Health inequity and the effects of COVID-19

Assessing, responding to and mitigating the socioeconomic impact on health to build a better future

World Health Organization
REGIONAL OFFICE FOR Europe

UNEQUAL **RISKS** OF INFECTION AND SEVERE ILLNESS

UNEQUAL **EFFECTS** OF CONTAINMENT MEASURES

UNEQUAL **CONSEQUENCES** OF SOCIOECONOMIC IMPACT

Document number: WHO/EURO:2020-1744-41495-56594

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ABSTRACT

Although the COVID-19 virus infects those exposed indiscriminately, exposure risk and the severity of its health, social and economic impacts are not being felt equally. Prior to the COVID-19 pandemic, dramatic differences in health, linked to socioeconomic inequities, already existed between and within countries in the WHO European Region. COVID-19 and its containment measures have exacerbated these and created new vulnerabilities through three key mechanisms: unequal socioeconomic impacts arising from both (i) the health effects of COVID-19 and their inequities and (ii) COVID-19 containment measures; and (iii) the bidirectional effects between the unequal socioeconomic impacts of COVID-19 and non-COVID-19-related health inequities. This publication sets out an agenda to address both pre-existing and new vulnerabilities and inequities by first identifying a range of key health-related socioeconomic impacts of COVID-19 and its containment measures and, secondly, proposing mitigation measures to reduce them. To support countries throughout their recovery and transition from COVID-19, these measures are aligned with the United Nations socioeconomic response pillars. Building a better future from COVID-19 requires policies and interventions that reduce inequities, address vulnerabilities first and leave no one behind.

Keywords

COVID-19, CONTAINMENT MEASURES, SOCIOECONOMIC, MITIGATION MEASURES, HEALTH INEQUITIES, VULNERABILITY

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ABBREVIATIONS

EHIS	European Health Interview Survey
EU	European Union
EU-SILC	European Union Statistics on Income and Living Conditions
ILO	International Labour Organization
UN	United Nations
WVS	World Values Survey

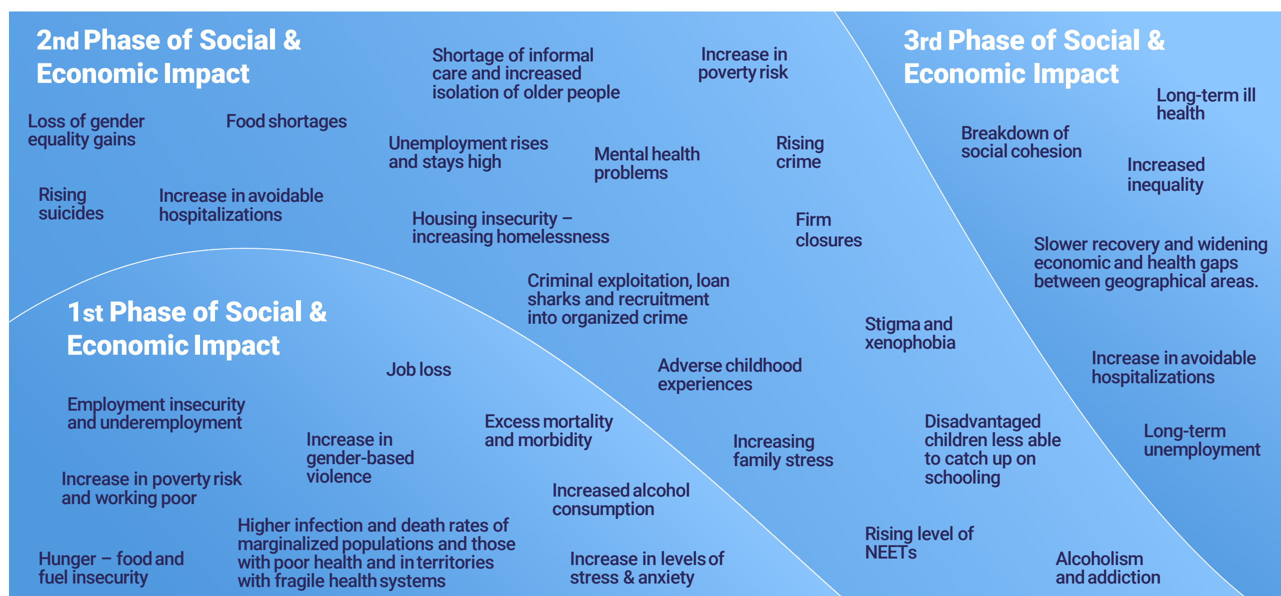
1 INTRODUCTION

Although COVID-19 infects those exposed indiscriminately, the risk of exposure and the severity of its health, social and economic impacts are not being felt equally. Up to 15 September 2020, there had been 4.8 million confirmed cases of COVID-19 across the 53 Member States of the WHO European Region, with approximately 226 000 deaths resulting from confirmed cases *(1)*. Member States of the Region are at varying phases of the pandemic response and have implemented a variety of containment measures *(2)*. There is increasing evidence that the unequal impact of COVID-19 and its containment measures on different groups in the population was neither fully anticipated nor well considered in the design and implementation of government response plans. Failure to anticipate and avoid the resulting unwanted scenarios in the short and medium terms has led to a major risk both of exacerbating health, social and economic inequities in the long term and of giving rise to new vulnerabilities within the population (Annex 1).

Protecting lives and safeguarding livelihoods go hand in hand. Adjusting and strengthening our health sector preparedness and response plans are essential to ensure that acute, primary and community health services are designed to reduce exposure to risk and intervene early to prevent health complications. These actions are necessary to mitigate the negative health consequences of COVID-19. During the ongoing emergency situation and efforts to transition to the new normal, containment and mitigation measures should be designed to avoid negative waves of social, economic and related health inequities (Fig. 1) *(2)*. These measures are necessary to ensure that cities, communities, rural areas and countries do not leave anyone behind and build physical and economic resilience across the whole of society *(3)*. In addition, medium-term actions are needed to address the common causes of vulnerability, especially because the socioeconomic impact of COVID-19 can worsen pre-existing vulnerabilities or create new ones. For example:

- vulnerable people are more likely to work in customer-facing services and are, hence, more exposed to the risk of infection;
- interruption of schooling by containment measures can worsen the life chances of disadvantaged children, who are disproportionately affected (and even when these measures are lifted, these children are less able to catch up); and
- new vulnerabilities are created when workers in previously secure occupations lose earnings and fall into debt.

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



Note: NEET: young person not in education, employment or training.

Source: Adapted from WHO Regional Office for Europe, 2020 *(2)*.

This publication sets out an agenda for building a better future by (i) identifying some of the key social and economic impacts of COVID-19 and its containment measures and (ii) proposing mitigation measures that can be taken to reduce these negative impacts. This agenda supports implementation of the WHO European Region's guidance on public health during the COVID-19 transition phases, which was published in April 2020. It is intended to support country-level strategies to reduce health inequities, as well as decision-making to mitigate the social and economic impacts on health, poverty and livelihoods *(2)*.

To support countries throughout their recovery and transition from COVID-19, the United Nations (UN) has issued guidance to coordinate its service provision under five COVID-19 socioeconomic response pillars: health first; protecting people; economic response and recovery; social cohesion and community resilience; and macroeconomic response and multilateral collaboration *(3)*. Aligned with the UN framework, this publication emphasizes the need for an equity-sensitive approach during the immediate socioeconomic response to COVID-19 *(3)*. It contains three main sections (sections 2–4): section 2 outlines why a focus on health inequity is needed and the key principles for addressing health inequities amid the COVID-19 pandemic; section 3 details the health effects and socioeconomic impact of COVID-19 and its containment measures; and section 4 proposes interventions to respond to and mitigate the health, social and economic impacts and inequities of COVID-19 during the ongoing outbreaks and transition and recovery phases.

2 HEALTH INEQUITIES AND THE KEY PRINCIPLES FOR ADDRESSING THEM DURING THE COVID-19 PANDEMIC

2.1 Why is a focus on health inequity needed?

Prior to the COVID-19 pandemic, dramatic differences in health existed between and within countries in the WHO European Region *(4)*. Health inequities arise because of the circumstances in which people grow, live, work and age and the systems put in place to deal with illness. The circumstances of daily life are, in turn, shaped by political, social and economic forces that affect everyone, although not equally *(5)*. This leads to a social gradient in health, in which the most disadvantaged tend to have the worst health and, in the context of COVID-19 and its containment measures, are also the most vulnerable to further worsening of their health and of their social and economic situations.

COVID-19 and its containment measures can exacerbate these existing inequities and create new vulnerabilities in multiple ways *(6)*. People in vulnerable social and economic situations are at a disproportionate risk of being exposed to the virus, for example, because of where they live, their home conditions or the type of work they do: they may be front-line workers, work in confined spaces or simply have jobs that mean they cannot work from home. People exposed to vulnerabilities are also more likely to suffer more serious health impacts if they become infected, for example, because of their greater susceptibility to pre-existing health conditions or worse access to the health system *(6)*. They are also at a disproportionately high risk of suffering the social and economic impacts of containment measures (see examples in Fig. 1), which may in turn precipitate adverse health impacts.

Recent figures indicate how many people in the Region are affected by pre-existing social and economic vulnerability. To summarize, in the 33 countries that provided data to Eurostat in 2018, 147 million people (24% of the population) were at risk of poverty or severe material deprivation or were living in households with very low work intensity *(7,8)*. World Bank data for the period 2012 to 2018 indicate that in a further 14 non-European Union (non-EU) countries in the Region, 32 million people lived below the national poverty line (11% of the population) *(9)*. More detail is given in Annex 2.

In terms of health status, approximately 9% of the population aged 16 years and over (44 million people) in the 33 countries that provided data to Eurostat reported their health to be poor or very poor – this proportion rose with age to approximately 26% of those aged 75 years and over (13 million people). In a further 13 non-EU countries in the Region participating in the 2017–2020 World Values Survey (WVS), 9.5% (20 million people) perceived their health to be poor or very poor *(10)*.

Before the onset of COVID-19, universal health coverage was not available in 25% of Member States in the Region (according to the 2017 WHO UHC Index of service coverage for 50 countries *(11)*). Whereas some countries in the Region have provided special health coverage related to COVID-19, in most countries, the demands placed on health services by COVID-19 have resulted in a decrease or suspension of many other essential health services. These include services related to the prevention and treatment of noncommunicable diseases, which disproportionately affect the most disadvantaged in society *(12)*.

Out-of-pocket payments for health care were also a problem for many people across the Region prior to COVID-19. In the second wave of the European Health Interview Survey (EHIS; 2013–2015), approximately 16% of the total population (92 million people) of 31 countries reported an unmet need for health care for financial reasons *(13)*. Similarly, in nine further non-EU countries that participated in the 2010–2014 WVS, around 6% (12 million people) said they had often gone without the medicine or treatment they needed in the last 12 months *(10)*.

2.2 Addressing health inequities amid COVID-19

Addressing the inequitable impacts of COVID-19 can be achieved, amplified and sustained through implementing equity-sensitive public policies that affect the circumstances in which people live, which are largely covered by the first four of the five UN COVID-19 socioeconomic response pillars *(3)*. The fifth pillar (macroeconomic response and multilateral collaboration) determines the broader conditions that affect everyday lives and are essential to ensuring equitable responses across the other four pillars.

Addressing health inequities amid the COVID-19 pandemic also requires a combination of targeted and universal measures:

- targeted measures: to prioritize those readily identifiable as being most vulnerable to the effects of COVID-19 and its containment measures; and

- universal measures to ensure that no one who is vulnerable is left behind and to address the increased needs of the population as a whole resulting from COVID-19 and its containment measures.

These population-wide needs are likely to be greater among individuals and families at more social or economic disadvantage. Therefore, meeting their health and social care needs equitably will require matching resources to the levels of disadvantage (Annex 2).

Unprecedented fiscal programmes have already been implemented to provide relief (e.g. tax and debt holidays, employment subsidies, and housing and food relief) and expanded coverage of health and social protection. But these programmes are often temporary and not specifically targeted. Many of those at higher risk fall through the net, either because of narrow eligibility criteria for the relief package, rigidity in how it can be accessed or other limitations built into the design. This has created new vulnerabilities (discussed in section 3), for example, among those in caring roles and those being cared for in locked down institutions and those who are already at a high risk of poor health, poverty and social exclusion pre-COVID-19. The latter include homeless people, single-parent families, children in low work intensity families, people in informal work, and undocumented migrants and refugees.

These differential effects should be considered and anticipated in the design and introduction of containment and mitigation measures. Proportionate universalist interventions are needed to mitigate the inequitable effects of the necessary containment measures. These interventions should be proportionate and appropriate to need across the social gradient and built on a set of policies with an inclusive and empowering approach *(4)*. Action is needed in the health sector in several areas. First, action is needed to identify those most vulnerable to infection, such as individuals with comorbidities and members of specific marginalized groups and minorities in order to provide greater protection from infection in the short term and to take preventive action in the long term. Secondly, the health sector should anticipate future isolated outbreaks and waves of the epidemic and plan interventions to close the known gaps in health-care provision and protection for the most vulnerable people. This will require appropriate, affordable and accessible responses, such as personal protective equipment, testing and tracing, and intensive care provision.

However, the health sector cannot minimize vulnerabilities and inequities on its own. Countries need to target groups at risk of increased vulnerability and marginalization through multisectoral coordination, tailored actions and community engagement to ensure that these groups have guaranteed access to health care and are not left behind. The social and economic determinants of vulnerability to infection, its health impacts and the impact of the necessary containment measures in any future isolated outbreaks or waves of the epidemic underpin the unequal impact of COVID-19. Action by other sectors of local and national government, the media, employers, the private sector and the third sector (including nongovernmental organizations and civil society) will also determine the impact and effectiveness of health recovery and how well inequities in health can be mitigated.

3 HEALTH EFFECTS AND THE SOCIOECONOMIC IMPACT OF COVID-19 AND ITS CONTAINMENT MEASURES

3.1 Assessing the health effects of COVID-19

As indicated in section 2, the risk of exposure to the coronavirus is greater for people in more disadvantaged social and economic situations, particularly the most vulnerable. However, not all of the most vulnerable people will contract COVID-19 and, equally, some who are neither disadvantaged nor vulnerable may experience severe illness or die from COVID-19. Therefore, the following three categories of people contribute to the total burden of ill health and mortality due to COVID-19.

People with severe illness or who die from COVID-19 itself. Age, gender, ethnicity and pre-existing morbidity affect these risks. Socially disadvantaged individuals develop multimorbidity and serious health conditions such as heart disease and diabetes at younger ages compared with the most advantaged people *(14,15)*.

People who contract COVID-19 but do not experience its most serious health impacts. Many of these individuals may not be tested because they either arrive at health-care facilities at a late stage of the disease or because they were in a community setting in which they were not tested. Groups who fear catastrophic out-of-pocket payments or who are socially excluded are at higher risk, including Roma, homeless people, care home residents (in countries with weak governance of social care), elderly people (especially those living alone), migrants and undocumented workers without health coverage or proof of identity *(16)*.

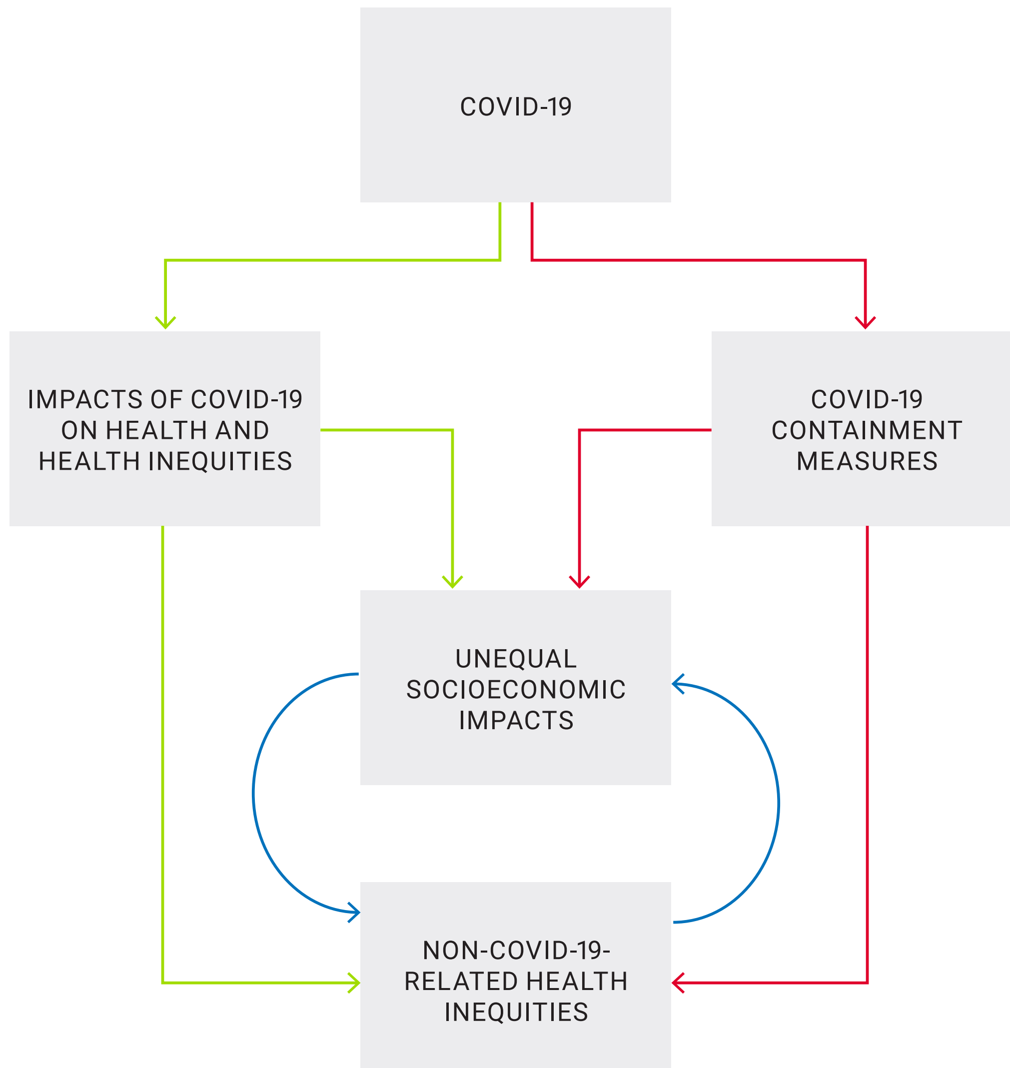
People who do not contract or develop symptoms of COVID-19 but who are at risk of other adverse health and socioeconomic impacts due to containment measures. These can include interruption or disruption of health-care services, social isolation, domestic violence, homelessness, loss of employment or informal work opportunities, increased poverty, and reduced access to education. Many of these risks will persist or have other impacts beyond the end of containment measures (illustrated in Fig. 1). For example, young people may experience longer-term disruption of education, and effective participation in the labour market may be difficult for young people and for individuals re-

entering the workplace after taking on extra responsibilities for the care and education of children during lockdown (the majority of whom are women) *(17,18)*. Thus, these socially differentiated risks and pathways characterized by adversity exist during each wave of the epidemic, the transition out of the emergency and the following years *(19–22)*.

3.2 Assessing inequities in the socioeconomic impact of COVID-19

The socioeconomic impacts of COVID-19 work through three key mechanisms to enhance existing inequities or create new ones (Fig. 2).

Fig. 2. Three mechanisms for COVID-19 socioeconomic impacts and their inequities



Note: green arrows, Mechanism 1; red arrows, Mechanism 2; blue arrows, Mechanism 3.

In Mechanism 1, health inequities follow from exposure to infection and the risk of severe outcomes, including Long COVID *(23)* and death (i.e. health effects). These health effects may go on to generate or enhance pre-existing socioeconomic inequities and non-COVID-19 conditions. In Mechanism 2, the unequal socioeconomic impacts of COVID-19 containment measures may generate non-COVID-19 health inequities, and these conditions may themselves predispose to subsequent inequities in adverse outcomes of COVID-19. In Mechanism 3, socioeconomic inequities can increase the risk of further non-COVID-19-related health inequities. Conversely, non-COVID-19-related health effects that are indirectly generated by containment measures or as the consequence of health problems caused by contracting COVID-19 may lead to further socioeconomic inequities. This cyclical mechanism can reinforce health and socioeconomic inequities. All three mechanisms are described in greater detail below. Annex 3 lists the corresponding monitoring indicators.

3.3 Mechanism 1. How the health effects of COVID-19 and their inequities lead to unequal socioeconomic impacts

The total burden of ill health and mortality resulting from COVID-19 *(24)* leads to socioeconomic impacts in two ways.

Health effects of COVID-19 and their inequities and their socioeconomic impact. The adverse outcomes of contracting COVID-19 (severe illness, disability and/or death) may have short- and long-term socioeconomic impacts for individuals and their families. Not all individuals who contract COVID-19 enter the health system and receive appropriate health treatments and interventions. Patients who experience adverse outcomes of COVID-19 but do not test positive (either because they arrive at health-care facilities at a late stage of the disease or live in a community setting where they are not tested) may suffer disproportionately and experience complications. In some cases, long-term effects on their health status may reduce the earning capacity and/or mobility of these individuals, thereby putting them at higher risk of experiencing a downward spiral in their health and well-being.

Non-COVID-19-related health effects and their socioeconomic impact. COVID-19 may increase stress, fear and anxiety, with consequent effects on mental health. As indicated in section 3, non-COVID-19-related conditions and health services may

be interrupted or disrupted by increased stress on the health system's resources due to excess/unplanned demands and needs during the pandemic (e.g. for extra manpower, new and expensive equipment, and re-assignment of hospital beds and materials). This may lead to an increase in unmet health needs and, in some cases, a deterioration in health status for individuals and population groups. These health effects also have socioeconomic impacts (as described for Mechanism 3).

Annex 4 provides an overview of the health effects of COVID-19 and the subsequent areas and mechanisms of socioeconomic impact across the WHO European Region. Other country-specific areas and mechanisms of socioeconomic impact should be considered where relevant.

3.4 Mechanism 2. How COVID-19 containment measures lead to unequal socioeconomic impacts

COVID-19 containment measures affect everyone, but their effects are socially differentiated among the different sites of ongoing localized outbreaks, during each larger wave of the epidemic, during a protracted outbreak, during transition out of the emergency and in the following years *(17–22)*. Countries have taken a number of measures to contain COVID-19, including physical distancing, staying inside and imposing lockdowns, closing workplaces and educational establishments (e.g. early years facilities, schools, colleges and universities), and interrupting and disrupting service provision. These containment measures affect health and result in socioeconomic inequities in two ways.

COVID-19 containment measures and their socioeconomic impact. Containment measures and the way they are managed and implemented can result in socioeconomic inequities through, for example, loss of employment and work opportunities or a rise in criminal exploitation. In turn, these affect health determinants and may increase health risks, including the risk of contracting COVID-19.

Non-COVID-19 health effects of containment measures and their socioeconomic impact. Containment measures, such as physical distancing and staying inside and being locked down, may negatively affect physical, mental and emotional health and well-being. For example, the requirement or advice to stay at home may reduce the amount of exercise taken, thereby

affecting fitness and potentially increasing a person's body mass index. They can also discourage patients from visiting health-care facilities to seek both routine and urgent care, diagnostic procedures or screening. This may increase the mortality rate from acute conditions such as heart attacks in the short-term *(25)* and lead to worse survival rates from these and other conditions, such as cancer, in the medium and long terms. Equally, physical distancing may lead to social isolation, which can lead to mental health issues and increased stress, anxiety and the harmful use of alcohol and other substances and can affect social and emotional development, particularly for children. Similarly, isolation from the workplace can reduce social interactions and feelings of self-worth, resulting in a loss of dignity. In turn, these health effects have differential socioeconomic impacts.

Governance arrangements that ensure physical safety and promote and protect human rights during outbreaks and subsequent waves of the epidemic underpin these two mechanisms and are central to safeguarding peace and stability. Annex 5 provides an overview of COVID-19 containment measures and their governance, as well as subsequent areas and mechanisms of socioeconomic impact, which are likely to apply to many countries. However, other country-specific areas and mechanisms of socioeconomic impact should be considered where relevant to the local situation.

3.5 Mechanism 3. Bidirectional relationship between the unequal socioeconomic impacts of COVID-19 and non-COVID-19-related health effects

Non-COVID-19 health effects will not be felt equally and many will have socioeconomic impacts. In turn, the negative socioeconomic impacts affect health determinants, as well as the risk of contracting COVID-19. Socially disadvantaged individuals may develop multimorbidity and serious health conditions, such as heart disease and diabetes, at a younger age compared with the most advantaged groups *(14,15)*. Population groups who fear catastrophic out-of-pocket payments or who are socially excluded are at higher risk, including Roma, homeless people, people with disabilities, people in care homes (particularly in countries with weak governance of social care), elderly people (especially those living alone), individuals who are isolated, migrants, undocumented workers, and people without health or social security coverage or proof of identity *(16)*.

3.6 Cumulative effect of all three mechanisms

Groups identified as living in vulnerable situations before the onset of COVID-19 are at a disproportionate risk of experiencing negative health effects and socioeconomic impacts through all three mechanisms. These include older adults (especially those living alone); people living with comorbidities and disabilities; ethnic and other minority groups; pregnant women; people subject to interpersonal and gender-based violence; people working in the informal sector; socially marginalized groups; children and young people; refugees and migrants in camps, settlements and urban settings; residents in confined care settings; people in prisons and other places of detention; single-parent households; informal or unpaid care workers; front-line health-care workers; homeless communities and people in shelters and informal urban settings; people with insecure incomes, who are poor or impoverished; and people who have previously suffered psychological trauma, such as adverse childhood experiences and/or post-traumatic stress disorder *(26)*. In addition, COVID-19 and its containment measures may lead to new forms of vulnerability that affect people such as those placed in vulnerable situations by social isolation, informal workers providing essential services with inadequate social protection, and journalists covering COVID-19 and country responses *(27)*. For all groups, mitigation measures that promote health equity are needed.

4 MITIGATING THE NEGATIVE IMPACTS OF COVID-19 IN ONGOING OUTBREAKS, TRANSITION AND RECOVERY

COVID-19 presents a major risk of increasing health, social and economic inequities. However, this is not inevitable. Protecting the most vulnerable is a political choice: measures taken now can mitigate the negative social and economic impacts of COVID-19 on health equity. The socioeconomic profile and trajectory of recovery depends on the willingness and ability of countries to invest early and throughout their recovery and transition phases in equity-sensitive public policies and in their health systems.

Recovery and transition from COVID-19 also provides an unprecedented opportunity to create healthier and more resilient people, societies and economies, based on the five UN COVID-19 socioeconomic response pillars. Delivering on these priorities for recovery and transition, as well as strengthening preparedness for future epidemics, requires that containment measures are accompanied by proportionate, universal interventions whereby essential health goods and services are resourced and delivered at a scale and intensity proportionate to the degree of need *(28)*.

Action and investment in the following areas can help to mitigate the negative equity impacts of COVID-19.

Essential health goods and services. People who have been infected with COVID-19 and all those experiencing the negative socioeconomic impacts of COVID-19 require equitable and sustainable access to quality health services with adequate numbers of front-line and essential workers in the health sector. Beyond this, they need access to adequate food, fuel and shelter to support a healthy life *(29–34)*. This requires services beyond the health sector, such as care provision, workplace protection, access to modern heating and cooking methods, transportation, education *(35)*, a clean water supply and sanitation, Internet access, and access to green space and outdoor facilities. Mechanisms such as community outreach need to be established or enhanced to enable more effective and appropriate access to health goods and services for individuals and communities in vulnerable situations.

Economic and financial security. This is critical to enable adherence to containment measures and socioeconomic recovery, both for those who have been infected with COVID-19 and for those negatively impacted by its containment measures. Measures to promote economic and financial security include (but may not be limited to) continuing and creating new, sustainable jobs, where needed *(36)*; formalizing financial and social protection and ensuring decent, safe working conditions, overtime pay and other benefits for all essential workers (including unpaid carers) *(37,38)*; guaranteeing a healthy minimum wage; expanding universal social protection over the life course *(31,32)*; safeguarding against inequitable financial consequences from COVID-19 and its containment measures; guaranteeing timely death benefits and pensions for those who have lost breadwinners to the virus; and ensuring income protection for workers who must cease working temporarily or permanently due to COVID-19 *(17)*.

Governance. Effective governance is essential to addressing health determinants and the health impacts of COVID-19. Introducing proportionate containment measures necessary for a safe transition and recovery for all is central to this effort and should be achieved through transparent and participatory decision-making processes throughout the containment, transition and recovery phases. These processes should include engaging with those exposed to the risk of exclusion and vulnerability to better understand the pathways out of vulnerability. These pathways can then be enabled and facilitated by concrete policies and interventions, lived experience evidence, and community-based needs assessment and solution generation *(39)*. Governance can act on health determinants by enforcing tenants' rights, ensuring the dissemination of evidence-based news, and eliminating and preventing discrimination and stigma *(40–42)*.

Annex 6 lists the health-related socioeconomic impacts on equity and mitigation measures required to tackle the widening social gradient and both existing and newly created vulnerabilities. Mitigation measures to address each of the negative impacts of either COVID-19 or its containment measures may need to be delivered in multiple ways, with each action falling under a different UN COVID-19 socioeconomic response pillar. For this reason, the grouping of the unwanted scenarios (Annex 1), health effects and socioeconomic impacts of COVID-19 (Annex 4) and its containment measures (Annex 5) does not always exactly match the pillars in which the appropriate response are located (Annex 6).

5 CONCLUSIONS

Building a better future from COVID-19 requires policies and interventions that leave no one behind and reduce inequities. This includes proportionate universalist interventions that balance the need to protect people experiencing acute vulnerability with the need to develop physical and economic resilience across the whole of society. In implementing this approach, partnerships and multilateral collaborations must commit to uncovering and acting upon new and pre-existing inequities early in and throughout the COVID-19 response. Political commitment to long-term, sustainable socioeconomic recovery is required to mitigate the negative impacts of COVID-19 and enable transition to a better, more equitable future for all.

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A1 Unwanted scenarios related to unequal health impacts and socioeconomic consequences during recovery and transition from COVID-19

Table A1 shows unwanted scenarios grouped under four of the UN's COVID-19 socioeconomic response pillars.

Table A1. Unwanted scenarios in the COVID-19 response

PILLAR	UNWANTED SCENARIOS
Health first: protecting health services and systems during the crisis	**Increased pressure on informal social care and welfare services:** may occur due to closure/disruption of formal services and illness/death of family members or other carers *(1,2)* **Reduced informal care support:** can lead to a rise in unmet care needs and increased health risks for those affected (e.g. older adults living alone, people with disabilities) **Increased pressure on workers in the formal and informal sectors deemed essential, including front-line health and care workers:** can increase the risk of contracting COVID-19 and lead to stress and mental health problems
Protecting people: social protection and basic services	**Loss of income and increased poverty rates:** most affects those in poverty or already close to the poverty line *(3)* and can lead to an inability to afford essential health goods and resources (e.g. safe and quality shelter, food and fuel) *(4)*. It may also increase the risk of homelessness, hunger, premature mortality and noncommunicable diseases (e.g. angina, asthma, mental health problems) **Closure of borders and/or reduction in consular services:** may increase barriers to accessing health and other essential services for people on the move due to legal, language, cultural and other barriers *(5,6)* **Reduction in the substantiation of human rights (including the right to health):** may occur as a result of greater stigma and discrimination; ethnic violence; and the excessive, discriminatory use of social control measures by enforcement agencies *(7–9)* **Domestic violence and abuse:** may increase in frequency and severity during lockdown, increasing the risk of physical, mental and emotional harm *(10,11)* **Reduction in life chances due to closure of early years facilities and schools:** may reduce future employment chances – with most effect on disadvantaged women and children *(12)* **Acute insecurity of those already vulnerable:** may affect people using food banks and shelters, refugees and people working in the informal sector *(7,13)* **Children being locked out of learning:** may reduce health and learning outcomes and increase the risk of social exclusion and poverty in adulthood *(12)* **Disruption/interruption of public transportation:** affects access to essential health goods and services, including food and health facilities **Disruption/interruption of water, sanitation and hygiene services:** may increase the risk of COVID-19 and other infections

Table A1 contd

PILLAR	UNWANTED SCENARIOS
Economic response and recovery: protecting jobs, small and medium-sized enterprises, and informal sector workers	**Loss of employment and work hours/opportunities due to lockdown or business failures:** may trigger stress and mental health problems, with most effect on informal workers and those in insecure work *(14)* **Risk of increased exposure to indoor air pollution:** may increase adverse impacts on respiratory and circulatory diseases and restrict people to living in inadequately heated dwellings
Social cohesion and community resilience	**Social isolation:** can lead to increased stress, anxiety, and the harmful use of alcohol and substances, which may exacerbate mental health problems **Closure of public spaces and parks:** may reduce play and physical activity and make physical distancing more difficult **Fake or misleading news:** may lead to unintentional self-harm from inappropriate prophylactic or treatment measures and incite distrust in containment/mitigation measures and transition plans from legitimate health authorities *(15)* **Criminal exploitation, including organized crime, of adversity created by the crisis:** can increase stress; compromise access to health and social services; and may also result in harm, abuse and/or trauma **Financial exploitation and unfair price inflation by loan sharks and some financial institutions or organized crime:** can lead to poverty and may worsen the health impact of debt. It may also cause harm and/or trauma, in addition to increasing stress and compromising access to health and social services *(16,17)* **Restrictions on the timely access to free and independent media:** may decrease transparency and participatory decision-making during containment, recovery, and transition; place journalists at higher risk; and increase barriers to receipt of evidence-informed news and information on COVID-19 and its containment measures

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A2 Vulnerability to the impacts of COVID-19 and its containment measures

Pre-existing socioeconomic and health conditions predispose people to increased vulnerability to COVID-19 and its containment measures; conversely, new types of vulnerability are generated by COVID-19 and its containment measures. This annex describes these different processes and pathways in detail.

Vulnerability to contracting COVID-19

Factors leading to an increased risk of contracting COVID-19 include being a front-line health or care worker; living in a care home; working or living in crowded conditions that make physical distancing difficult (e.g. food processing plants, overcrowded housing, informal urban settlements and migrant hostels); having a job involving frequent exposure to young adults with asymptomatic or mild illness (e.g. hospitality staff, security guards and transport workers); inadequate water, sanitation and hygiene facilities; and services that impact on hygiene practices *(1)*.

Vulnerability to the most serious health impacts from contracting COVID-19

Vulnerability to severe illness and death from COVID-19 itself includes older age, being male, ethnicity, and having pre-existing health and health-related conditions (e.g. diabetes, obesity, respiratory and circulatory diseases) *(2,3)*. These health conditions are more likely to be seen among older people and also among younger people living in the most disadvantaged, stressful social conditions (e.g. experiencing food insecurity and malnutrition, poor quality and overcrowded homes, high dependence on the informal economy and daily wages, working long hours under coercive contracts, enforced part-time working, and unemployment) *(4,5)*. The effects of severe symptoms are worsened by inadequate treatment as a result of weak systems (health, social and governance), armed conflict and violence, and by poor access to health care and basic services. Poor access is often caused by an

inability to afford out-of-pocket expenses, an inability to take time off work, and living in remote locations *(1)*.

Those most at risk of accumulating this sequence of vulnerabilities (i.e. contracting COVID-19, experiencing its health effects and having inadequate treatment) include, but are not limited to, those at risk of poverty or social exclusion, self-employed people, informal workers, refugees, migrant workers, homeless people, elderly people and disabled people *(6)*.

Vulnerability to health effects of COVID-19 containment measures

Groups who are disproportionately at risk of infection and serious illness are also among those more likely to be disproportionately impacted by COVID-19 containment measures in the short term and, as seen in previous pandemics, to suffer waves of negative long-term socioeconomic inequalities. The latter can adversely affect health outcomes and accumulate over the life course (Fig. 1) *(7–10)*, resulting in disproportionately higher rates of illness throughout life and, even, premature death.

The health effects of containment are not, however, restricted to those most vulnerable to coronavirus infection and its direct impacts. In particular, children and women of working age are disproportionately affected by containment. Children become locked out of learning when schools are shut. Those whose parents continue working outside the home during lockdown (e.g. in low-skilled jobs) may be disadvantaged in receiving home education *(11)*. Those living in poverty or adverse housing conditions may have inadequate access to the Internet and computers *(12,13)*. For children, these factors may trigger lower health and learning outcomes and a risk of social exclusion and poverty in adulthood *(14,15)*. Women living with abusive partners are at greater risk of domestic violence during lockdown *(16)*. Those who are single parents are most at risk of increased financial insecurity, including increased debt, the threat of homelessness and loss of possessions, and loss of control over the conditions of daily living, leading to increased physical and mental health problems. In the EU in 2018, 45% of single adults with dependent children (mostly women) were at risk of poverty or social exclusion and 61% were unable to face unexpected financial expenses *(12,17,18)*.

The scale of vulnerability in the WHO European Region

The numbers of people affected by social and economic vulnerability in the WHO European Region can be seen from recent European Union Statistics on Income and Living Conditions (EU-SILC), International Labour Organization (ILO) and World Bank data *(12,19–21)*. In 2018 of the 33 countries (the 28 EU Member States plus North Macedonia, Norway, Serbia, Switzerland and Turkey) with data available from EU-SILC on poverty or social exclusion (namely those at risk of poverty or facing severe material deprivation or living in households with very low work intensity), 147 million people (24% of the total population) reported one or more of these vulnerabilities. Of those who reported experiencing one of these adversities, 65 million (11% of the total population) were at risk of poverty, 23 million (4% of the total population) faced severe material deprivation and 14 million (2% of the total population) lived in households with very low work intensity. In addition, 37 million (6% of the total population) experienced two of these adversities and 9 million (1.5% of the total population) experienced all three types of adversity. In the 14 non-EU countries in the Region with data available from the World Bank for 2012–2018 (Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, Russian Federation and Tajikistan, Ukraine, Uzbekistan), 32 million people (11% of the total population) lived below the national poverty line; in the 12 non-EU countries with data available from ILO for 2012–2019 (Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, Russian Federation and Ukraine), approximately 20 million people (8% of the total population) were underemployed or unemployed.

In all, 9% of those interviewed and aged 16 years or over for EU-SILC (44 million people) reported poor or very poor health, with the percentage rising with age to 26% of those aged 75 years and over (13 million people). In the 13 non-EU countries in the Region that participated in the 2017–2020 WVS (Albania, Andorra, Azerbaijan, Armenia, Belarus, Bosnia and Herzegovina, Georgia, Iceland, Kazakhstan, Kyrgyzstan, Montenegro, Russian Federation and Tajikistan) around 10% of the population (20 million people[1]) reported poor or very poor health.

For some people, illness is something they cannot afford – 1.2% of the population in EU-SILC countries (6 million people) could not

[1] Based on authors' calculations using World Bank population figures.

afford to have a medical examination, with the proportion rising to 1.6% in those aged 75 years and over (more than 800 000 people). In all, 6% of the population (12 million people) of nine non-EU countries that participated in the 2010–2014 WVS (Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation, Ukraine and Uzbekistan) had often gone without needed medicine or treatment in the last 12 months. More detailed health questions were asked in the most recent round of the EHIS (in 2014), for which 31 countries provided data (28 EU Member States plus Iceland, Norway and Turkey) *(17)*. In these countries, 16% of people (92 million people) reported unmet need for health care for financial reasons and, in terms of COVID-19-related pre-existing health conditions, 20% reported having high blood pressure, 7% reported having diabetes, 6% reported having asthma, 5% reported having chronic lower respiratory diseases (excluding asthma) and 4% reported having coronary heart disease or angina. All of these health conditions were more prevalent in people aged 75 years and over – for example, 52% of this age group reported having high blood pressure *(12)*. During an ongoing emergency such as COVID-19, the de facto higher risks of experiencing vulnerability by certain populations have to be defined, mapped, assessed and considered in strategic planning and multisectoral responses to mitigate negative impacts and ensure that newly acquired vulnerabilities are not overlooked.

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A3 Social and economic impact monitoring indicators

In order to monitor inequitable outcomes and ensure that mitigation measures appropriately reach those vulnerable to each unwanted scenario, it is important that monitoring systems are in place and disaggregate data by age; sex; socioeconomic status, such as education level and economic status/income level; urban/peri-urban/rural status; level of regional development; and key dimensions of additional vulnerability, such as migrant status *(1)*. Within these disaggregated systems, the excess levels of adverse health outcomes need to be identified during and after each wave of the epidemic in order to ensure a proportionate response to the level of increased risk and vulnerability experienced by each group in the population. Table A3 lists the available indicators for each of the UN COVID-19 socioeconomic response pillars *(2)*.

Table A3. Social and economic impact monitoring indicators for each UN COVID-19 socioeconomic response pillar

PILLAR/INDICATOR	RATIONALE AND VALUE OF MONITORING	SOURCE FOR BASELINE DATA
Health first		
Excess mortality	Allows separation of mortality due to COVID-19 and other diseases	National statistics offices
Self-reported health	Allows assessment of the general status of health and well-being	European Social Survey, EU-SILC, HBSC, HED, WVS
Rate of NCDs[a]	Allows assessment of morbidity, in part due to risky health behaviours	EHIS, HED, STEPS
Avoidable hospitalizations	Allows understanding of the degree of interruption of normal health service provision	Eurostat, administrative hospital data, HED
Unmet need for health care	Allows understanding of the degree of delay or interruption of health service provision and exacerbated health conditions as a result of delays in seeking care	EU-SILC, HED, WVS
Quality of health-care services	Allows understanding of the degree of interruption of normal health service provision and quality	European Quality of Life Survey, HED
Informal caregiving	Allows monitoring of the degree of reduced informal care support	European Quality of Life Survey, HED
Protecting people		
Poverty, child poverty and in-work poverty rates	Allows monitoring of loss of income and its effect on pushing households into poverty	EU-SILC, HED

Table A3 contd

PILLAR/INDICATOR	RATIONALE AND VALUE OF MONITORING	SOURCE FOR BASELINE DATA
Early years outcomes	Allows monitoring of children who miss out on early learning and healthy development due to closures	National statistics offices
Educational performance	Allows monitoring of children and young people who are locked out of learning and friendship networks due to poor/no access to the Internet and computers	HED, PISA (OECD)
NEETs	Allows monitoring of the educational and economic impact of closures on young people, with implications for their future health and well-being	HED, ILO
Housing deprivation	Allows assessment of the impact of loss of employment and income on housing quality, affecting respiratory and mental health	EU-SILC, HED
Food insecurity	Allows assessment of the impact of loss of employment and income, as well as of restrictions and closures, on the ability to access sufficient and good quality nutritional intake, especially for older people, and school meals for children	EU-SILC, European Quality of Life Survey, HED, WVS
Fuel poverty	Allows assessment of the impact of loss of employment and income on ability to afford basic utilities, affecting respiratory and mental health	EU-SILC, HED
Feeling unsafe from crime or violence in the home	Allows monitoring of the implications of COVID-19 restrictions on gender-based and domestic violence	European Quality of Life Survey, HED, WVS
Household debt	Allows assessment of the financial stress generated by income and employment loss, generating anxiety and depression	National survey data, OECD (not disaggregated)
Unaffordable loans, household debt-to-income ratios	Allows monitoring of unfair interest rates and activities by loan sharks and other financial institutions targeting the most economically vulnerable, who are already at a greater risk of negative health and economic impacts	National statistics offices
Adequate water and sanitation facilities	Allows assessment of the ability of households to follow hygiene-related guidance to stop the spread of COVID-19	WHO–UNICEF Joint Monitoring Programme, HED
Monitor of human rights abuses	Allows monitoring of discrimination, ethnic violence and the excessive, discriminatory use of social control measures by enforcement agencies towards groups considered to pose a greater risk of COVID-19	Fragile States Index – Human Rights Dimension
Travel advisories and consular processing notifications	Allows monitoring of the closure of borders and/or reduction in consular services	Embassies and consulates
Economic response and recovery		
Unemployment rate	Allows monitoring of the labour market and the economic impact of closures, and consequent implications for mental health and premature morbidity	HED, ILO
Informal and part-time workers	Allows monitoring of those most at risk of loss of employment due to lockdown or business failures without sickness or health-care benefits	Eurostat, HED

Table A3 contd

PILLAR/INDICATOR	RATIONALE AND VALUE OF MONITORING	SOURCE FOR BASELINE DATA
Indoor ambient air pollution	Allows assessment of loss of employment and income on the ability to afford basic utilities, affecting respiratory health	European Commission
Incidence, coverage and adequacy of social assistance programmes	Allows assessment of the extent to which social assistance reduces financial insecurity among those at greatest economic risk and their ability to access the resources needed to live a healthy life	World Bank Atlas of Social Protection
Social cohesion and community resilience		
Mental health (WHO 5-point scale) *(3)*	Allows understanding of the mental health implications of social and economic impacts from COVID-19 restrictions	European Quality of Life Survey
Suicides	Allows understanding of extreme mental health implications	WHO Global Burden of Disease Database (by age and sex)
Volunteering	Allows monitoring of opportunities for fostering social inclusion and well-being, especially at local level, for those exposed to vulnerability such as older people	EU-SILC, HED
Access to green space	Allows monitoring of opportunities for play and exercise provided by green space, which provides psychological benefits and alleviates crowding and physical distancing	European Quality of Life Survey, HED
Trust in others	Allows monitoring of trust and social cohesion, which are necessary for the widespread acceptance of and adherence to possible future waves of restrictions	European Quality of Life Survey, European Social Survey, HED, WVS
Not having someone to ask for help	Allows monitoring of social isolation and its implications for mental health and well-being	EU-SILC, HED
Rates of Internet crime	Allows monitoring of criminal exploitation of adversity created by the crisis, with the risk of falling victim to Internet fraud and other crimes highest among groups with social and mental health vulnerabilities, such as older people and those who are socially isolated	National statistics offices
Media stories and fake news monitors	Allows monitoring of incorrect information and illegal activity on websites and social media, which impacts health literacy and adherence to COVID-19 guidelines and has the potential to determine the trajectory of the outbreak and its social and economic impacts	University departments (e.g. of the Open University)
Equal treatment under the law and absence of discrimination	Allows monitoring of discrimination, ethnic violence and the excessive, discriminatory use of social control measures by enforcement agencies towards groups considered to pose a greater risk of COVID-19	HED, World Justice Project
World Press Freedom Index	Allows monitoring of restrictions to free and independent media	Reporters Without Borders

HBSC: Health Behaviour In School-Aged Children (WHO collaborative cross-national survey); HED: Health Equity Dataset; NCD: noncommunicable disease; NEET: young person not in education, employment or training; OECD: Organisation for Economic Co-operation and Development; PISA: Programme for International Student Assessment (OECD); STEPS: WHO STEPwise approach to surveillance.

[a] Including cancer, chronic respiratory diseases, cardiovascular disease and diabetes

Note: HED is a disaggregated indicator of the WHO European Health Equity Status Report Initiative *(4,5)*, calculated from the original data source(s) listed.

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A4 COVID-19 health effects and socioeconomic impact

Table A4 shows the health effects and areas and mechanisms of the socioeconomic impact of COVID-19, leading to health inequities (all relate to the UN COVID-19 socioeconomic response pillar "Health first" *(1)*). These are likely to apply to many country situations. However, other country-specific areas and mechanisms of socioeconomic impact should be considered where relevant to the local situation.

Table A4. UN pillar "Health first": areas and mechanisms of socioeconomic impact and its inequities

AREA	MECHANISM	UN COVID-19 RESPONSE PILLAR
Physical health effects from contracting COVID19	The risk of contracting COVID-19, severity of the health impact, and likelihood and speed of recovery/death vary according to socioeconomic factors, pre-existing health conditions, age and disability	Health first
	Disadvantaged and/or marginalized groups frequently have limited access to medical treatment. Treatment during and after experiencing COVID-19 may lead to a decline in their long-term health status, thereby reducing their earning capacity and/or mobility and creating a downward spiral of health	
Mental health effects	Stress and trauma associated with the pandemic and fear and anxiety about it will have psychosocial health impacts (e.g. worsening of depression and anxiety disorders, the harmful use of alcohol, substance misuse and suicide risk)	Health first
	Worsening of existing mental health problems among those already left behind (e.g. depression, anxiety disorders and suicide risk; harmful use of alcohol; and substance misuse)	
	Psychosocial health impacts of the pandemic may also manifest as physical symptoms (e.g. high blood pressure, angina)	
	Increased risk of delayed suicides due to socioeconomic destabilization of households as a consequence of the containment measures	

Table A4 contd

AREA	MECHANISM	UN COVID-19 RESPONSE PILLAR
Disruption/interruption of health-care services	People requiring diagnostic testing for non-COVID-19 conditions (including in routine screening programmes) and those with existing chronic or deteriorating conditions may experience delays or cessation of normal provision of health services during the COVID-19 response	Health first
	The prevalence of treatment-sensitive conditions increases with age, and often predominate among poor and marginalized population groups within each age group	
	In normal times, access to health services is worse among poor and marginalized population groups; therefore, worsening of health conditions among these groups may reduce their earning power and/or ability to access services, leading to a spiral of worsening health	
	Increase in non-COVID-19-related mortality owing to the interruption of essential health services	
	Increased risk of vaccine preventable diseases when the Expanded Programme on Immunization *(2)* or immunization services are among the discontinued essential services	

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A5 COVID-19 containment measures and subsequent areas and mechanisms of socioeconomic impact

Table A5 shows the COVID-19 containment measures and subsequent areas and mechanisms of socioeconomic impact, and their relationship with the UN response pillars. These general areas and mechanisms are likely to apply to many country situations; however, other country-specific areas and mechanisms of socioeconomic impact should be considered where relevant to the local situation.

Table A5. COVID-19 containment measures and their socioeconomic impact

COVID-19 CONTAINMENT MEASURE	AREA OF SOCIOECONOMIC IMPACT	MECHANISM OF SOCIOECONOMIC IMPACT	UN COVID-19 RESPONSE PILLAR
Physical distancing, staying inside and being locked down	Social isolation	Risk of disproportionate suffering from loneliness and mental health issues Loss of belonging and dignity owing to isolation from the workplace Increase in stress, anxiety and harmful use of alcohol and substances Children who do not have siblings or social contact with peer groups for social and emotional development.	Social cohesion and community resilience
	Domestic violence and abuse	Higher risk of physical, mental and emotional harm Frequency and severity increases during lockdown Increased barriers to seeking help and support to stay safe	Protecting people
	Reduced informal care support	Illness or death of informal carers Restricted or reduced visits by carers, leading to a rise in unmet care needs	Health first
	Risk of increased exposure to indoor air pollution	Staying inside for longer than usual, including during summer heat-waves, increases the adverse impact of indoor pollution on respiratory and circulatory diseases People restricted to living in inadequately heated or cooled houses	Economic response and recovery

Table A5 contd

COVID-19 CONTAINMENT MEASURE	AREA OF SOCIOECONOMIC IMPACT	MECHANISM OF SOCIOECONOMIC IMPACT	UN COVID-19 RESPONSE PILLAR
Closure of workplaces and/ or interruption of service provision	Loss of employment and work hours/ opportunities	May trigger mental health problems and additional stress, including for individuals who fear losing their jobs	Economic response and recovery
	Loss of income and increased poverty rates	Inability to afford essential health goods and the resources (e.g. safe and quality shelter, food and fuel) needed to have a healthy life Increase in financial insecurity (including increased debt, threat of homelessness and loss of possessions) and loss of control over the conditions of daily living, which lead to increased physical and mental health problems	Protecting people
	Reduction in life chances due to closure of early years facilities	These risks are higher among children living in disadvantaged households (e.g. living in poverty or in adverse housing conditions with inadequate access to the Internet and computers), where there are few developmentally appropriate books or toys and they may be otherwise be disadvantaged in receiving developmental stimuli Children in more disadvantaged circumstances will be less ready to start and succeed in schooling without access to early years facilities. Lower levels of educational attainment are associated with poorer health and increased mortality risk in later life owing to a lack of the skills/qualifications needed to obtain and retain employment and earn a sufficient income to live healthily and be able to make healthy choices	Protecting people
	Increased pressure on workers in the formal and informal sectors, including front-line health and care workers	Higher exposure to and risk of contracting COVID-19, leading to stress, mental health problems and, potentially, trauma	Health first
	Acute insecurity of those already vulnerable	People in groups that are ineligible for social protection and lack income security suffer disproportionately from additional socioeconomic exclusion, which leads to increased psychosocial stress and, as a result, additional physical and mental health problems	Protecting people
	Children locked out of learning	Children whose parents have fewer material resources (e.g. as a result of lower levels of wealth, capital and educational attainment) and/ or are continuing to work outside the home may be disadvantaged in receiving home education. This may trigger lower health and learning outcomes, a risk of social exclusion, and poverty in adulthood School-aged children living in poverty or adverse housing conditions may have inadequate access to the Internet and computers. This may trigger lower health and learning outcomes, risk of social exclusion and poverty in adulthood	Protecting people

Table A5 contd

COVID-19 CONTAINMENT MEASURE	AREA OF SOCIOECONOMIC IMPACT	MECHANISM OF SOCIOECONOMIC IMPACT	UN COVID-19 RESPONSE PILLAR
	Disruption/ interruption of water, sanitation and hygiene services	Inadequate water, sanitation and hygiene facilities and services pose a risk of infection from COVID-19 (when lack of water impacts hygiene practices), as well as an increased risk of other waterborne diseases	Protecting people
	Disruption/ interruption of public transportation	Inability to travel to obtain essential health goods and resources (including food) and to reach health-care facilities	Protecting people
	Closure of public spaces and parks	Lack of adequate play and exercise opportunities and the psychological benefits of green spaces. Limiting the availability of public areas for recreation may also increase crowding and make physical distancing difficult	Social cohesion and community resilience
	Increased pressure on informal social care and welfare services	Reductions in formal care puts increased pressure on informal carers, which can lead them to suffer stress, mental health problems and, potentially, physical health problems	Health first
	Closure of borders and/or reduction in consular services	Closed borders or expired passports or residency permits may reduce access to health and social care services and increase stress and mental health problems for individuals (especially pregnant women) who are unable to enter countries in which they have health coverage and/or social protection	Protecting people
Governance	Reduction in the substantiation of human rights	Discrimination against people in accessing health services and facilities, including the rationing of intensive care and related equipment Greater stigma and discrimination (including xenophobia) and excessive use of social control measures by enforcement agencies may lead to stress, violence, trauma and adverse effects on many of the social determinants of health (e.g. housing, employment, schooling and voting)	Protecting people
	Criminal exploitation, including organized crime	Criminals may take advantage of the adversity created by the crisis, such as through Internet and other fraud. Defrauding or exploiting vulnerable individuals leads to poverty (which reduces their ability to live healthily) and debt (which increases stress). Criminal activity may also compromise access to health and social services Children spending more time online with less supervision are at risk of abuse and trauma	Social cohesion and community resilience
	Financial exploitation and unfair price inflation	Loan sharks and some financial institutions may take advantage of increased economic vulnerability due to closures and job losses. This worsens the health impact of debt by reducing the ability to live healthily and access health and social services, and has the potential to increase stress and cause harm/trauma	Social cohesion and community resilience

Table A5 contd

COVID-19 CONTAINMENT MEASURE	AREA OF SOCIOECONOMIC IMPACT	MECHANISM OF SOCIOECONOMIC IMPACT	UN COVID-19 RESPONSE PILLAR
	Restrictions on a free and independent media	Constraints on factual reporting and broadcasting on issues related to health and the response to COVID-19 may harm public health and place journalists at higher risk	Social cohesion and community resilience
	Fake or misleading news	May lead to unintentional self-harm from inappropriate prophylactic or treatment measures and a lack of trust in scientific information Rumours and false stories can incite distrust in legitimate health authorities, recommended treatments, transition plans, health-care facilities and public health messages A lack of accessibility options for people with disability may cause challenges in accessing public health information on COVID-19	Social cohesion and community resilience

A6 Health-related socioeconomic impacts of COVID-19 and mitigation measures

Table A6 shows the areas of health-related socioeconomic impact, the identified national/subnational policy areas where mitigation measures may be implemented and the relevant UN COVID-19 socioeconomic response pillar(s). The policy areas and mitigation measures are likely to apply to many country situations; however, other country-specific policy areas and mitigation measures should be considered where relevant to the local situation.

Table A6. Health-related socioeconomic impacts and action areas for mitigation

ACTION AREA	ACTION/ INVESTMENT	NATIONAL/SUBNATIONAL POLICY AREA	UN RESPONSE PILLAR
Physical health effect from contracting COVID-19	Essential health goods and services	Ensure equitable and sustainable access to quality health services	Health first
		Ensure the sustainable provision of essential health goods and services beyond the health sector	Protecting people
	Economic and financial security	Ensure decent and safe working conditions, including personal protective equipment and work breaks for essential and front-line health and care workers in the formal and informal sectors	Protecting people
Mental health effects	Essential health goods and services	Ensure equitable and sustainable access to quality health services	Health first
		Support third sector organizations and statutory care services	Protecting people
		Enable the safe and equitable reopening of parks and other outdoor facilities	Social cohesion and community resilience
		Phase the reopening of early years facilities and schools in a safe and equitable way	Protecting people
	Economic and financial security	Continue sustainable employment	Economic response and recovery
		Construct new and sustainable employment opportunities	Macroeconomic response and multilateral collaboration
Disruption of health-care services	Essential health goods and services	Ensure equitable and sustainable access to quality health services	Health first
		Ensure adequate numbers of front-line health workers to facilitate the recovery	

Table A6 contd

ACTION AREA	ACTION/ INVESTMENT	NATIONAL/SUBNATIONAL POLICY AREA	UN RESPONSE PILLAR
Impact of the socioeconomic effects of COVID19 on the health sector	Essential health goods and services	Ensure equitable and sustainable access to quality health services	Health first
		Ensure adequate numbers of front-line health workers to facilitate the recovery	
Social isolation	Essential health goods and services	Ensure adequate numbers of front-line health workers to facilitate the recovery	Health first
		Support third sector organizations and statutory care services	Protecting people
		Ensure safe and equitable access to transport	Economic response and recovery
		Enable the safe and equitable reopening of parks and other outdoor facilities	Social cohesion and community resilience
		Phase the reopening of early years facilities and schools in a safe and equitable way	Protecting people
		Close the digital divide (including Internet access) for families in poverty and/or experiencing vulnerability	
	Economic and financial security	Continue sustainable employment	Economic response and recovery
		Construct new and sustainable employment opportunities	Macroeconomic response and multilateral collaboration
Domestic violence and abuse	Essential health goods and services	Support third sector organizations and statutory care services	Protecting people
		Ensure safe and equitable access to transport	Economic response and recovery
		Phase the reopening of early years facilities and schools in a safe and equitable way	Protecting people
		Close the digital divide for families in poverty and/or experiencing vulnerability	
	Economic and financial security	Continue sustainable employment	Economic response and recovery
		Construct new and sustainable employment opportunities	Macroeconomic response and multilateral collaboration
Reduced informal care support	Essential health goods and services	Ensure equitable and sustainable access to quality health services	Health first
		Support third sector organizations and statutory care services	Protecting people

Table A6 contd

ACTION AREA	ACTION/ INVESTMENT	NATIONAL/SUBNATIONAL POLICY AREA	UN RESPONSE PILLAR
Risk of increased exposure to indoor air pollution	Essential health goods and services	Increase availability of modern methods of heating and cooking	Economic response and recovery
Loss of employment and work hours/ opportunities	Essential health goods and services	Ensure safe and equitable access to transport	Economic response and recovery
	Economic and financial security	Ensure decent and safe working conditions, including personal protective equipment and work breaks for essential and front-line health and care workers in the formal and informal sectors	Protecting people
		Continue sustainable employment	Economic response and recovery
		Construct new and sustainable employment opportunities	Macroeconomic response and multilateral collaboration
Loss of income and increased poverty rates	Economic and financial security	Formalize protection for essential workers	Protecting people
		Guarantee that the minimum wage is a healthy living wage	
		Expand universal income protection over the life course	
		Prevent inequitable financial consequences of COVID-19 and its containment measures	Economic response and recovery
		Guarantee timely death benefits and pensions for those who have lost breadwinners	Protecting people
		Ensure income protection for essential and front-line health and care workers who need to cease work either temporarily or permanently	
Reduction in life chances due to closure of early years facilities	Essential health goods and services	Phase the reopening of early years facilities and schools in a safe and equitable way	Protecting people
Increased pressure on workers in the formal and informal sectors, including front-line health and care workers	Economic and financial security	Formalize protection for essential workers	Protecting people
		Ensure decent and safe working conditions, including personal protective equipment and work breaks for essential and front-line health and care workers in the formal and informal sectors	
		Guarantee timely death benefits and pensions for those who have lost breadwinners	
		Guarantee overtime pay and other benefits for essential and front-line health and care workers	
		Ensure income protection for essential and front-line health and care workers who need to cease work either temporarily or permanently	

Table A6 contd

ACTION AREA	ACTION/ INVESTMENT	NATIONAL/SUBNATIONAL POLICY AREA	UN RESPONSE PILLAR
Acute insecurity of those already vulnerable	Essential health goods and services	Ensure the sustainable provision of essential health goods and services beyond the health sector	Protecting people
	Economic and financial security	Expand universal income protection over the life course	Protecting people
		Guarantee timely death benefits and pensions for those who have lost breadwinners	
		Ensure income protection for essential and front-line health and care workers who need to cease work either temporarily or permanently	
	Governance	Enforce tenants' rights	Protecting people
		Ensure fair and equitable access to cross-border movement	
		Eliminate and prevent discrimination and stigma	Social cohesion and community resilience
Children locked out of learning	Essential health goods and services	Phase the reopening of early years facilities and schools in a safe and equitable way	Protecting people
		Close the digital divide for families in poverty and/or experiencing vulnerability	
Disruption/ interruption of water, sanitation and hygiene services	Essential health goods and services	Prioritize provision of a safe, equitable water supply and sanitation and hygiene facilities during transition and recovery	Protecting people
Disruption/ interruption of public transportation	Essential health goods and services	Ensure safe and equitable access to transport	Economic response and recovery
		Facilitate safe active travel (including walking and cycling) and reduce the risk of unsustainable shifts towards private motorization	Social cohesion and community resilience
Closure of public spaces and parks	Essential health goods and services	Enable the safe and equitable reopening of parks and other outdoor facilities	Social cohesion and community resilience
Increased pressure on informal social care and welfare services	Essential health goods and services	Ensure equitable and sustainable access to quality health services	Health first
		Support third sector organizations and statutory care services	Protecting people
Closure of borders and/ or reduction in consular services	Governance	Ensure fair and equitable access to cross-border movement	Protecting people
		Introduce necessary and proportionate containment measures for a safe transition and recovery	Health first

Table A6 contd

ACTION AREA	ACTION/ INVESTMENT	NATIONAL/SUBNATIONAL POLICY AREA	UN RESPONSE PILLAR
Reduction in the substantiation of human rights	Governance	Enforce tenants' rights	Protecting people
		Ensure fair and equitable access to cross-border movement	
		Introduce necessary and proportionate containment measures for a safe transition and recovery	Health first
		Ensure transparent and participatory decision-making during containment, transition and recovery	Social cohesion and community resilience
		Ensure the dissemination of evidence-based news	
		Eliminate and prevent discrimination and stigma	
Criminal exploitation, including organized crime	Essential health goods and services	Ensure equitable and sustainable access to quality health services	Health first
		Support third sector organizations and statutory care services	Protecting people
		Ensure the sustainable provision of essential health goods and services beyond the health sector	
	Economic and financial security	Guarantee that the minimum wage is a healthy living wage	Protecting people
		Expand universal income protection over the life course	
		Prevent inequitable financial consequences of COVID-19 and its containment measures	Macroeconomic response and multilateral collaboration
Financial exploitation and unfair price inflation	Essential health goods and services	Ensure equitable and sustainable access to quality health services	Health first
		Ensure the sustainable provision of essential health goods and services beyond the health sector	Protecting people
	Economic and financial security	Guarantee that the minimum wage is a healthy living wage	Protecting people
		Expand universal income protection over the life course	
		Prevent inequitable financial consequences of COVID-19 and its containment measures	Macroeconomic response and multilateral collaboration
Restrictions on timely access to a free and independent media	Governance	Introduce necessary and proportionate containment measures for a safe transition and recovery	Health first
		Ensure transparent and participatory decision-making during containment, transition and recovery	Social cohesion and community resilience
		Ensure the dissemination of evidence-based news	
Fake or misleading news	Governance	Ensure transparent and participatory decision-making during containment, transition and recovery	Social cohesion and community resilience
		Ensure the dissemination of evidence-based news	

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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