

## **Left behind: inequalities in the negative impacts of the COVID-19 pandemic among adolescents in the WHO European Region**

Impact of the COVID-19 pandemic on young people's health and well-being  
from the findings of the HBSC survey round 2021/2022

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# ABSTRACT

This report summarizes findings from the Health Behaviour in School-aged Children survey round 2021/2022 regarding the unequal impact of the COVID-19 pandemic on adolescents' health and health behaviours in 22 countries and regions of the WHO European Region. Risk factors contributed to different extents to the pandemic's impact on adolescents' health and health behaviours. More girls and 15-year-olds than boys and younger adolescents reported negative impacts of the pandemic on the four health outcomes considered. The largest gender and age inequalities were seen in mental health. Social inequalities, such as having an immigration background, coming from a family that was not well-off, having at least one unemployed parent and/or living in a single-parent household, were linked to adolescents experiencing negative impacts of the pandemic on their health and health behaviours in many countries and regions. Having experienced the hospitalization of a family member due to COVID-19 was also an important risk factor for negative health and health behaviour outcomes in more than half of the countries and regions. The large cross-country/region variation in the contribution (or lack of contribution) of different risk factors to negative pandemic impacts underlines the need for country-/region-specific interventions in times of crises.

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# KEY FINDINGS

- The COVID-19 (coronavirus disease 2019) pandemic and the restrictions imposed to control its spread had an unequal impact on adolescents, being more negative for those who were vulnerable to health problems and thereby increasing pre-existing inequalities.
- No clear geographical patterns were detected in the extent to which different risk factors contributed to the negative pandemic impact on adolescents' health, mental health and health behaviours (physical activity and eating and drinking habits).
- More girls than boys reported a negative COVID-19 impact on their mental health in nearly all 22 countries and regions.
- More 15-year-olds than those who were aged 11 or 13 reported a negative COVID-19 impact on health, mental health and health behaviours in most countries and regions.
- Coming from a family that was not well-off was linked to a negative COVID-19 impact in half of the countries and regions, while parental unemployment and immigration were risk factors in around one in three.
- More adolescents from single- rather than two-parent households reported a negative COVID-19 impact on health, mental health and health behaviours in half of the countries and regions.
- Adolescents who experienced the hospitalization of a family member due to COVID-19 reported a negative pandemic impact on their own health, mental health and health behaviours in more than half of the countries and regions.

## SUMMARY

This report summarizes findings from the Health Behaviour in School-aged Children (HBSC) survey round 2021/2022 regarding the unequal impact of the COVID-19 pandemic on adolescents' health and health behaviours in 22 countries and regions of the WHO European Region. It looks at inequalities in pandemic impact related to gender, age, family economic status, parental unemployment, immigration background, family structure and the experience of family members being hospitalized due to COVID-19.

Risk factors contributed to different extents to the pandemic's impact on adolescents' health and health behaviours. Links between the risk factors and unequal impacts of the pandemic varied widely among the countries and regions.

Overall, more girls and 15-year-olds than boys and younger adolescents reported negative impacts of the pandemic on the four health outcomes considered. The largest gender and age inequalities, noticeable in almost all countries and regions, were seen in mental health.

Social inequalities, such as having an immigration background, coming from a family that was not well-off, having at least one unemployed parent and/or living in a single-parent household, were linked to adolescents in many countries and regions experiencing negative impacts of the pandemic on their health and health behaviours.

Having experienced the hospitalization of a family member due to COVID-19 was also an important risk factor for negative health and health behaviour outcomes in more than half of the countries and regions.

The large cross-country/region variation in the contribution (or lack of contribution) of different risk factors to negative pandemic impacts underlines the need for country-/region-specific interventions in times of crises.

# FINDINGS

## Inequalities in the COVID-19 pandemic's impact on adolescents' health

Twenty per cent of adolescents in the 22 countries and regions reported a negative impact of the COVID-19 pandemic on their health, ranging from 9% in Spain to 32% in Kazakhstan (Fig. 1) (see Box 1 for a description of how to read the figures).

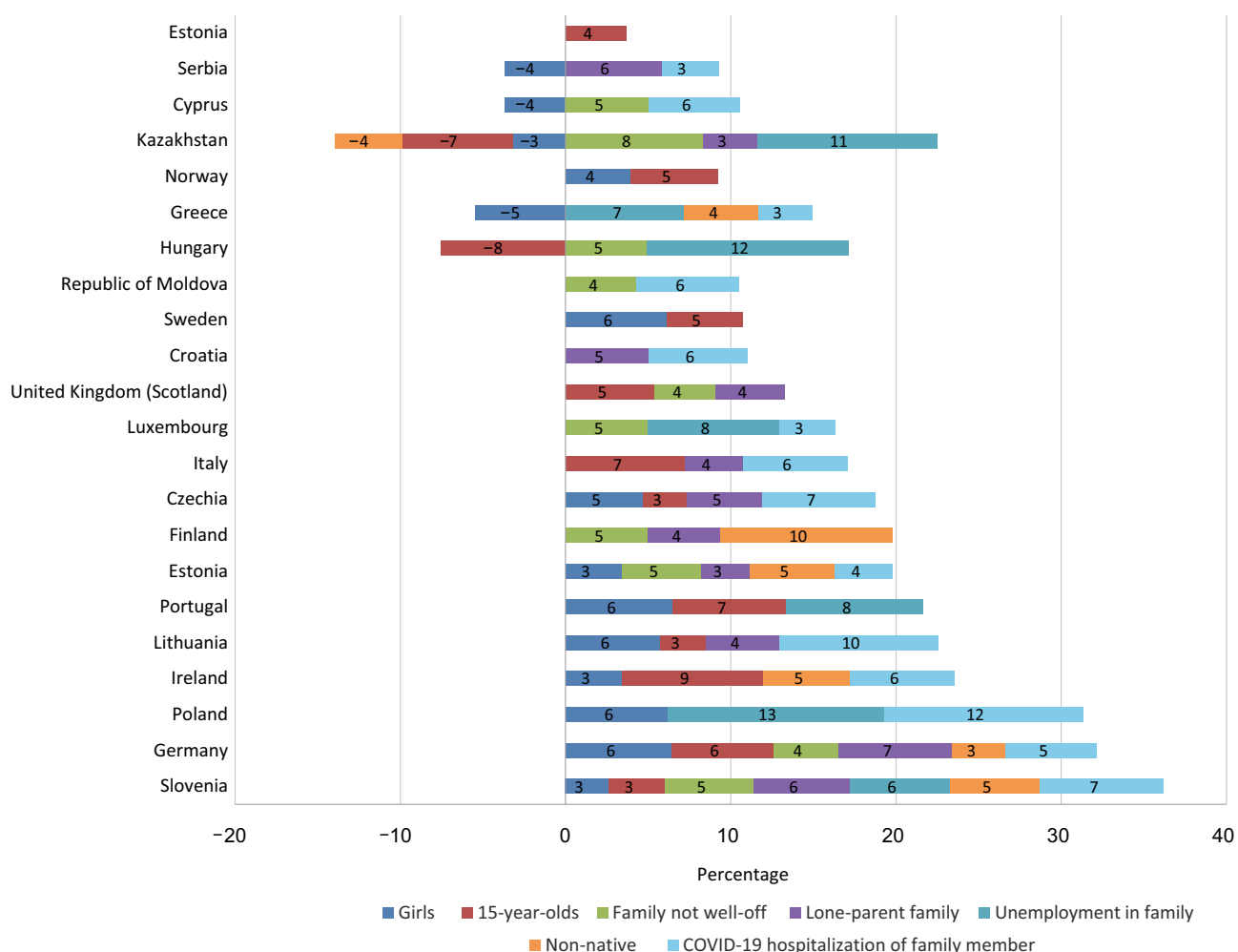
### Box 1. How to read the figures

Each of the **coloured blocks** represents the inequality (the differences in shares of adolescents reporting a negative impact) in the negative impact of the COVID-19 pandemic for specific risk factors between adolescents at risk and their counterparts:

- **gender** (girls versus boys);
- **age** (15-year-olds versus 11–13-year-olds);
- **family economic status** (those from families that are not well-off versus those whose families are better-off);
- **family structure** (single-parent households versus households with two parents);
- **parental unemployment** (at least one parent unemployed versus both parents employed);
- **immigration background** (immigrant versus native); and
- past experience of a **family member's hospitalization** due to COVID-19 (versus no such experience).

Larger blocks represent larger inequalities in the impact of the COVID-19 pandemic. Where there is no block of a specific colour, it means that no substantial differences were detected in the specific country/region in relation to that risk factor.

**Fig. 1. Inequalities in negative COVID-19 pandemic impacts on adolescents' health across risk factors, by country**



Note: Finland, Hungary, Norway and Sweden did not collect data on hospitalization of a family member and Lithuania did not collect data on adolescents' country of birth.

More girls than boys in nearly half the countries and regions reported a negative impact of the COVID-19 pandemic on their health, with the gender differences being 3–6 percentage points. By contrast, the link was reversed in Cyprus, Greece, Kazakhstan and Serbia. More 15-year-olds than their younger counterparts in half of the countries and regions reported a negative impact on their health, with the difference ranging from 9 percentage points in Ireland to 3 in Switzerland. In Hungary and Kazakhstan, 15-year-olds reported fewer negative impacts than 11- and 13-year-olds.

Social inequalities in adolescents' views of how the pandemic had affected their health were found in nearly half of the countries and regions. Compared to their better-off counterparts, more adolescents from families that were not well-off reported a negative impact, with the differences ranging from 8 percentage points in Kazakhstan to 4 in Germany, the Republic of Moldova and United Kingdom (Scotland). More adolescents from single-parent households than those living with two parents reported a negative impact on their health in one third of the countries and regions; the differences in the perceived negative impact ranged from 3 percentage points in Kazakhstan and Spain to 7 in Germany.

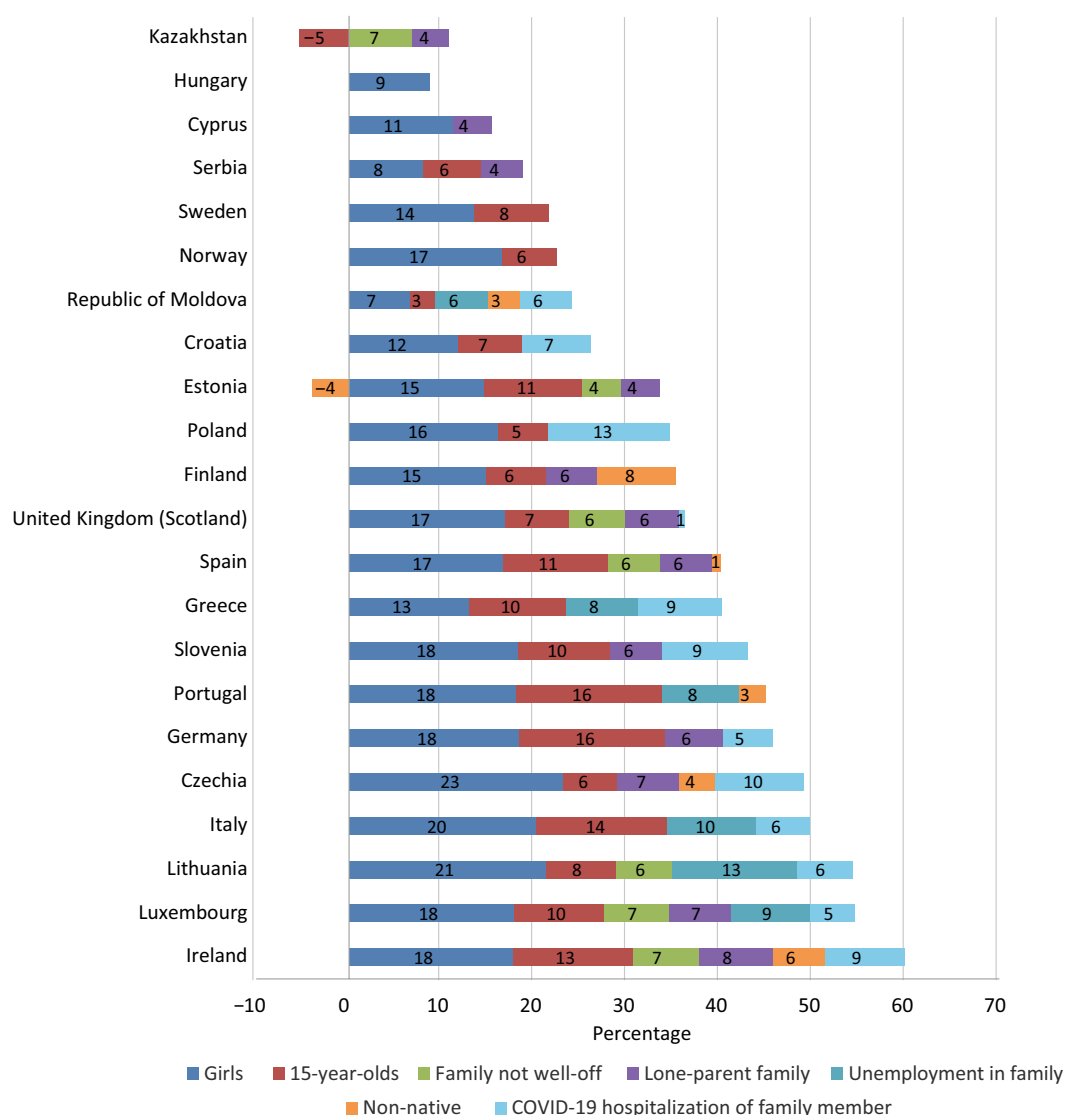
Parental unemployment contributed to unequal pandemic impacts on adolescents' health in only seven countries, but inequalities in these countries were wide, reaching 13 percentage points in Poland. More non-native than native adolescents reported a negative pandemic impact on their health in six countries, with the difference reaching 10 percentage points in Finland.

In most countries and regions, more adolescents who had experienced the hospitalization of a family member due to COVID-19 reported a negative pandemic impact on their own health (compared to adolescents who did not have this experience). The differences were widest in Poland, reaching 12 percentage points.

## Inequalities in the COVID-19 pandemic's impact on adolescents' mental health

Nearly 30% of adolescents in the 22 countries and regions reported that the COVID-19 pandemic had had a negative impact on their mental health, with percentages ranging from 17% in the Republic of Moldova to 38% in Ireland (Fig. 2).

**Fig. 2. Inequalities in negative COVID-19 pandemic impacts on adolescents' mental health across risk factors, by country**



Note: Finland, Hungary, Norway and Sweden did not collect data on hospitalization of a family member and Lithuania did not collect data on adolescents' country of birth.

More girls than boys reported a negative COVID-19 impact on their mental health in all countries and regions except Kazakhstan. The extent of gender differences varied widely, ranging from 7 percentage points in the Republic of Moldova to 23 in Czechia. More 15-year-olds experienced negative pandemic impacts on their mental health than their younger counterparts in most countries and regions, with the widest difference in Germany and Portugal (16 percentage points). In Kazakhstan, more 11- and 13-year-olds reported negative impacts than their older peers.

Adolescents whose families were not well-off or who had unemployed parents reported negative pandemic impacts on their mental health more often than those whose families were better-off and whose parents were in employment. This was found in one third of the countries and regions. Parental unemployment contributed to inequalities reaching as high as 13 percentage points in Lithuania. More non-native than native adolescents reported negative pandemic impacts on their mental health in one third of countries and regions. The largest difference (8 percentage points) was seen in Finland. In Estonia, more native than non-native adolescents reported negative impacts.

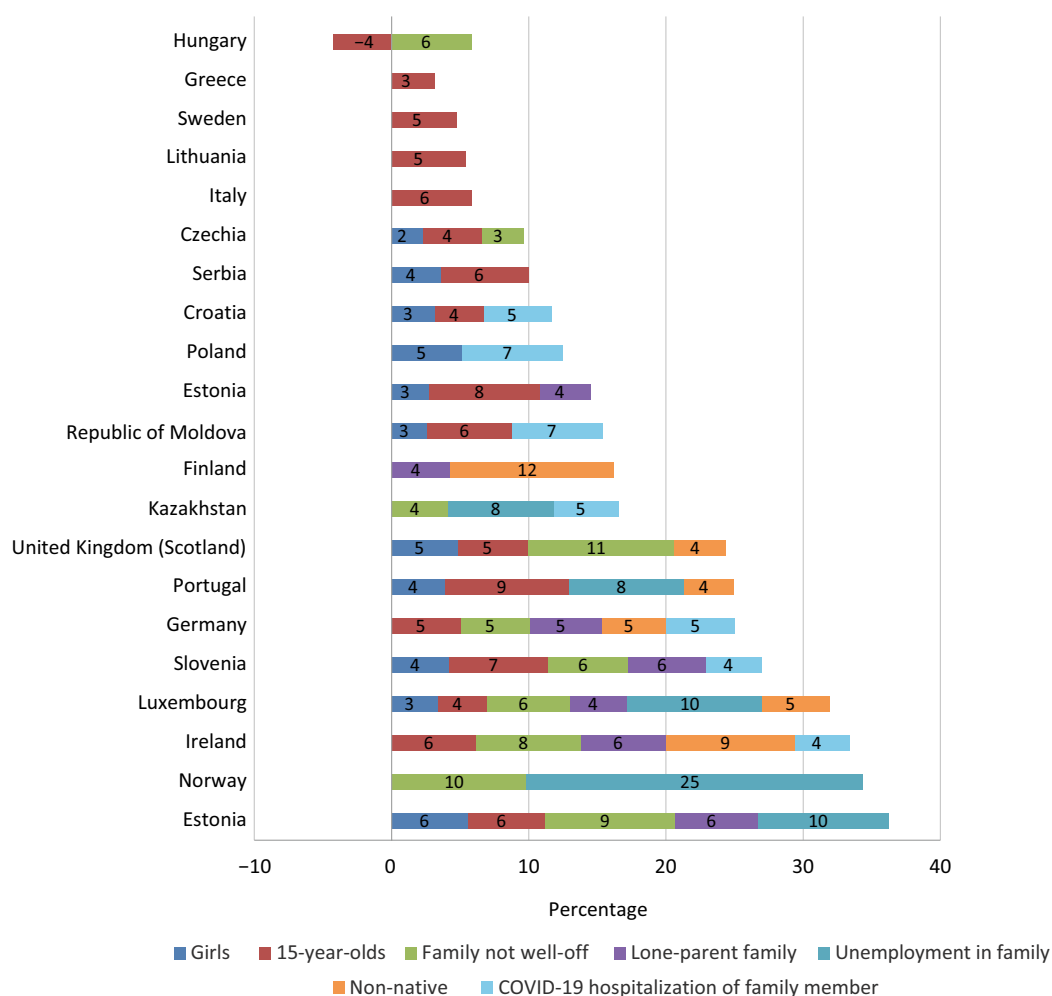
In more than half of the countries and regions, adolescents from single-parent families were more likely than those from two-parent households to report negative impacts. The largest difference (8 percentage points) was recorded in Ireland.

More adolescents who had experienced the hospitalization of a family member due to COVID-19 reported a negative impact on their mental health than those without this experience in two thirds of the countries and regions. The largest difference in impact was seen in Poland, reaching 13 percentage points.

## **Inequalities in the COVID-19 pandemic's impact on adolescents' physical activity**

Thirty per cent of adolescents reported that the COVID-19 pandemic had had a negative impact on their physical activity, with shares ranging from 16% in Finland to 44% in Italy (Fig. 3).

**Fig. 3. Inequalities in COVID-19 pandemic impacts on adolescents' physical activity across risk factors, by country**



Note: Finland, Hungary, Norway and Sweden did not collect data on hospitalization of a family member and Lithuania did not collect data on adolescents' country of birth.

More girls than boys in half of the countries and regions reported negative pandemic impacts on physical activity, with gender differences ranging from 2 percentage points in Czechia to 6 in Spain. In more than two thirds of the countries and regions, a higher number of 15-year-olds reported negative impacts on physical activity than their younger peers, with the largest difference (9 percentage points) being seen in Portugal. In Hungary, more 11- and 13-year-olds than those aged 15 reported negative impacts on physical activity.

Adolescents whose families were not well-off were more likely than their better-off counterparts to report negative impacts on physical activity in nearly half of the countries and regions, with differences ranging from 3 percentage points in Czechia to 11 in United Kingdom (Scotland). Parental unemployment contributed to unequal pandemic impacts on adolescents' physical activity in five countries and regions, but disparities were larger in Norway (reaching 25 percentage points).

Non-native adolescents and those from single-parent families in around one third of the countries and regions were more likely to report negative pandemic impacts on physical activity than their native counterparts and those living in two-parent households. The difference in negative impacts between non-native and native adolescents reached



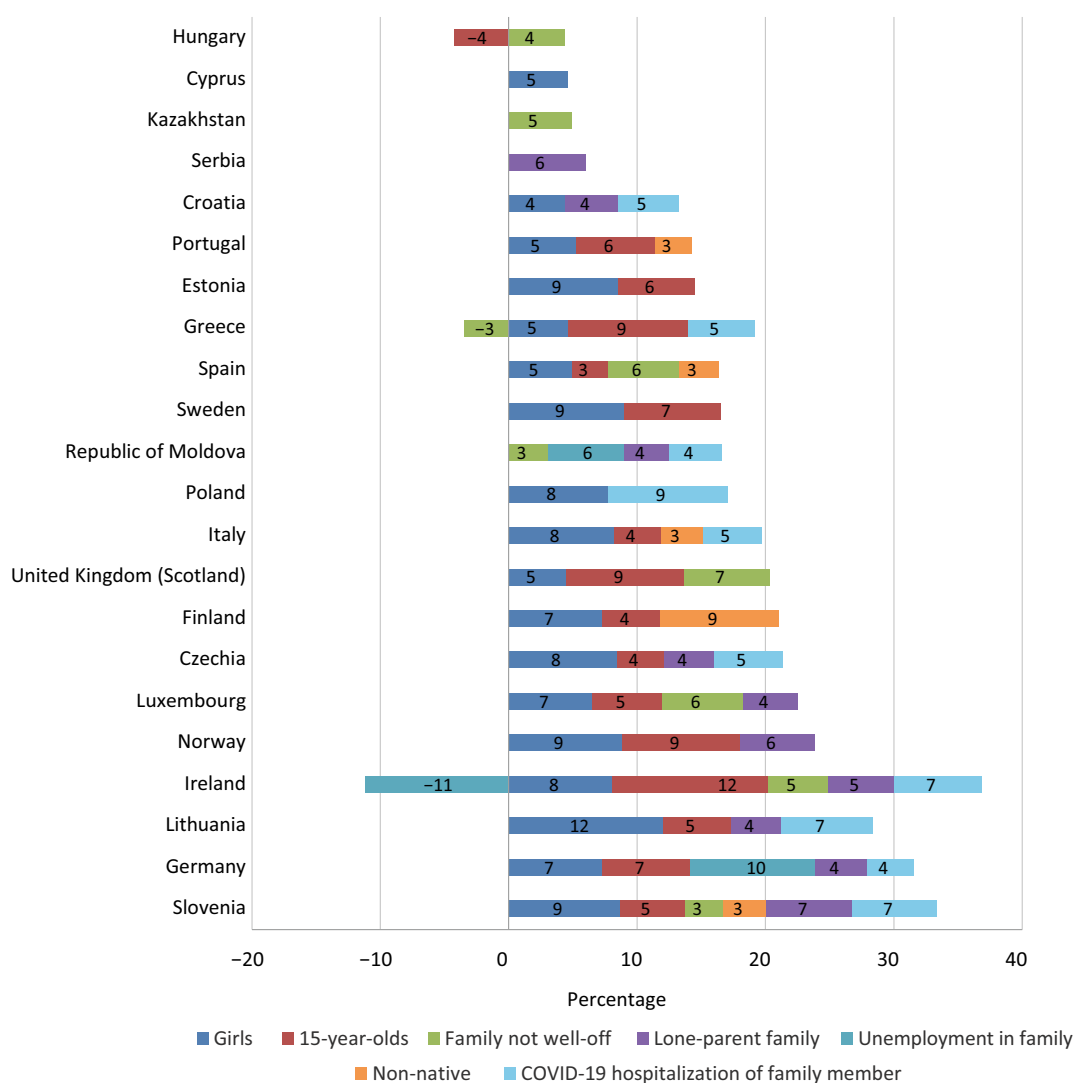
a maximum of 12 percentage points in Finland, while differences between adolescents from single- and two-parent families were 6 percentage points in Ireland, Spain and Switzerland.

Hospitalization of adolescents' family members due to COVID-19 was linked to negative impacts on physical activity in about one third of the countries and regions. The largest difference between adolescents who experienced the hospitalization of a family member and those who did not (8 percentage points) was recorded in Hungary and the Republic of Moldova.

## Inequalities in the COVID-19 pandemic's impact on adolescents' eating and drinking

Twenty per cent of adolescents in the countries and regions reported that the pandemic had had a negative impact on their eating and drinking habits, with percentages ranging from 12% in the Republic of Moldova to 34% in Greece (Fig. 4).

**Fig. 4. Inequalities in COVID-19 pandemic impacts on adolescents' eating and drinking across risk factors, by country**



Note: Finland, Hungary, Norway and Sweden did not collect data on hospitalization of a family member and Lithuania did not collect data on adolescents' country of birth.

In most countries and regions, more girls than boys reported negative pandemic impacts on their eating and drinking habits, with gender differences ranging from 4 percentage points in Croatia to 12 in Lithuania. Older adolescents in more than two thirds were more likely than those who were younger to have experienced negative impacts on their eating and drinking, with the largest difference (12 percentage points) being seen in Ireland. Similar to the findings on physical activity, more 11- and 13-year-olds in Hungary reported negative impacts on their eating and drinking habits than those aged 15.

In about one third of the countries and regions, adolescents whose families were not well-off were more likely to report negative impacts on their eating and drinking habits than their better-off counterparts. This link was reversed in Greece. The largest difference (7 percentage points) was recorded in United Kingdom (Scotland). Parental unemployment was linked to negative pandemic impacts on eating and drinking only in Germany and the Republic of Moldova. Adolescents in Greece and those in Ireland whose parents were unemployed were less likely to find their eating and drinking habits being negatively affected than their peers with employed parents, with the difference reaching 11 percentage points.

A higher proportion of non-native than native adolescents in about one quarter of the countries and regions reported negative pandemic impacts on eating and drinking. The difference was as high as 9 percentage points in Finland.

Family structure was linked to a negative pandemic impact on adolescents' eating and drinking in about half of the countries and regions. The difference in the impact between those from single- and two-parent households reached a maximum of 7 percentage points in Slovenia.

Adolescents who had experienced the hospitalization of a family member due to COVID-19 were more likely to report negative pandemic impacts on their eating and drinking habits in more than half of the countries and regions. The largest difference (9%) was recorded in Poland.

# POLICY ACTIONS

The following issues have emerged as factors that countries and regions should consider in developing policies.

- Understanding the COVID-19 impact on more disadvantaged groups is essential to avoid increases in the social gradient in health.
- Interventions should be tailored to gender and age, especially focusing on promoting resilience against the negative impacts of the COVID-19 pandemic among girls and older adolescents to reduce long-term harmful effects.
- Policy-makers should identify and promote protective factors that contribute to building resilience among the most vulnerable groups to enable them to cope with the medium- and long-term consequences of the pandemic and future crises.
- The role of different risk factors on various health and health-related behaviour outcomes varied widely across the countries and regions, highlighting the need for country-/region-specific interventions.
- Some risk factors contributed to the unequal COVID-19 pandemic impact in some countries and regions but not in others. Differences in country- and region-level policies and measures and cultural factors should be further investigated, as sharing good practices may support decision-making in future crises.
- Social policies targeting average families and adolescents are usually insufficient to meet the needs of families and individuals who are already at risk. In addition to the vulnerable groups highlighted in this report, policy-makers should develop actions for groups who often are underrepresented or even excluded from surveys, such as refugees, adolescents with disabilities and those who have dropped out from school.
- The potential multiplying effects for adolescents with two or more risk factors may put them in extremely vulnerable positions. There is a need to grow understanding of the combinations of risks that tend to occur together and the intersectional effects created when individuals exist simultaneously in different risk groups.

# CONTEXT

COVID-19 and the restrictions imposed to control its spread have strongly affected adolescents' everyday lives and well-being (1). Adolescents tended to report more loneliness, increased worry and less physical activity (2), and showed increased risks of mental health problems (3,4).

The experience of the pandemic, however, was not the same for all young people. The effects differed vastly across countries and regions, probably because of differences in how countries and regions managed the pandemic and its consequences (5). Some adolescents were more vulnerable to experiencing negative impacts and were at greater risk of more severe physical and mental health problems because of their social backgrounds.

Among them (6), girls more often reported negative impacts in different areas of their lives than boys. Coming from a low-income or one-parent family and having a migration background increased the negative effects of the pandemic on adolescents' mental health (7,8), although the picture was not always consistent. Many children and adolescents experienced traumatic events, such as the illness or death of family members due to COVID-19. According to some studies (9,10), knowing someone who was hospitalized due to COVID-19 increased the negative consequences of the pandemic on adolescent well-being. In addition, the COVID-19 pandemic appears to have made pre-existing inequalities in adolescents' health worse (11).

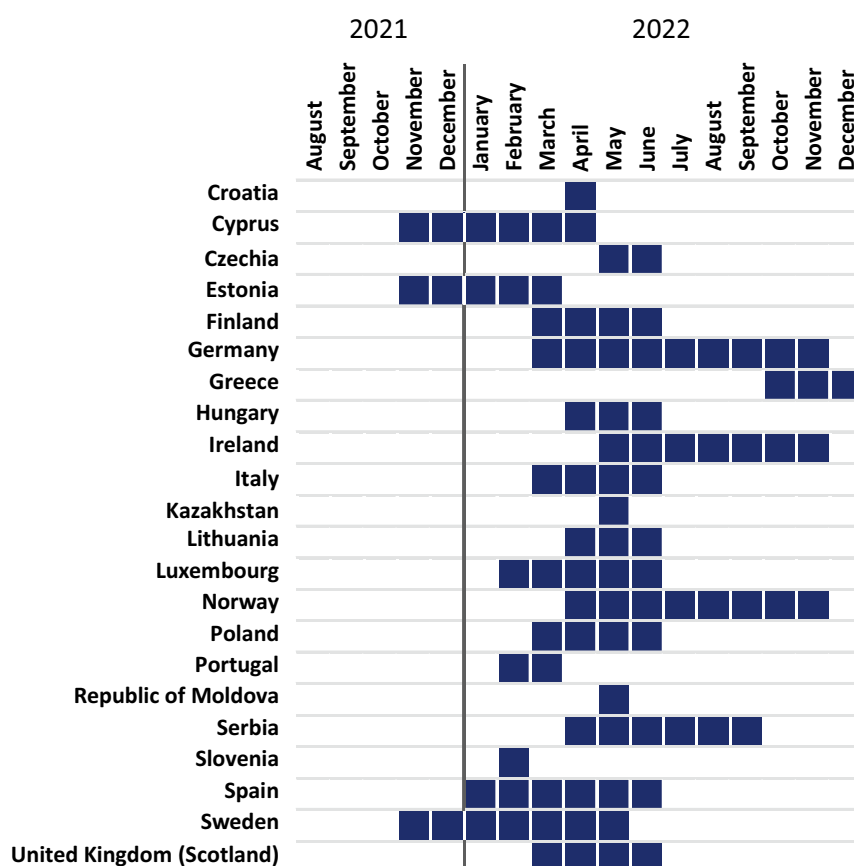
# HBSC SURVEY ROUND 2021/2022

The HBSC study is a large school-based survey carried out every four years in collaboration with the WHO Regional Office for Europe. It tracks, monitors and reports on the self-reported health behaviours, health outcomes and social environments of boys and girls aged 11, 13 and 15 years. The most recent survey (2021/2022) was conducted across 44 countries and regions of the WHO European Region and Canada and included an optional set of questions that measured perceived impacts of the COVID-19 pandemic.

This report investigates the contribution of seven demographic and environmental risk factors (gender, age, family economic status, family structure, parental unemployment, immigration status and having experienced the hospitalization of a family member due to COVID-19) to the negative impact of the COVID-19 pandemic on adolescents' health and health behaviours. It is part of a series of five reports on understanding the impact of the COVID-19 pandemic on young people's health and well-being.

Fig. 5 shows the dates on which the 22 countries conducted the survey.

**Fig. 5. Dates on which the 22 countries conducted the survey**



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