust and inclusion during the COVID-19 pandemic: perspectives from Black and South Asian people living with dementia and their carers in the UK. Int J Geriatr Psychiatry. 2022;37(3):10.1002/gps.5689. doi: 10.1002/gps.5689.
- 112. Experiences from health and social care: the treatment of lower-paid ethnic minority workers. London: Equality and Human Rights Commission; 2022 (https://www.equalityhumanrights.com/en/publication-download/experiences-health-and-social-care-treatment-lower-paid-ethnic-minority-workers).
- 113. Karlsen S, Nelson R. Staying "one step ahead of a racist": expanding understandings of the experiences of the COVID-19 pandemic among people from minoritized ethnic groups living in Britain. Front Sociol. 2021;6:730313. doi: 10.3389/fsoc.2021.730313.

- 114. Arora S, Bø B, Tjoflåt I, Eslen-Ziya H. Immigrants in Norway: resilience, challenges and vulnerabilities in times of COVID-19. J Migr Health. 2022;5:100089. doi: 10.1016/j.jmh.2022.100089.
- 115.Burgess RA, Kanu N, Matthews T, Mukotekwa O, Smith-Gul A, Yusuf I et al. Exploring experiences and impact of the COVID-19 pandemic on young racially minoritised people in the United Kingdom: a qualitative study. PloS One. 2022;17(5): e0266504. doi: 10.1371/journal.pone.0266504.
- 116. Denford S, Morton K, Horwood J, Garang R de, Yardley L. Preventing within household transmission of COVID-19: Is the provision of accommodation feasible and acceptable? BMC Public Health. 2021;21(1):1641. doi: 10.1186/s12889-021-11666-z.
- 117. Mahmood F, Acharya D, Kumar K, Paudyal V. Impact of COVID-19 pandemic on black, Asian and minority ethnic (BAME) communities: a qualitative study on the perspectives of BAME community leaders. BMC Public Health. 2021;21(1):1641. doi: 10.1186/s12889-021-11666-z.
- 118.McNulty CAM, Sides E, Thomas A Kamal A, Syeda RB, Kaissi A et al. The public views of and reactions to the COVID-19 pandemic in England: a qualitative study with diverse ethnicities. BMJ Open. 2022;12(8):e061027. doi: 10.1136/bmjopen-2022-061027.
- 119. Yücel A. Symbolic annihilation of Syrian refugees by Turkish news media during the COVID-19 pandemic. Int J Equity Health. 2021;20(1):137. doi: 10.1186/s12939-021-01472-9.
- 120. Ahrendt D, Mascherini M, Nivakoski S, Sándor E. Living, working and COVID-19 (update April 2021): Mental health and trust decline across EU as pandemic enters another year. Dublin: Eurofound; 2021 (https://www.eurofound.europa.eu/publications/report/2021/living-working-and-covid-19-update-april-2021-mental-health-and-trust-decline-across-eu-as-pandemic).
- 121.Eurobarometer 82.3 (2014)–96.3 [database]. In: Eurobarometer data service/ Survey series/Standard & Special EB/Study overview. Mannheim: Leibniz Institute for the Social Sciences; 2022 (https://www.gesis.org/en/eurobarometer-data-service/survey-series/standard-special-eb/study-overview/eurobarometer-823-za5932-november-2014).
- 122. Perry J. Trust in public institutions: trends and implications for economic security. New York: United Nations Department of Economic and Social Affairs; 2021 (https://www.un.org/development/desa/dspd/2021/07/trust-public-institutions/).
- 123. Building trust to reinforce democracy: main findings from the 2021 OECD survey on drivers of trust in public institutions. Paris: Organisation for Economic Co-operation and Development; 2022 (https://www.oecd-ilibrary.org/governance/building-trust-to-reinforce-democracy b407f99c-en).
- 124. Our common agenda: report of the Secretary-General. New York: United Nations; 2021 (https://www.oecd-ilibrary.org/governance/building-trust-to-reinforce-democracy b407f99c-en).
- 125.COVID-19 and human rights: we are all in this together. New York: United Nations; 2020 (https://unsdg.un.org/resources/covid-19-and-human-rights-we-are-all-together).
- 126.Brezzi M, González S, Nguyen D, Prats M. An updated OECD framework on drivers of trust in public institutions to meet current and future challenges. Paris: Organisation for Economic Cooperation and Development; 2021 (https://www.oecd-ilibrary.org/governance/an-updated-oecd-framework-on-drivers-of-trust-in-public-institutions-to-meet-current-and-future-challenges_b6c5478c-en).
- 127.Global call to action for a human-centred recovery from the COVID-19 crisis that is inclusive, sustainable and resilient. Geneva: International Labour Organization; 2021 (https://www.ilo.org/digitalguides/en-gb/story/globalcall).

- 128. Heckman J. Invest in early childhood development: reduce deficits, strengthen the economy. The Heckman Equation. 7 December 2013 (https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy/).
- 129. Eichengreen B, Saka O, Aksoy CG. The political scar of epidemics. Cambridge (MA): National Bureau of Economic Research; 2022 (Working paper 27401; https://www.nber.org/papers/w27401).
- 130. Walking beside: support for youth employment [factsheet]. In: EU PolicyWatch. Dublin: Eurofound; 2022 (https://static.eurofound.europa.eu/covid19db/cases/FI-2021-32 2092.html).
- 131. Jones A. A basic income to improve population health and well-being in Wales? Cardiff: Public Health Wales NHS Trust; 2021 (https://phw.nhs.wales/publications/publications1/a-basic-income-to-improve-population-health-and-well-being-in-wales/).
- 132. Wales pilots basic income scheme [press release]. Cardiff: Government of Wales; 2022 (https://www.gov.wales/wales-pilots-basic-income-scheme).
- 133. New minimum living income introduced [factsheet]. In: EU PolicyWatch. Dublin: Eurofound; 2020 (https://static.eurofound.europa.eu/covid19db/cases/ES-2020-23_878.html).
- 134.Mackenbach JP, Karanikolos M, McKee M. Health policy in Europe: factors critical for success. BMJ 2013;346:f533. doi: 10.1136/bmj.f533.
- 135.Kidd S, Nycander GA, Tran A, Cretney M. The social contract and the role of universal social security in building trust in government. Sidcup: Development Pathways; 2020 (https://www.developmentpathways.co.uk/publications/the-social-contract-and-the-role-of-universal-social-security-in-building-trust-in-government/).
- 136. Pickett K, Wilkinson R. The spirit level: why greater equality makes societies stronger. New York: Bloomsbury Publishing, 2010.
- 137. Szreter S, Woolcock M. Health by association? Social capital, social theory, and the political economy of public health. Int J Epidemiol. 2004;33(4):650–67. doi: 10.1093/ije/dyh013.
- 138. Kawachi I. Social capital for health and human development. Development. 2001;44:31–5. doi: 10.1057/palgrave.development.1110211.
- 139. Devlin K, Fagan M, Connaughton A. People in advanced economies say their society is more divided than before pandemic. Pew Research Center. 23 June 2021 (https://www.pewresearch.org/global/2021/06/23/people-in-advanced-economies-say-their-society-is-more-divided-than-before-pandemic/).
- 140. Risk communication and community engagement: a compendium of case studies in times of COVID-19. Copenhagen: WHO Regional Office for Europe; 2022 (https://apps.who.int/iris/handle/10665/363343).
- 141. How's life in the digital age?: opportunities and risks of the digital transformation for People's well-being. Paris: Organisation for Economic Co-operation and Development; 2019 (https://www.oecd.org/publications/how-s-life-in-the-digital-age-9789264311800-en.htm).
- 142.sundhed.dk [website]. Copenhagen: Ministry of Health; 2023 (https://www.sundhed.dk/).
- 143.Banck S, Jensen KB, Kayser L, Uffelmann J, Elbæk M. Denmark: using an eportal to transform PHC during the pandemic. How a national ehealth portal enabled a fast and inclusive response to the COVID-19 pandemic. Geneva: World Health Organization; 2022 (https://www.who.int/europe/publications/m/item/denmark-how-a-national-ehealth-portal-enabled-a-fast-and-inclusive-response-the-the-covid-19-pandemic).

- 144.Barr B, Bambra C, Whitehead M. The impact of NHS resource allocation policy on health inequalities in England 2001–11: longitudinal ecological study. BMJ. 2014;348:g3231. doi: 10.1136/bmj.g3231.
- 145. Alexiou A, Fahy K, Mason K, Bennett D, Brown H, Bambra C et al. Local government funding and life expectancy in England: a longitudinal ecological study. Lancet Public Health. 2021;6(9):e641–7. doi: 10.1016/S2468-2667(21)00110-9.
- 146. Daras K, Alexiou A, Rose TC, Buchan I, Taylor-Robinson D, Barr B. How does vulnerability to COVID-19 vary between communities in England? Developing a Small Area Vulnerability Index (SAVI). J Epidemiol Community Health. 2021;75(8):729–34. doi: 10.1016/S2468-2667(21)00110-9.
- 147. Anselmi L, Lagarde M, Hanson K. Equity in the allocation of public sector financial resources in low- and middle-income countries: a systematic literature review. Health Policy Plan. 2015;30(4):528–45. doi: 10.1093/heapol/czu034.
- 148. Carey G, Crammond B, De Leeuw E. Towards health equity: a framework for the application of proportionate universalism. Int J Equity Health. 2015;14:81. doi: 10.1186/s12939-015-0207-6.
- 149. Willsher K. French hospital staff treating coronavirus patients to get €1,500. The Guardian. 15 April 2020 (https://www.theguardian.com/world/2020/apr/15/french-hospital-staff-treating-coronavirus-patients-to-get-1500.
- 150. Tudor Hart J. The inverse care law. Lancet. 1971;297(7696):405–12. doi: 10.1016/S0140-6736(71)92410-X.

Annex 1. Details of the methodology used

Data analysis: Measures of excess mortality for subnational regions

Data sources

Data on the number of deaths from all causes in Europe were obtained from Eurostat through a special collection of weekly death statistics (online code: demomwk) (1). They include EU and European Free Trade Association countries, as well as candidate or neighbouring countries by week, age (5-year age groups), sex and NUTS 3 region,⁴ but not all breakdowns are available and data granularity varies by country. More details can be found in the associated metadata provided by Eurostat. Where possible, the missing data were sourced from national mortality statistics (listed below).

Annual mortality data of equivalent granularity were obtained for 2015–2019 (or the most recent) and used as a basis for comparison. Population data were obtained for 2015–2021 (or the most recent). Annual mortality and population data were obtained from Eurostat or national statistics offices.

All datasets were compiled for NUTS 2 regions, which is the unit of analysis. There were issues with data for the NUTS 3 level, mainly due to changes in boundaries, as well as a lack of robust deprivation measures for analysing the relationship between excess mortality and deprivation.

Countries with fewer than four regions were excluded from further analysis because they would not have a meaningful variation in mortality rate. In total, 19 European countries were included in the analysis (Austria, Belgium, Bulgaria, Czechia, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Netherlands, Poland, Portugal, Romania, Spain, Sweden, Switzerland, United Kingdom).

The following adjustments and additions were made to the compiled dataset.

• In Germany, data for NUTS 1 regions were used due to lack of data for NUTS 2. Mortality data for Germany were provided by the Federal Statistical Office of Germany using the ad hoc evaluation of mortality figures, which are disaggregated for the German federal states (equivalent to NUTS 1 regions) (3). The provisional data were accessed on 7 July 2022. However, deaths are only supplied in broad age groups (0–

⁴ Nomenclature des Unités Territoriales Statistiques, an economic classification system for the European Union and United Kingdom, in which NUTS 1 includes all major socioeconomic regions, NUTS 2 includes basic regions for the application of regional policies and NUTS 3 includes small regions for specific diagnoses (2).

65 years, 65–75 years, 75–85 years and 85 years and over). Baseline mortality statistics were adjusted to match the age groups of the recent data; however, mortality rates for Germany might not be directly comparable with those of countries that use 5-year age groups.

- Weekly death data for the United Kingdom were only supplied to Eurostat for 2020. Equivalent data for 2021 were provided by the United Kingdom Office for National Statistics (4); however only data for England and Wales were available. As such, excess mortality figures for the United Kingdom apply only to England and Wales. Population data for 2020 and 2021 were also obtained from the United Kingdom Office for National Statistics (5).
- Norway was excluded because of boundary changes to NUTS regions between 2016 and 2021, which prevented comparisons.
- Data for France do not include overseas territories.

In order to explore the association between deprivation level and excess mortality, a deprivation measure was derived from 2019 (or most recent) regional (NUTS 2) measures of unemployment, young people not in education employment or training, life expectancy pre-COVID-19, and GDP per capita. Data were obtained from Eurostat (online codes: lfst_r_lfu3rt, edat_lfse_22, demo_r_mlifexp and nama_10r_2gdp, respectively) (6–8).

Methods

Excess mortality is calculated as the rate of additional deaths per year compared with the expected number of deaths for that year, assuming the same trends over a baseline period. Positive values mean that additional deaths have occurred compared with the baseline.

The excess mortality rate was calculated as the change between the expected annual number of deaths and the observed annual number of deaths per 100,000 in the 2020–2021 period, by NUTS 2 region. It was calculated using a Poisson regression model to predict the 2020 and 2021 number of deaths by 5-year age groups based on the observed mortality trends in the 2015–2019 baseline period.

The slope index of inequality summarizes the linear association between socioeconomic characteristics (such as deprivation) and health across population groups or geographical areas. Values greater than one indicate a positive association, and values lower than one a

negative association. This analysis used the relative index of inequality, which measures relative health status (in this case, mortality). In this analysis, the relative index of inequality was calculated for the association between deprivation level and excess mortality, by NUTS 2 regions, within every country. The regional deprivation measure was defined as the average rank of a region across all four domains: unemployment rate, percentage of young people not in education employment or training, life expectancy pre-COVID-19 (reversed), and GDP per capita (reversed).

Expert and stakeholder engagement

Various stakeholder groups were consulted to contextualize the findings and understand the responses of Member States and international organizations to both the COVID-19 pandemic and the cost-of-living crisis.

SAGE was consulted throughout the development of this rapid stocktake review through ad hoc discussions and input, as well as three formal meetings over the course of the stocktake to discuss initial findings from key data sources and emerging policy actions and to review crisis responses of international organizations and countries, including to identify country case studies.

In addition, the implications for policy-makers were discussed with the following stakeholders:

- representatives from Member States (Denmark, Finland, Germany, Greece, Hungary, Iceland, Italy, Lithuania, North Macedonia, Portugal, Slovenia and Türkiye);
- external partners from international organizations (including the European Institute for Gender Equality, European Public Health Alliance, EuroHealthNet, Food and Agriculture Organization, ILO, National University of Ireland, Nobody Left Outside Initiative, OECD, Public Health Wales and UNICEF);
- external experts on current economics and investing in health from the WHO New
 Economics Expert Group, who provided particular insight on the emerging global costof-living/economic crisis and the implications for inequities; and
- subject experts from the following WHO divisions and units:
 - o WHO Barcelona Office for Health Systems Financing;
 - o WHO European Office for Prevention and Control of Noncommunicable Diseases;
 - o WHO Europe Behavioural and Cultural Insights Unit;

- o Division of Country Health Programmes;
- o Division of Country Health Policies and System;
- o Regional Technical Officer, Gender Equality and Rights;
- o WHO consultants for the Well-being of Economies;
- o Lead for Global Change and Health, WHO Regional Office for Europe; and
- Regional Technical Officer within the Data and Digital Health programme at Division for Country Health Policies and Systems, WHO Regional Office for Europe.

The WHO European Office for Investment for Health and Development provided insight throughout this stocktake, led by Chris Brown (Head, WHO European Office for Investment for Health and Development, Division of Country Health Policies and Systems). Table A1 outlines the different stages of the consultation and engagement activities and Table 2 shows the members of SAGE.

Table A1. Stages of the stakeholder consultation

Date/frequency	Stage
October 2021	First meeting of SAGE. There was an initial review of the available
	data to inform the project
May 2022	Consultation with subject experts working in WHO regional offices
	Consultation with external partners from international organisations
June 2022	Emerging findings with WHO European Region national
	counterparts for determinants and health equity
	Second meeting of SAGE. Discussion of emerging findings and
	inequities
October 2022	Third meeting of SAGE and consultation with the New Economic
	Expert Group. Discussed priority policy areas using data analysis
	and a review of responses from international organisations; review
	of country case studies
November 2022	Second consultation activity with representatives from Member
	States
	Second consultation with external partners from international
	organisations
January 2023	Second consultation with subject experts working in WHO regional
	offices
Monthly	Regular meetings with the WHO European Office for Investment
	for Health and Development, Division of Country Health Policies
	and Systems, which oversaw the project

Table A2. SAGE membership

SAGE member	Affiliation
Chris Brown (Chair)	WHO European Office for Investment for Health and
	Development, Division of Country Health Policies and Systems,
	WHO Regional Office for Europe
Isabel Yordi Aguirre	Gender Equality and Rights Unit, WHO European Office for
	Investment for Health and Development, Division of Country
	Health Policies and Systems, WHO Regional Office for Europe
Matthias Franz	Environment and Health Impact Assessment Programme,
Wilhelm Braubach	Division of Country Health Programmes, WHO Regional Office
	for Europe
Paula Braveman	University of California San Francisco
Giuseppe Costa	SCaDU Servizio Sovrazonale di Epidemiologia (SEPI)
Paula Franklin	European Trade Union Institute
Peter Goldblatt	University College London
Scott Greer	University of Michigan
Louise Haag	University of York
Rachel Hammonds	London School of Hygiene and Tropical Medicine; University of
	Antwerp
Johanna Hanefeld	Robert Koch Institute
Heli Hätönen	Finnish Ministry of Social Affairs and Health
Heikki Hiilamo	Finnish Institute for Health and Welfare
Daniel La Parra	University of Alicante
Julia Lynch	University of Pennsylvania
Jennie Popay	Lancaster University
Ivo Rakovac	NCD Surveillance, NCD Office, Division of Country Health
	Programmes, WHO Regional Office for Europe
Aaron Reeves	University of Oxford
Amanda Shriwise	WHO European Office for Investment for Health and
	Development, Division of Country Health Policies and Systems
Laura Sochas	University of Oxford
Marc Suhrcke	University of York
Denny Vågerö	Stockholm University
Margaret Whitehead	University of Liverpool

Review of recovery policies of international agencies

[To come]

Compilation of case studies

Case studies were identified from searches of published country assessments of the health equity impacts of the COVID-19 pandemic in different policy areas and from an open call for case studies across the WHO European Region. The aim was to include interventions/systems implemented in in 2020–2021 to protect the health system or to protect specific population groups against social and economic vulnerabilities and inequities in health.

Guiding questions in the selection of case studies were grouped as follows.

- What social, economic and health system measures/interventions have been implemented during the COVID-19 pandemic to protect people from vulnerabilities, health inequities and the economic costs of restrictive measures?
 - O Did the country implement new initiatives or reinforce/adapt existing mechanisms that were already in place to prevent vulnerabilities and health inequities?
 - What is the main dimension/aspect of health inequities that the implemented measure aims to improve (e.g. child development, schooling disruption, community engagement, financial insecurity, job loss and business, supply chain problems)?
- What were the **barriers** and how were they overcome or mitigated? And to what extent did they limit the success or scope of the intervention?
 - Which groups have been supported by the implementation?
 - Who has been **left behind**?
 - What were the main barriers and facilitating factors for specific groups in the population to access or fully benefit from the intervention or activities?
- Did the intervention/measure involve any **collaborative partnership**? If yes, what are the main sectors involved?
 - o Any stakeholders, community groups, nongovernmental organizations, civil society representing population experiencing vulnerabilities or disadvantage?
 - With hindsight, would the intervention have benefited from involvement of additional sectors?
- What is the mechanism (if any) to carry out the **evaluation or follow-up** after the implementation?
 - What equity, gender/human rights or social determinants indicators, if any, does the intervention/action use to verify achievements or track progress?
- Are there any **other considerations** that should be made when implementing any option to ensure that inequities are reduced, if possible, and they are not increased?

Rapid evidence review: ethnic minorities and migrant groups

A rapid evidence review was undertaken to answer the following three review questions (9).

- What are the unequal adverse impacts of the COVID-19 pandemic by ethnicity and migrant status and/ or what are these perceived to be?
- What are the unequal beneficial impacts of the COVID-19 pandemic by ethnicity and migrant status and/ or what are these perceived to be?
- What factors are reported to potentially mediate or moderate these impacts?

The following databases were searched for published and preprint academic literature in English from January 2020 to July 2022: Cochrane COVID-19 Study Register, LitCovid, MEDLINE, medRxiv, PROSPERO and PsycINFO. Grey literature was obtained from searches of international statistical sources that report on COVID outcomes and websites of relevant organizations (further details of search terms and the selection strategy are given in Bagnall et al. *(7)*).

Screening against preselected inclusion criteria (10) produced 399 articles (including 14 reviews) for a rapid mapping exercise (phase 1). These showed that well-documented health inequities were associated with minority ethnic or migrant status during the pandemic. After discussing the phase 1 findings with expert advisers, a subset of 116 studies aligned with four potential pathways to unequal outcomes were identified: (i) legal status and entitlement or access to services (n = 45); (ii) exacerbation of pre-existing health inequities (n = 56); outright stigma or discrimination (n = 30); and lack of trust in authority/institution (n = 34) (Fig. A1). These were examined in more detail in phase 2 and a framework synthesis was conducted.

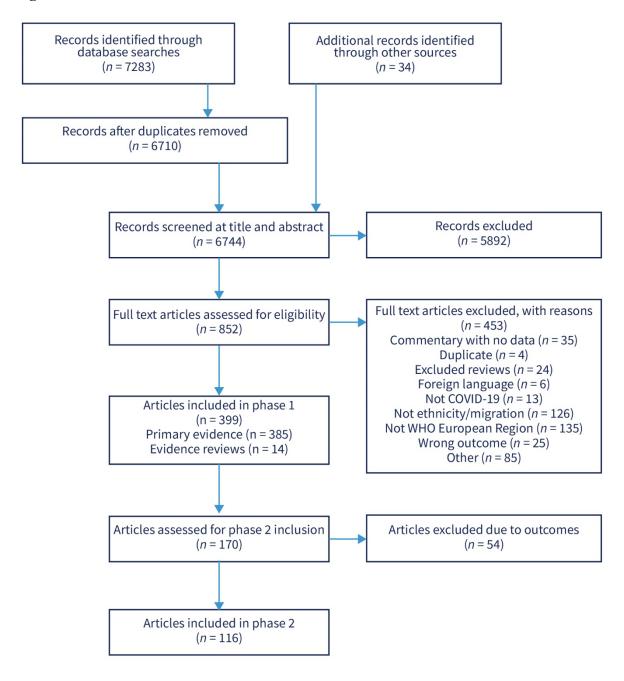


Fig. A1. Flowchart of included studies

References

- 1. Deaths by week –special data collection (demomwk). In: Data Browser [database]. Luxembourg: Eurostat; 2023 (https://ec.europa.eu/eurostat/cache/metadata/en/demomwk_esms.htm).
- 2. Background [website]. In: NUTS Nomenclature of territorial units for statistics. Luxembourg: Eurostat; 2023 (https://ec.europa.eu/eurostat/web/nuts/background).
- 3. Deaths, life expectancy: ad-hoc evaluation of mortality figures for 2020 to 2023 [website]. Wiesbaden: Statistisches Bundesamt; 2023 (https://www.destatis.de/EN/Themes/Society-Environment/Population/Deaths-Life-Expectancy/mortality.html).

- 4. Mortality statistics underlying cause, sex and age. In: Nomis: official census and labour market statistics [website]. Durham: Office for National Statistics; 2022 (https://www.nomisweb.co.uk/).
- 5. Population estimates/projections. In: Nomis: official census and labour market statistics [website]. Durham: Office for National Statistics; 2022 (https://www.nomisweb.co.uk/).
- 6. Unemployment rates by sex, age, educational attainment level and NUTS 2 regions (%). In: Data Browser [database]. Luxembourg: Eurostat; 2023 (https://ec.europa.eu/eurostat/databrowser/view/LFST_R_LFU3RT/default/table?lang=en).
- 7. Life expectancy by age, sex and NUTS 2 region. In: Data Browser [database]. Luxembourg: Eurostat; 2023 (https://ec.europa.eu/eurostat/databrowser/product/page/demo_r_mlifexp).
- 8. Gross domestic product (GDP) at current market prices by NUTS 2 regions. In: Data Browser [database]. Luxembourg: Eurostat; 2023 (https://ec.europa.eu/eurostat/databrowser/view/nama_10r_2gdp/default/table?lang=en).
- 9. Bagnall A-M, Pilkington G, Maynard M, Apekey T, Griffiths A, Matu J et al. Impacts of the COVID-19 pandemic on ethnic and migrant inequalities: a rapid evidence review. PROSPERO. 2022;CRD42022354668 (https://www.crd.york.ac.uk/prospero/display record.php?ID=CRD42022354668).
- Bagnall A-M, Pilkington G, Maynard M, Apekey T, Griffiths A, Matu J et al. Impacts of the COVID-19 pandemic on ethnic and migrant inequalities: a rapid evidence review. Protocol. PROSPERO. 2022;CRD42022354668 (https://www.crd.york.ac.uk/PROSPEROFILES/354668 PROTOCOL 20220819.pdf).

Annex 2. Country clusters

Member States were clustered according to policy and political commonalities, and also to reflect the countries that they compare themselves to. The clusters do not match WHO country groupings.

Country cluster	Member State
Caucasus and eastern Europe	Armenia
	Belarus ^a
	Georgia
	Republic of Moldova ^a
	Ukraine ^a
Central Asia	Azerbaijan
	Kazakhstan
	Kyrgyzstan
	Tajikistan
	Turkmenistan ^b
	Uzbekistan
Central Europe	Bulgaria
•	Croatia
	Czechia
	Estonia
	Hungary
	Latvia
	Lithuania
	Poland
	Romania
	Slovakia
	Slovenia
Nordic countries	Denmark
	Finland
	Iceland ^a
	Norway
	Sweden
Russian Federation	Russian Federation ^a
Southern Europe	Andorra ^b
-	Cyprus
	Greece
	Israel ^a
	Italy
	Malta
	Portugal
	San Marino ^b
	Spain
	Türkiye
Western Balkans/southeastern Europe	Albania
-	Bosnia and Herzegovina

	Montenegro
	North Macedonia
	Serbia
Western Europe	Austria
	Belgium
	France
	Germany
	Ireland
	Luxembourg
	Monaco ^b
	Netherlands
	Switzerland
	United Kingdom

^aVery little data available.

^bNo data available.

Annex 3. Country data for selected figures

 Table A2. Country data included in selected figures

Figure No.	Title	Countries and areas included
5	Excess all-cause mortality across the WHO European Region, 2020–2021	Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Merino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkmenistan, Türkiye, Ukraine, United Kingdom, Uzbekistan
6	Association between relative deprivation and excess mortality, 2020–2021	Austria, Belgium, Bulgaria, Czechia, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Netherlands, Poland, Portugal, Romania, Spain, Sweden, Switzerland, United Kingdom
7	Trend in limiting illness by education level, EU countries, 2016–2021	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Spain, Sweden
8	Trends in reporting (a) low life satisfaction and (b) poor mental health in the poorest and richest quintiles	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden
9	People reporting poor mental health in 2022 compared with 2016, by age group and sex	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden
10	Percentage of young people reporting poor life satisfaction, by employment status, 2007–2022	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden
12	Distribution of doctors across subnational areas relative to within-country deprivation	Austria, Belgium, Bulgaria, Czechia, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Netherlands, Norway, Poland, Portugal,

13	across 19 European countries, 2020 Percentage of people in EU countries who reported needing health care but being unable to access it, 2016–2021	Romania, Spain, Sweden, Switzerland, Türkiye, United Kingdom Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Spain, Sweden
16	Youth unemployment in the WHO European Region, 2014–2022	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovenia, Spain, Sweden, Switzerland
17	Change in expenditure on social protection since 2019 as a percentage of GDP, by function, 2020	Albania, Armenia, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Merino, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye, Ukraine, United Kingdom
19	Trends in the poverty rate across Europe by education level, 2010–2021	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Netherlands, Portugal, Romania, Slovenia, Spain, Sweden
21	Food insecurity in central Asia, central Europe and the Balkans, 2015–2021	Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan Central Europe and the Balkans: Belarus, Bulgaria, Czechia, Hungary, Poland, Republic of Moldova, Romania, Russian Federation, Slovakia, Ukraine
22	Food Price Index across the WHO European Region, 2017–2022	Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kosovo, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Merino, Serbia, Slovakia,

-

⁵ All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

23	Percentage of people who have never used the internet in some European countries, by deprivation level	Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkmenistan, Türkiye, Ukraine, United Kingdom, Uzbekistan Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, North Macedonia, Norway, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland
24	Proportion of people in EU	Austria, Belgium, Bulgaria, Croatia, Cyprus,
	countries reporting high levels of trust in others	Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden
25	Percentage point change in people reporting that they tend to trust the government, by country cluster, 2019–2022	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia,
26	Percentage of people reporting that they tend to trust the government, EU countries, 2014–2022	Spain, Sweden Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden