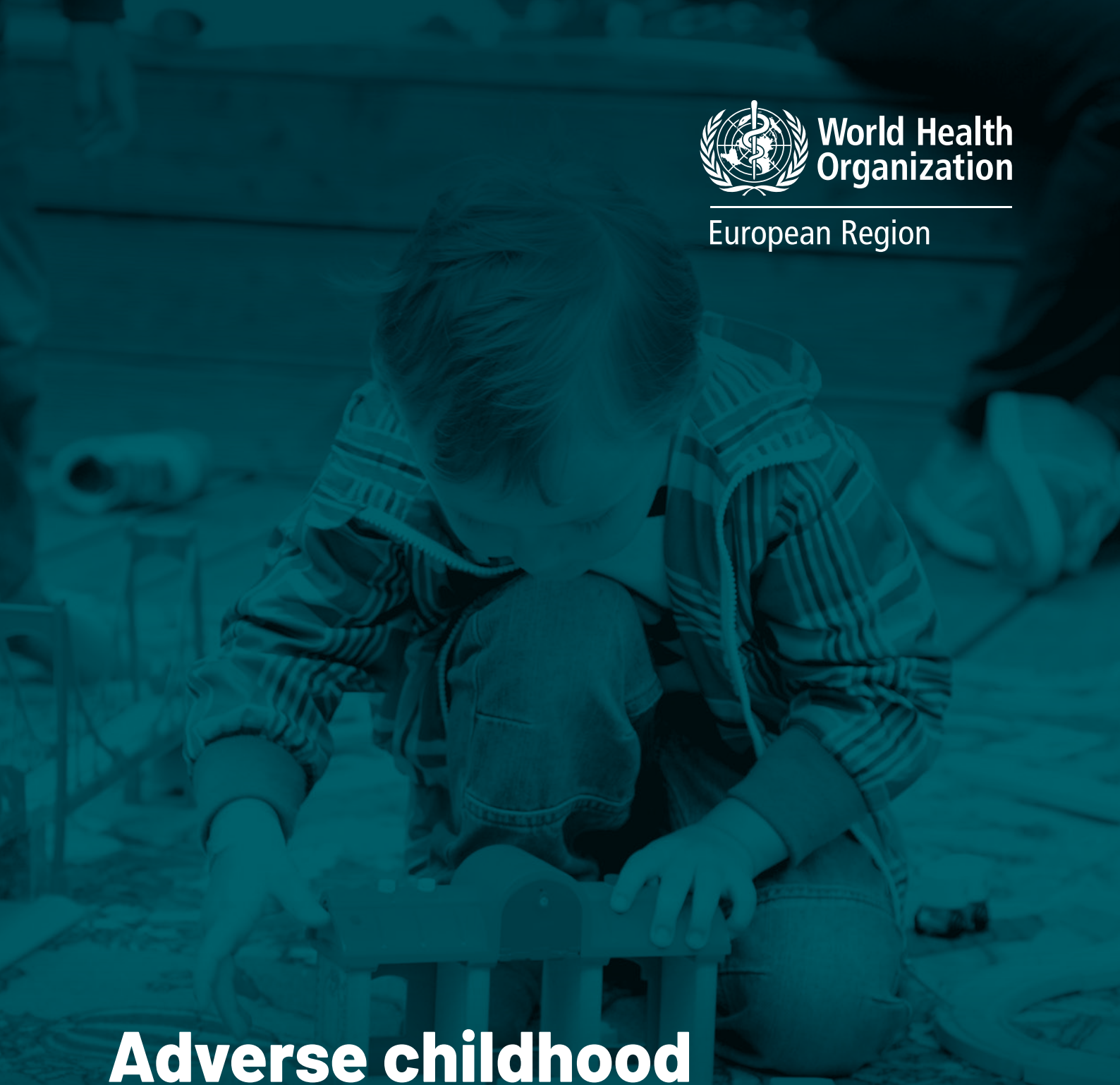


World Health Organization

European Region

Adverse childhood experiences in the European Union, Iceland and Norway: characteristics, consequences and costs

Funded by the European Union

Abstract

This report presents findings from the first harmonized multi-country survey of adverse childhood experiences (ACEs) among young adults (18–30) across the EU, Iceland and Norway, involving 26 741 respondents. More than two-thirds reported at least one ACE, with higher exposure linked to poorer mental and physical health, lower educational attainment and income, greater involvement in violence, and weaker social trust. ACEs were estimated to cause substantial losses in healthy life-years, while childhood resilience—particularly supportive adult relationships—mitigated these effects. The report calls for coordinated, trauma-informed, multisectoral policy action to prevent ACEs, build resilience, and break intergenerational cycles of adversity.

Keywords: ADVERSITY, CHILDHOOD, MENTAL HEALTH, WELL-BEING, YOUTH

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World Health Organization

European Region

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Indicate the change or changes:

1. On page 15, in Table 1, column 4, row 7, “69.7” was replaced with “39.7”.

This correction was incorporated into the electronic file on 09 October 2026.

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Foreword

Adverse childhood experiences (ACEs) – including abuse, neglect, household dysfunction and exposure to violence – remain among the most significant and most preventable threats to the health, mental health and well-being of young people in the WHO European Region, with impacts felt across the life course. The evidence to date has been consistent: children who experience multiple ACEs face substantially higher risks of poor mental health, social and economic exclusion, and negative social and behavioural outcomes as they grow into adulthood. The impacts are felt by individuals but also reverberate through families and communities, and across generations. Measuring the impact of ACEs and reducing the harms they cause is critical to tackle the growing burden of mental health conditions in the Region comprehensively, and to build resilient, healthy and prosperous future generations.

However, this aim has been hampered by a lack of comparable data on ACEs and their impacts at a scale to drive regional advocacy and build coordinated policy. By gathering data from different countries using the same methodology, this report provides a picture of how ACEs affect health, education, criminal justice and prosperity across Europe. It draws on the findings of the first harmonized multi-country ACE survey – in which young adults retrospectively reported on the adverse experiences they had faced in childhood – across the 27 European Union (EU) Member States, Iceland and Norway, made possible through funding from the EU. It does not aim to measure the levels of ACEs in each country but is intended to fill an evidence gap by providing critical insights into the problem and the associated costs, as well as a clear pathway for action.

The findings are stark. ACEs are too common: more than two-thirds of young adults surveyed reported at least one type of ACE, and more than one in five had experienced four or more. The greater the number of ACEs reported, the greater the impact experienced by young adults across a range of domains where they should be thriving – from mental and physical health, education and workforce participation, financial security, and exposure to harms such as bullying and violence. The impacts are felt hardest by those from the poorest backgrounds, and the costs to healthy life – even at this early life stage – are measurable and substantial.

Addressing childhood adversity and mitigating the impact of ACEs requires a coordinated and multisectoral approach, acknowledging the multiple systems – from education to social protection, justice, housing and finance – in which ACEs originate, and through which they can be prevented. The health sector has a pivotal role to play but, as for many of the determinants of mental health and well-being across the life course, it cannot do this alone. The WHO Regional Office for Europe is actively supporting Member States to adopt a "mental health in all policies" approach to comprehensively tackle the drivers of poor mental health and build community resilience – supported under a contribution agreement with the European Commission on "Addressing mental health challenges in the EU, Iceland and Norway". This report provides confirmation of the need to expand this approach and to continue to build capacity for effective implementation.

Resilient, prosperous societies are not possible without safe and nurturing childhoods. Preventing ACEs, and mitigating their effects where prevention comes too late, is not simply a health priority: it is the foundation on which the security and prosperity of future generations is built. With this report we now have a clear understanding of why we must act, and the confidence that action will deliver returns that reach across sectors and generations.

Natasha Azzopardi-Muscat
Director of Health Systems
WHO Regional Office for Europe



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Abbreviations

ACE	Adverse childhood experience
ACE-IQ	Adverse Childhood Experiences International Questionnaire
EQ-5D-5L	EuroQol five-dimensional, five-level questionnaire (on health-related quality of life)
EU	European Union
NEET	Not in education, employment or training
QALY	Quality-adjusted life-year
QR	Qualifying response

Executive summary

Adverse childhood experiences (ACEs) are globally recognized as key determinants of mental and physical health, and of social and economic outcomes across the life course. While there is no single agreed definition, ACEs are potentially traumatic events that occur in childhood (ages 0–17 years) and include some of the most severe experiences children may face, such as abuse, neglect, and household and community dysfunction. Exposure to ACEs – particularly cumulative exposure – is associated with immediate harms in childhood. However, ACEs are also linked to harms to health, productivity and community cohesion across the life course. As a result, ACEs can carry substantial societal costs not only to the health sector but also to the educational, criminal justice and other sectors.

ACEs are common: an estimated 319 million adults in the WHO European Region (around 40% of the population) have experienced at least one ACE. Preventing ACEs and early mitigation of the impact of ACE exposure is critical to improving population health and well-being, and to building resilient communities and economies. Since 2010, the WHO Regional Office for Europe has supported ACE surveys in several countries in the Region; however, there remains a lack of harmonized, comparable data on burden, health impacts, quality of life and resilience. While no single survey can comprehensively measure the full range of ACEs and their multiple impacts across Europe, the application of standardized methodologies across countries provides a powerful means of understanding how ACEs shape health, educational attainment, criminal justice involvement and prosperity. Consequently, under the contribution agreement with the European Commission "Addressing mental health challenges in the EU, Iceland and Norway", the Regional Office worked with Liverpool John Moores University to launch the first harmonized multi-country ACE survey of young adults across the 27 European Union (EU) Member States, Iceland and Norway in November 2025.

This report:

- describes the characteristics of ACEs experienced among young adults (aged 18–30 years) across the EU, Iceland and Norway;
- examines the relationships between ACEs, mental and physical health, and other social and behavioural outcomes in young adults;
- quantifies impacts using a standardized measure – quality-adjusted life-years – and estimates financial values associated with different levels of ACE exposure; and
- provides evidence-informed policy recommendations for ACE prevention and response.

Study overview

The study is based on a survey of 26 741 young adults aged 18–30 years, recruited through national panels, with data collected between November 2025 and January 2026. Childhood exposure to nine ACEs (physical abuse, emotional abuse, sexual abuse, physical neglect, household substance use, household mental illness, household incarceration, parental separation or death, and witnessing domestic violence in the household) was measured using WHO's Adverse Childhood Experiences International Questionnaire (ACE-IQ). Other measures included health, social and economic outcomes, and factors associated with childhood resilience. The study examined the characteristics of ACE exposure, as well as the associations between ACE exposure, mental and physical health, and other social and behavioural outcomes among the young adult respondents. It also measured the impact on health-related quality of life and used this to estimate the economic cost of ACEs.

All results are based on national samples adjusted for age, sex and childhood deprivation at the country level. Despite adjustments, the survey should not be assumed to have collected samples representative of national ACE levels. To provide estimates for the combined 29 participating countries, ACE measures from each country were weighted according to population size and summed.

Key findings

More than two thirds of young adults surveyed reported experiencing at least one type of ACE, and more than one in five had experienced four or more ACEs.

- The findings suggest high levels of childhood adversity among respondents. The percentage of young adults who reported each type of ACE ranged from 11.5% for living with a household member who was sent to jail or prison to 39.2% for experiencing parental separation or death of a parent/guardian. These figures are specifically related to those aged 18–30 years and participating in panels; they are not comparable to other ACE surveys covering different age ranges and using different methodologies.
- Women, people with ethnic minority or migrant status, and those who grew up in deprived environments were more likely to report exposure to ACEs.

The more ACEs young people reported enduring, the greater their risk of poor health, social and behavioural outcomes in young adulthood.

- Each additional ACE reported was associated with progressively worse outcomes in young adulthood across all outcomes measured.

Individuals who reported exposure to more ACEs reported a greater need for mental health support, but poorer access to care.

- Over three quarters (76.3%) of young adults reporting four or more ACEs felt they needed professional mental health support in the last 12 months compared to 36.7% of those reporting no ACEs.
- Among those who felt they needed mental health support, young adults reporting ACEs were significantly more likely to attempt to access it (74.2% among those with four or more ACEs compared to 54.5% among those with no ACEs).
- Young adults reporting more ACEs were also more likely to report that they had not received the mental health support they felt they needed (39.8% among those with four or more ACEs compared to 27.3% among those with no ACEs).

Individuals reporting higher numbers of ACEs were more likely to have lower levels of educational and household income as young adults.

- Higher exposure to ACEs was associated with higher rates of not completing university (70.9% among those with four or more ACEs compared to 61.0% among those with no ACEs), and a higher likelihood of being not in education, employment or training (15.1% among those with four or more ACEs compared to 9.6% among those with no ACEs).
- Higher exposure to ACEs was associated with low household income (44.5% among those with four or more ACEs compared to 35.0% among those with no ACEs) and greater difficulty in making ends meet (41.9% among those with four or more ACEs compared to 26.1% among those with no ACEs).

Those reporting ACEs were far more likely to be perpetrators or victims of physical and/or verbal violence in young adulthood.

- Rates of violent behaviour and experiences of violence in adulthood increased with ACE exposure: young adults reporting four or more ACEs were more than six times more likely to experience physical violence (36.9% among those with four or more ACEs compared to 6.0% among those with no ACEs) and over 10 times more likely to perpetrate physical violence (26.8% among those with four or more ACEs compared to 2.4% among those with no ACEs) than those reporting no ACEs.

ACEs were associated with lower levels of trust in others and weaker feelings of community connection.

- Individuals reporting higher ACE exposure were more likely to believe that people cannot be trusted, and to report low community connectedness.

ACE exposure increased the risk of exposure to other childhood traumas.

- Compared to those reporting no ACEs, young adults reporting four or more ACEs were around eight times more likely to be exposed to community violence, around nine times more likely to be exposed to collective violence, around five times more likely to experience bullying, and around eight times more likely to experience cyberbullying.
- Exposure to harmful online content in childhood also increased with ACE count: those reporting four or more ACEs were approximately three times more likely to be exposed than those reporting no ACEs.

The quality-adjusted life-years methodology allows levels of self-reported ill health to be described in terms of years or days of healthy life lost. The impact of ACEs translated into the equivalent of substantial losses in years of full health.

- Young adults reporting four or more ACEs were estimated to lose the equivalent of nearly two months of healthy life per year (51 days), equating to the equivalent of almost two years (1.82 years) of full health lost among young adults between the ages of 18 and 30 years.

Childhood resilience can protect mental health.

- Greater childhood resilience (here from sources of adult support) was associated with better mental health outcomes: individuals who reported greater exposure to supportive adults during childhood were less likely to need professional mental health support in young adulthood.
- Although mental health difficulties increased with ACE exposure, higher resilience consistently reduced this risk across all ACE groups, highlighting the protective role of supportive adult relationships in childhood in reducing the long-term impacts of adversity.

Policy responses

ACEs represent a multisectoral challenge, with implications across health systems, social care, education, criminal justice, employment and economic productivity. A range of evidence-based policy and other intervention measures have been identified that can prevent ACEs, build resilience, and develop trauma-informed policy responses and services so that those affected can access appropriate support throughout the life course.

Primary prevention efforts should tackle the root causes of childhood adversity. This includes supporting children, parents, caregivers and families, and addressing the conditions within communities and society that heighten the risk of ACEs – including poverty, social exclusion and community violence. As exposure to ACEs is not limited to the most disadvantaged children but increases across socioeconomic groups, preventing ACEs requires both targeted support for those with the greatest needs and broader policies that improve the conditions in which all children grow up. High-quality early years interventions are a fundamental component of primary prevention.

Building resilience can help individuals better withstand and recover from adversity when occurrence of ACEs cannot be eliminated. Resilience-building strategies work best when embedded in cross-sectoral policy and practice, including approaches and strategies to enhance supportive relationships, promote life skills and education for coping, and empower communities and cultural strengths.

Developing public services in a trauma-informed way (to ensure that they understand and are responsive to the impacts of childhood trauma, including ACEs) is crucial so that workers can recognize and sensitively address the needs of individuals with ACE histories. Many young people will inevitably still experience ACEs, often with few or no resilience assets to moderate the impacts on their health and well-being. Trauma-informed public services are an essential element in providing young people with appropriate support, and often in breaking intergenerational ACE cycles where those experiencing ACEs are more likely to have children also exposed to ACEs.

Conclusions

This first multi-country ACE study across the EU, Iceland and Norway demonstrates that childhood adversity is strongly linked to poorer mental health, well-being, education, employment, income, safety and social connectedness in young adulthood. For all measures of harm, risks increased with ACE exposure. However, positive outcomes remained possible even among those exposed to high levels of ACEs. This highlights that while ACEs may increase the risks of poor health and social outcomes across the life course, other factors such as experiencing sources of resilience may prevent or reduce many of the harmful consequences of ACEs.

The findings underline the need for coordinated action across the life course to prevent ACEs, reduce inequalities, strengthen supportive environments and embed trauma-informed approaches across services. Together, these actions will reduce child abuse and other forms of childhood trauma, and will improve health, social and economic outcomes across the life course. Critically, these measures should also help to break intergenerational cycles of childhood adversity that otherwise result in ACEs passing from one generation to the next. Given the significant human, social and economic costs associated with not addressing ACEs – including losses in healthy life-years and productivity – investment in the prevention of and response to ACEs is likely to yield substantial health and economic benefits. It is the responsibility of individual countries to establish the prevalence and trends of ACEs within their own populations. However, the findings of this study suggest that all countries stand to benefit from improved population health, greater equity and enhanced social development through concerted efforts to prevent ACEs and break intergenerational cycles of adversity.



1. Introduction

Since the first study of adverse childhood experiences (ACEs) *(1)* was published in 1998 *(2)*, a growing body of international research has identified ACEs as key influences on health, criminal justice, and social and economic issues across the life course *(3–5)*. Debate continues over the extent of these relationships and the confounding factors that affect and explain them. However, findings across a wide range of studies covering multiple cultures now support the view that childhood adversity and trauma are critical factors affecting health, antisocial behaviour and prosperity in adults *(6)*. ACEs refer to some of the most severe sources of trauma children face while growing up, including abuse, neglect, and household and community dysfunction (Box 1). A wealth of evidence shows that ACEs are common across populations, and have both immediate (for example, injury) and long-term (for example, mental ill health and chronic disease) impacts, including for future generations *(1)*. In the past decade, emerging evidence has identified both the widespread prevalence and cumulative consequences of ACE exposure across many of the 53 countries in the WHO European Region *(7)*, with estimates suggesting that around 40% of adults have suffered at least one ACE, and 20% more than one *(1)*.

BOX 1. Defining ACEs

While there is no standard agreed definition, ACEs generally refer to some of the more severe sources of trauma children may face while growing up. ACE studies have typically focused on:

- forms of child maltreatment and violence including physical, emotional and sexual abuse, and neglect; and
- household dysfunction, such as a household member being treated violently, suffering from mental health issues, drug and/or alcohol misuse, or having been incarcerated.

Increasingly, other forms of childhood trauma – such as bullying, community violence and online abuse, including technology-facilitated gender-based violence – are also being considered alongside other ACEs.

Since they are an important determinant of a range of health and well-being outcomes across the life course, understanding, preventing and responding to ACEs is critical for advancing WHO's strategic priorities, including the Second European Programme of Work, 2026–2030: United Action for Better Health *(8)*. Addressing ACEs is also crucial to objectives of aligned strategies and initiatives, including "A healthy start for a healthy life", the WHO/United Nations Children's Fund (UNICEF) Strategy for Child and Adolescent Health and Well-being in the WHO European Region 2026–2030, which recognizes that safe, nurturing and supportive environments are essential for healthy development and well-being throughout childhood and adolescence *(9),* the WHO Regional Office for Europe Special Initiative on Violence against Women and Girls *(10),* and the report Policy action for health equity from early years to later life: the second WHO European Health Equity Status Report (in press).

A core component of the work undertaken between the WHO Regional Office for Europe and the European Commission, under the "A comprehensive approach to mental health" initiative launched by the Commission in 2023 *(11)*, aims to strengthen action on mental health across the EU. Objectives include integrating mental health into all relevant EU policies, and maximizing the value of these policies at the national and local levels. The Commission's initiative included entering into the contribution agreement "Addressing mental health challenges in the EU, Iceland and Norway" with the WHO Regional Office for Europe to build mental health policy and systems capacity across the Region. Part of this work is assessing the impact of ACEs to inform policy-making and address vulnerabilities from a prevention and resilience-building perspective.

Since 2010, the WHO Regional Office for Europe has supported ACE surveys in several countries using consistent tools *(6,7)* – such as WHO's ACE-IQ *(12)* – and several countries have implemented ACE studies at subnational or national levels *(1)*. These have helped to improve understanding, and have informed policy and practice on preventing and responding to ACEs *(13)*. However, lack of consistent and comparable data across countries – and limited evidence on links to health, quality of life and resilience – restrict integrated regional perspectives and effective policy development. It is vital to strengthen the evidence base to support regional and country-level priorities on prevention, early intervention and reducing inequalities *(14–16)*, recognizing that many health and mental health issues originate in childhood adversity *(15,17)*.

In November 2025, under the contribution agreement with the European Commission "Addressing mental health challenges in the EU, Iceland and Norway", the Regional Office worked with Liverpool John Moores University to launch the first harmonized multi-country ACE survey of young adults across the EU, Iceland and Norway. The study aimed to:

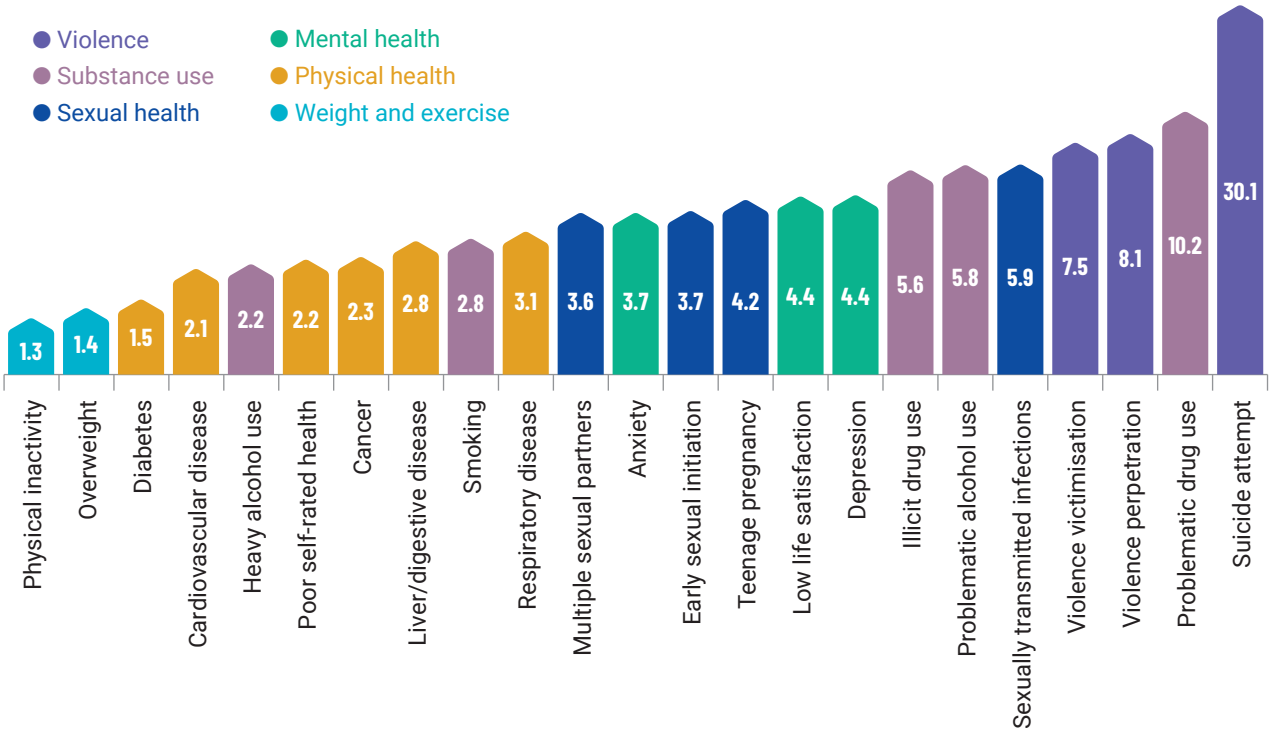
- analyse the characteristics of ACEs experienced among young adults (18–30 years) across the EU, Iceland and Norway;
- examine the relationships between ACEs, mental and physical health, and other social and behavioural outcomes in young adults;
- quantify the impacts of ACEs on levels of healthy life experience using a standardized measure – quality-adjusted life-years (QALYs) – and estimate financial values associated with different levels of ACE exposure; and
- provide evidence-informed policy recommendations for ACE prevention and response.

The importance of ACEs

Across the 53 countries in the WHO European Region, an estimated 319 million people have suffered at least one ACE, and 142 million have suffered two or more *(7)*. Exposure to chronic stress, including ACEs, in early childhood disrupts brain development, impairs emotional regulation and alters physiological stress response systems *(18)*. Critically, evidence shows that exposure to ACEs – particularly as the number of ACEs experienced accumulates – is strongly associated with both immediate harms in childhood and ongoing harms across the life course *(1)*. While not all people exposed are affected by ACEs, immediate harms can include injury, and ACEs show a graded association with issues affecting child development; these include poor childhood health, school absenteeism and low educational achievement, and engagement in antisocial behaviours and violence *(19–21)*.

Evidence also shows a dose–response relationship with leading causes of adult morbidity and mortality. These include mental illness, adoption of health-harming behaviours (such as harmful alcohol and/or drug use), and early onset of chronic diseases such as cardiovascular disease, type 2 diabetes and cancer *(1,7,22,23)* (Fig. 1). In addition, research consistently suggests that exposure to ACEs can increase risks of poverty and unemployment *(24–27)*, experience of being a victim or perpetrator of violence, and exposure to other criminal activity in adulthood *(3,5)*. Across the WHO European Region, estimates suggest that ACEs are responsible for 15–45% of illicit drug use, 12–38% of depression, 5–18% of diabetes and 15–54% of interpersonal violence *(28)*.

Fig. 1. Increased likelihood of poor health outcomes among adults who have suffered four or more ACEs (compared to no ACEs)



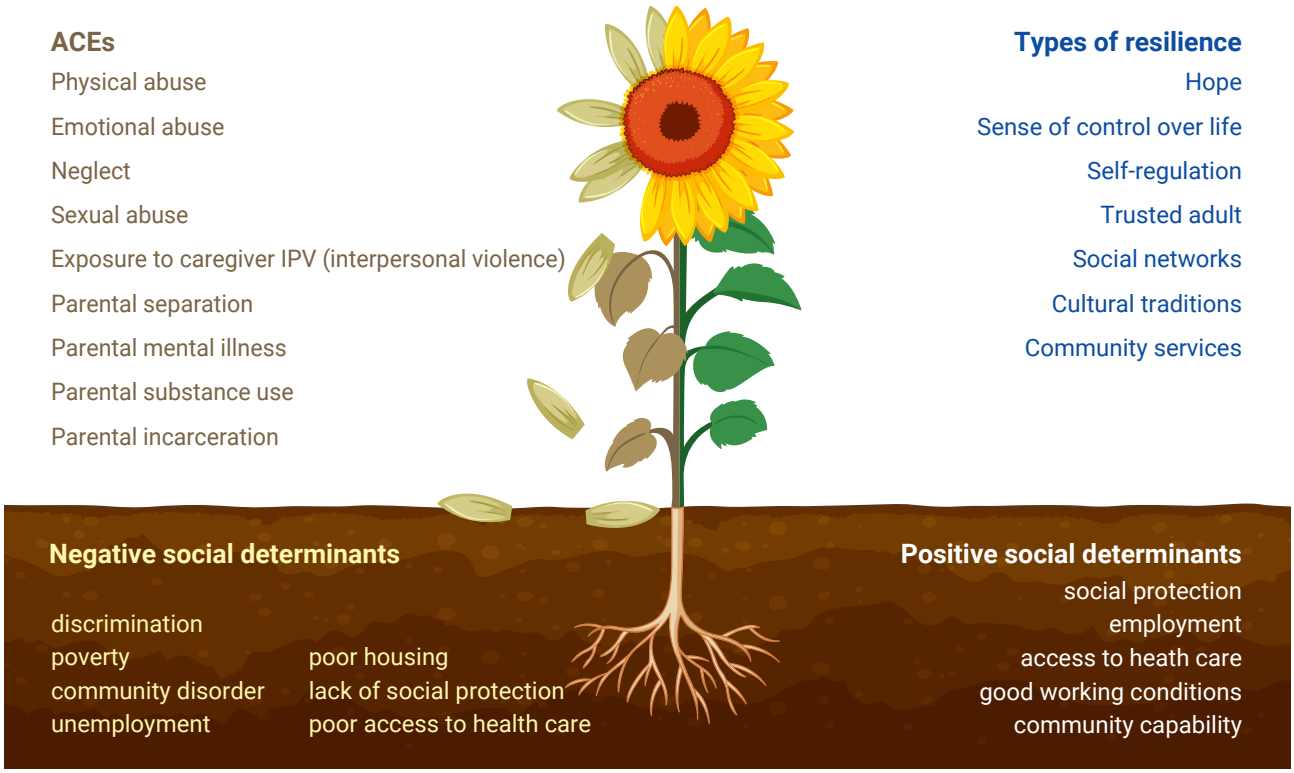
Source: Adapted from *(3)*. © 2023 Public Health Wales NHS Trust. Reproduced under the terms of the Open Government Licence v3.0 (https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/).

It is important to recognize that although empirical evidence on the impacts of ACEs continues to accumulate globally, methodological and other factors relating to ACE studies still require further investigation. ACE studies (including the study presented here) typically ask adults retrospectively about their experiences as children, creating the potential for poor recollection. Further, ACEs and the associated outcomes in adulthood are frequently self-reported. Increasingly, however, such self-reported outcomes are supported by clinical and other biological measures consistent with long-term harms arising from ACE exposure *(1)*.

The broad-ranging impacts of ACEs place large burdens on society, and the attributed costs of ACEs across the life course are substantial, with estimates of US$ 581 billion (2019 costs) in the WHO European Region alone *(7)*. Critically, without adequate support, childhood adversity can be reproduced across generations through continuing exposure to poverty, violence, poor mental health and other adverse conditions *(29)*. Further, children of individuals who experienced ACEs are at greater risk of developmental, mental and physical health problems (such as low birthweight or asthma), emotional and behavioural difficulties, and adopting risky behaviours (such as smoking) *(30–33)*.

A range of approaches can prevent or reduce the impacts of ACEs, and interrupt intergenerational pathways to improve outcomes for both current and future generations. Strategies can aim to prevent ACEs from occurring (employing interventions such as parenting programmes and school-based programmes that develop life skills) *(1,13)*. Developing resilience in childhood (and adulthood) is also crucial for reducing the impact of ACEs and equipping children with the support and skills to cope with future challenges throughout the life course. A range of individual, family, community and system factors can help to build resilience (Fig. 2). Emergent evidence across countries in the WHO European Region shows that the availability of resilience assets during childhood (for example, the support of a trusted adult) can reduce the life-course impacts of ACEs *(5,34)*.

Fig. 2. ACEs and resilience



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The importance of focusing on mental health

Mental health represents a growing public health challenge across the WHO European Region, and evidence shows a sustained increase in the burden over recent decades. Mental disorders affect roughly one in six people in the Region, with prevalence rising by an estimated 21% in the past two decades, indicating a worsening trend despite policy efforts *(35)*. This burden is particularly pronounced among younger populations: more than 22% of those aged 15–24 years have a mental disorder, and suicide is now the leading cause of death among young people aged 15–29 years *(36)*.

Further, consequences extend beyond morbidity to wider population health issues. Projections suggest that mental disorders could reduce healthy life expectancy across the WHO European Region by around 2.5 years during 2025–2050. Economic impact assessments suggest that mental illness may cost the Region around €76 billion annually in health-care costs, as well as contributing to reduced labour participation and productivity, potentially lowering gross domestic product by an average of 1.7% during 2025–2050 *(35)*. A growing body of evidence suggests that ACEs may be a key underlying driver of this burden, as they are strongly associated with increased risks of mental illness, substance use and chronic disease across the life course *(3)*.

The importance of focusing on young adults

Young adulthood represents a critical developmental stage, characterized by entry into the labour market, increasing independence, and the formation of intimate and family relationships. Exposure to ACEs can disrupt these key transitions, causing difficulties in establishing stable relationships, and leading to unstable employment and long-term impacts on health and other systems *(24,25,37–39)*.

Exposure to ACEs increases risks of both victimization and perpetration of intimate partner violence, with risks emerging as early as adolescence *(38,39)*. This period also often coincides with the transition to parenthood;

individuals with a history of ACEs are more likely to expose their own children to adversity, contributing to intergenerational cycles of harm *(29,37)*. In addition, ACEs are linked to other forms of interpersonal violence, including youth violence and antisocial behaviour, and involvement with the justice system *(3,5,19,20)*. When combined with heightened risks of poverty and social exclusion *(24–27)*, these factors can contribute to broader social instability, including violent forms of protest participation *(40)*. Importantly, across the WHO European Region, interpersonal violence remains a leading cause of death among adolescents and young adults aged 15–29 years *(41)*.

Beyond these social and behavioural impacts, young adults with high ACE scores are also at increased risk of developing early-onset chronic diseases *(22)*. Further, as young adults form a central part of the labour force, the long-term consequences of ACEs – particularly reduced health – can also constrain workforce participation and economic output *(24,25)*. Collectively, these outcomes perpetuate inequalities, and place sustained pressure on health and other systems – as well as on individuals, families and communities. Addressing ACEs is therefore essential not only for improving population health but also for enhancing economic resilience and supporting sustainable development.

While this report examines outcomes among young adults, ACEs are first and foremost a child health and development issue. Many consequences emerge during childhood itself, affecting physical growth, emotional well-being, learning, social relationships and healthy development. Understanding their impact in young adulthood provides important insights into the lasting effects of childhood adversity, but prevention and early intervention must begin much earlier in the life course.

Relevance for global and regional policy

At the global and regional levels, a range of policy frameworks already address individual components of ACEs – particularly child maltreatment. The United Nations Sustainable Development Goals, for example, include a specific target to end all forms of violence against children (Target 16.2), alongside broader goals addressing key ACE-related risk factors such as poverty, household dysfunction and mental ill health *(42,1)*.

Across the WHO European Region, these priorities are reflected in policies aligned with the 2030 Agenda for Sustainable Development, such as the WHO/Europe Special Initiative on Violence against Women and Girls *(10)*. EU frameworks increasingly recognize mental health as a cross-cutting public health issue shaped by early-life conditions and wider social determinants *(15)*. Initiatives such as the EU Strategy on the Rights of the Child and the European Child Guarantee *(14)* aim to tackle structural drivers of ACEs – including poverty, social exclusion and exposure to violence – while seeking to break intergenerational cycles of disadvantage. These policies emphasize child protection, equitable access to services, opportunities for participation and early-life well-being — important components of ACE prevention as well as broader health equity policy.

In parallel, many countries in the Region have shown growing commitment to protecting children and preventing ACEs, with increased coordination, and development of national action plans focused on child maltreatment prevention and protection *(16)*. Many countries have adopted a life-course approach, recognizing that adult health outcomes are strongly influenced by experiences earlier in life. These approaches should provide the foundation for improving population health, reducing inequalities and promoting sustainable development.

Despite much progress, however, different government departments (such as the health, education and criminal justice departments) often deal with different aspects of ACE prevention and consequences instead of recognizing the connections between different ACEs and the impacts they have cumulatively on individuals, communities, costs and services. An integrated approach to address this interconnectedness requires population-level evidence on the cumulative impact of ACEs and the harms associated with them. Strengthening data collection on all ACEs is therefore essential for informing more effective prevention and response strategies, supporting joined up policy development, and implementation and monitoring progress at national and European levels.



2. Methods

Survey sample

Individuals were recruited from panel survey providers using a mix of online and telephone recruitment (see Annex 1 for the recruitment method used in each country), coordinated through an international polling market research company – Ipsos in Switzerland. Data collection ran from November 2025 to January 2026. Inclusion criteria were being aged 18–30 years, resident in the country, and able to understand at least one of the local languages the survey was available in for the sample country (see Annex 1 for country languages). Samples were selected to have approximately equal numbers of males and females, and of individuals aged 18–24 and 25–30 years in each country. Sampling within each country was also stratified by country regions to reflect within-country population distributions (see Annex 1 for country regions). The final sample size for the majority of countries was around 1000. However, due to feasibility of recruitment, Cyprus, Iceland, Ireland, Luxembourg and Malta had sample sizes of around 500 (see Annex 1 for sample sizes in each country). It is impractical for any one survey to capture the prevalence of ACEs and all their far-reaching consequences across an area as large as the EU, Iceland and Norway. However, the use of consistent methodologies across countries allows a coherent picture to emerge of how childhood adversity influences health, education, criminal justice outcomes and economic prosperity across the 29 countries surveyed. The survey informs this coherent picture but is not intended to describe the prevalence of ACEs in any country or across Europe. The total study sample size was 26 741.

Survey tool

The survey questionnaire was developed by the Liverpool John Moores University study team in collaboration with the WHO Regional Office for Europe and included validated tools where possible. Questionnaire items (Q1 - 55) included in the study report can be found in Annex 2. The questionnaire categories are set out in the following subsections.

ACEs

Nine ACEs (physical abuse, emotional abuse, sexual abuse,[1] physical neglect, household substance use, household mental illness, household incarceration, parental separation or death, and witnessing domestic violence in the household) were measured using items (Annex 2, Q1–Q19) from the ACE-IQ *(12)*. The frequency scoring method for classification of any specific ACE was adopted to quantify ACE exposure. This method classifies only a certain frequency of exposure (for example, many times) as a qualifying response (QR) for ACE exposure for some questions (see Annex 2 for QRs for each question). In line with other ACE studies, the number of ACEs each individual had been exposed to during their childhood was then calculated and categorized as no ACEs, one ACE, two to three ACEs, or four or more ACEs. Only individuals who had responded to over five ACE items in the survey were included in the ACE count.

Sociodemographic factors

Sociodemographic factors measured included sex, age (18–24, 25–30 years), and ethnic minority or migrant status (Annex 2, Q20–Q22). Childhood deprivation was measured using three items asking individuals to rate their housing quality, quality of neighbourhood and level of availability of household funds at age 14 years (Annex 2, Q23), ranked into five national tiers. Because smaller numbers of respondents reported the wealthiest and poorest quintiles, individuals were coded as having poorer (lower two quintiles), medium (middle quintile) or more affluent (upper two quintiles) childhoods. For the purposes of the analysis, modal values across the three measures were assigned as an overall measure of childhood deprivation for each respondent. Where no mode was present, the childhood deprivation category was based on household funds.[2]

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1 Question wording was altered following the pilot to match other ACE surveys more closely.

2 Where data on household funds were unavailable, the childhood deprivation category was based on housing quality or neighbourhood quality if those data were also unavailable.

Mental health

Mental health was measured by perceived need for professional mental health support in the past 12 months (Annex 2, Q24), whether they tried to get this support, and whether they received the support they needed (Annex 2, Q25).

Health-related quality of life

Health-related quality of life was measured using the EuroQol five-dimensional, five-level questionnaire on health-related quality of life (EQ-5D-5L) descriptive system digital tool *(43)*. The tool uses five dimensions: mobility, self-care, usual activities, pain/discomfort and anxiety/depression (see Annex 2, Q26–Q30). Individuals are asked to score each dimension on a five-point categorical scale (for example, from no problems to extreme problems).

First, response options were dichotomized into a binary set of variables that classified individuals as having no problems or any problems (slight, moderate, severe or extreme) for each dimension. Second, responses across the five dimensions were converted to utility decrements (values indicating how much any level of problem in each dimension affects quality of life). This was undertaken by applying country-specific EQ-5D-5L value sets or adjusted value sets[3] *(43,44)*. An overall utility value was calculated by subtracting the sum of the five utility decrements from 1. The overall utility values represent health-related quality of life; they range from 1 to 0, where 1 is equivalent to full health and 0 is equivalent to death *(45)*. This can be interpreted as, for instance, a value of 0.5 representing an individual experiencing the equivalent of only half a year of full health for every year of life they spend in that state.

Education, employment and income

Education, employment and income were measured by highest level of education achieved (Annex 2, Q31), current employment status (Annex 2, Q32), household income[4] (Annex 2, Q33) and whether individuals had difficulty in making ends meet (Annex 2, Q34).

Violence exposure

Violence exposure was measured by experience of verbal and physical violence victimization (Annex 2, Q35–Q36) and verbal and physical violence perpetration (Annex 2, Q37–Q38) in the past 12 months.

Community trust and connection

Community trust was measured using three items (Annex 2, Q39–Q41), and connection to community was measured using four items asking about how connected individuals felt to their town/city, their region, their country and Europe (Annex 2, Q42).

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[3] Country-specific value sets were unavailable for Austria, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Finland, Greece, Iceland, Latvia, Lithuania, Luxembourg, Malta, Slovakia and Slovenia. For these countries, adjusted value sets were estimated using a mean based proxy approach informed by the ProgrammE in Costing, resource use measurement and outcome valuation for Use in multi-sectoral National and International health economic evaluAtions (PECUNIA) conceptual framework for optimized proxy value set selection *(44)*. In line with PECUNIA recommendations, countries were grouped into supranational clusters based on shared cultural, linguistic, sociodemographic and health-care system characteristics (including health-care system typology and financing). For each country lacking a national value set, EQ-5D-5L utilities were calculated as the unweighted mean of utilities generated using all available national value sets within the corresponding PECUNIA cluster (English-speaking, Nordic, Central Western, Southern or Eastern European).

[4] Income band values and currency varied by country, and were based on deciles used in the European Social Survey Round 10/11 *(46)*, the OECD Income Distribution database *(47)* or national statistic surveys.

Exposure to other childhood trauma

Three ACEs that reflect adversity outside of the household (witnessing community violence, exposure to collective violence and bullying victimization) were measured using items from ACE-IQ *(12)* (Annex 2, Q43–Q50). Two additional items measured experience of cyberbullying (Annex 2, Q51) and exposure to harmful content online (Annex 2, Q52) in childhood (before the age of 18 years).

Childhood resilience

Childhood resilience is built through relationships, communities and systems, as well as broader social and institutional factors. It can be understood as the dynamic process of adapting and responding positively to stress, trauma and other forms of adversity. While the survey did not aim to collect comprehensive measures of resilience, it did include a number of questions relating to sources of resilience individuals might have experienced during childhood. Two items (Annex 2, Q52-Q53) examined whether parents/guardians knew how free time was being used during the respondent's childhood and whether parents/guardians understood individuals' problems and worries during childhood. Responses recorded as "always" and "most of the time" were counted. Another question (Annex 2, Q54) examined how often there was any adult in an individual's childhood who they could trust and talk to about any personal problems. For this item, the "always" response was counted. Item scores were summed to produce a total ranging from 0 to 3. Total scores of 0–1 were categorized as low resilience, while scores of 2–3 were categorized as high resilience.

Study limitations and considerations

The study did not aim to estimate ACE prevalence across countries or across Europe, but used a balanced sample (age, sex, deprivation level and region) to ensure broad representation within individual countries using a consistent methodology (see the section on study sample above). Individual country profiles were typically calculated using only data from each specific county. However, some countries (Cyprus, Iceland, Ireland, Luxembourg and Malta) had smaller sample sizes (around 500) because fewer individuals were accessible through panel and phone samples (see Annex 1 for exact sample sizes in each country). For these countries, relationships between ACEs and outcomes presented in the individual country profiles were calculated using models incorporating all country data and weighted according to results from the specific country.

The sampling method used panel surveys across countries and will thus have excluded individuals in settings without access to participate in such panels (such as those involved in criminal justice systems), which may have an impact on levels of ACEs reported.

Exposure to ACEs and other health and social outcomes in the study are based on survey participant self-reporting, and ACE questions are retrospective, so causality between outcomes and ACEs cannot be established. Nevertheless, strong, significant associations were found between ACEs and all outcomes measured in young adults, and as respondents were aged between 18 – 30 years, experiences reported on in childhood were more proximal in time to surveys conducted in older populations.

The frequency and chronicity of exposure to each individual ACE in the study were scored according to the ACE-IQ frequency scoring method (see the section on the survey tool above). However, different levels of frequency and chronicity of exposure to each ACE – in addition to the age of exposure – may affect relationships with health and social outcomes. However, in line with other ACE studies, this study employs an ACE count where each ACE is considered equally.

Nine ACEs were included in this study to examine ACE frequency against health and social outcomes. This was to ensure that the study was easily comparable to and in line with other ACE studies *(1,6)*. The nine ACEs in this study (and previous ACE studies) focus on exposure to childhood abuse and neglect, and household adversity. However, this study used the ACE-IQ tool, which also includes community-level ACEs (for example, exposure to bullying and witnessing violence in the community), and the findings show a significant relationship between exposure to childhood abuse and neglect, household dysfunction, and wider adversities in the community. This highlights the importance of further research to understand and potentially incorporate a wider range of childhood experiences into ACE research and policy and practice.

The survey was not designed to examine intimate partner violence, coercive control or other forms of gender-based violence in detail. While the study identified important associations between ACEs and violence, it cannot determine how childhood adversity may influence later experiences of violence within intimate or family relationships. Future research could usefully explore these pathways and their implications for prevention.

This study used one aspect of resilience (supportive adult relationships) to assess the impact of such relationships protecting individuals needing to seek mental health support in adulthood. Further research is required to understand whether and how other aspects of resilience are protective, and to reduce the impact of ACEs on poor mental health and other poor health and social outcomes in adulthood across Europe.

Analysis

The percentages of individuals reporting each ACE were calculated by combining data across the 29 participating countries overall after data from each country had been adjusted for age, sex and childhood deprivation,[5] and weighted by population aged 18–30 years (using 2025 Eurostat data) *(46)*. Despite such adjustments, they should not be assumed to be representative of national ACE levels. Precise national measures of prevalence of ACEs in any country require large studies capable of reaching all sections of society.

Where dependent variables were categorical (such as perceived need for mental health support) they were examined against ACE count and sociodemographic factors using logistic regression methods. Adjusted means were calculated (using estimated marginal means) for all ACE count categories, which were corrected to sample characteristics for age, sex, ethnic minority or migrant status, childhood deprivation and sample country. This method was also employed to calculate adjusted percentages for each of the nine ACEs and ACE count (with individual ACEs and ACE count as the dependent variables) across key sociodemographic factors.

To explore the impact of childhood resilience on the association between ACE count and perceived need for mental health support, childhood resilience level was included in the model and adjusted means were calculated for ACE count by resilience score, controlling for sociodemographic factors. Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

For health-related quality of life utility value (overall measure of health quality), a generalized linear model (log linear) was employed, and adjusted means were calculated along with contrasts (+/- standard error) to measure changes in utility associated with differences in ACE count category. Annual QALYs were calculated using these mean differences in utility values between ACE categories to represent QALYs lost per year associated with any level of ACE exposure (compared to no ACEs). Effectively, this provides a measure equivalent to what proportion of a full year of health is lost per year lived aged 18–30 years for each level of ACE previously experienced. A single monetized estimate for Europe was produced by applying the gross domestic product per capita (current prices) for the 27 EU Member States reported by Eurostat for 2025 to the aggregated EUlevel QALY losses *(47)*. This is a "human capital" approach, which attaches a cost to a year of life at full health, equivalent to the gross domestic product per capita of the individual's country of residence. This is not intended as a detailed health economic analysis, but it can provide a basic indication of potential lost capital – resulting in this case from ACEs. Critically, these values are only based on the samples collected; therefore, they should not be assumed to be representative of costs across the 29 countries, but are included as indications of the scale of financial impacts ACEs may have. All analyses were undertaken using SPSS Version 30.

[5] Individual country-level analyses for Cyprus, Iceland, Ireland, Luxembourg and Malta were also adjusted due to their smaller sample sizes.

Ethical approval and review process

Ethical approval was granted by Liverpool John Moores University Research Ethics Committee (25/PHI/001). The questionnaire was developed in English, then translated into 26 other languages.[6] Quality assurance was conducted by Ipsos research company and the study team to ensure that translations were accurate prior to data collection. Following data collection and analysis, representatives from participating countries were invited to a consultation to provide feedback on the findings in their individual country profiles and suggestions on what would be useful to include in the final overall report.

[6] The questionnaire was translated into Bulgarian, Croatian, Czech, Danish, Dutch, Estonian, Finnish, French, German, Greek, Hungarian, Icelandic, Italian, Latvian, Lithuanian, Luxembourgish, Maltese, Norwegian, Polish, Portuguese, Romanian, Russian, Slovak, Slovenian, Spanish and Swedish (see Annex 1 for the questionnaire language available for each country).



3.
Findings

Characteristics and nature of ACEs

This section presents the proportion of young adults reporting each ACE and the ACE counts across the combined participating countries. Proportions were calculated based on the study sample, adjusted for age, sex and childhood deprivation at the country level (see the analysis section in Chapter 2).

Over two thirds (68.9%) of young adults reported experiencing at least one ACE, and over one in five (22.8%) four or more ACEs (Fig. 3). The percentage of young adults with QRs for each ACE in the sample ranged from 11.5% for living with a household member who was sent to jail or prison, to 39.2% for experiencing parental separation or death of a parent/guardian (Fig. 4). All ACE types were reported by over 10% of respondents. Critically, however, the figures are specifically related to those aged 18–30 years and participating in the panels; they are therefore not comparable to other ACE surveys covering different age ranges, using different methodologies or covering different geographical areas.

Fig. 3. Proportion of young adults in each ACE count category across all 29 countries

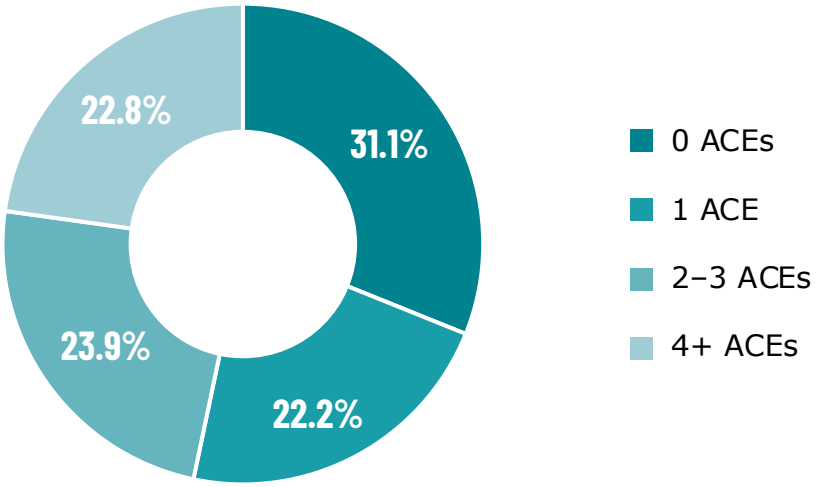
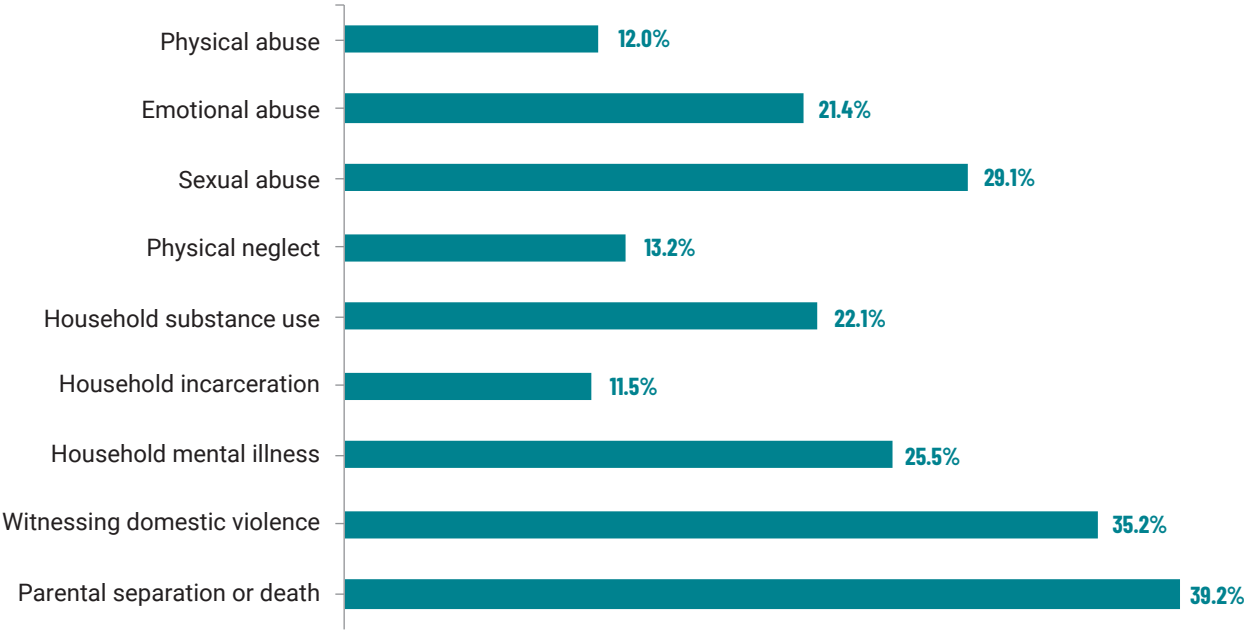


Fig. 4. Proportion of young adults who experienced each ACE across all 29 countries



Although these figures differ from some European studies *(1,5–7,21,48,49)*, variations are likely to reflect differences in age focus, methods and measurement tools *(12)* (see the section on study limitations and considerations in Chapter 2).

ACEs and their relationship with sociodemographic factors

ACEs are unevenly distributed and socially patterned, and are most common among already disadvantaged populations. The relationships between ACEs and each sociodemographic factor presented below were adjusted to account for each other sociodemographic factor.

The percentage of young adults who experienced each type of ACE varied across sociodemographic factors (Table 1). The majority of ACE types were experienced most commonly among females, those identifying as having ethnic minority or migrant status, and those who experienced the highest level of childhood deprivation.

Table 1. Proportion of young adults who experienced each ACE, by sociodemographic factor across the 29 countries

Sociodemographic factor		Abuse			Neglect	Household				
		Physical (%)	Emotional (%)	Sexual (%)	Physical (%)	Substance use (%)	Incarceration (%)	Mental illness (%)	Parental separation or death (%)	Witnessing domestic violence (%)
Age (years)	18–24	9.6	19.1	29.2	12.1	21.0	11.5	24.7	38.2	33.9
	25–30	9.9	18.5	28.5	12.8	24.4	11.8	25.5	39.5	34.4
Sex	Male	9.6	15.3	25.1	13.2	20.8	12.5	21.2	36.3	30.3
	Female	9.9	22.9	33.0	11.8	24.7	10.9	29.5	41.4	38.2
Ethnic minority or migrant status	Yes	13.8	22.1	38.9	17.7	27.1	18.1	28.9	39.2	41.1
	No	6.8	16.0	20.5	8.6	18.8	7.3	21.6	38.5	27.8
Childhood deprivation (by wealth quintiles)	1 – poorer	18.0	31.3	69.7	19.9	37.0	20.5	37.7	50.5	51.7
	2 – medium	7.1	14.8	23.4	8.6	18.9	2.8	21.1	36.6	28.4
	3 – more affluent	7.0	13.6	25.0	11.1	15.6	8.5	18.9	30.3	24.7

The proportion of young adults in each ACE count category varied across sociodemographic factors (Table 2). Percentages of those reporting four or more ACEs were highest among those aged 25–30 years, female respondents, those identifying as having ethnic minority or migrant status, and those who experienced the highest level of childhood deprivation.

Table 2. Proportion of young adults in each ACE count category, by sociodemographic factor across the 29 countries

Sociodemographic factor		0 ACEs (%)	1 ACE (%)	2–3 ACEs (%)	4+ ACEs (%)
Age (years)	18–24	55.8	20.0	16.0	8.2
	25–30	55.4	19.7	15.6	9.3
Sex	Male	59.4	18.3	13.9	8.3
	Female	51.9	21.4	17.6	9.1
Ethnic minority or migrant status	Yes	43.8	19.8	19.0	17.4
	No	58.0	19.9	15.2	6.9
Childhood deprivation (by wealth quintiles)	1 – poorer	34.0	21.7	24.3	19.9
	2 – medium	60.0	19.8	14.5	5.7
	3 – more affluent	63.4	18.7	12.0	6.0

Insights: The results show that while high ACE levels were observed across all groups, they were more common among those experiencing greater deprivation and those reporting ethnic minority or migrant status. The findings also demonstrate a pronounced social gradient in childhood adversity, suggesting that ACE exposure increases as childhood socioeconomic circumstances worsen. Policies supporting these groups should account for the added burden of childhood trauma and its impact on health across the life course *(39)* while combining targeted support with proportionate universal approaches.

ACEs and their relationship with health and social issues in adulthood

The more ACEs young people endure, the greater their risk of poor health, social and behavioural outcomes in adulthood. Across every domain examined – mental health, quality of life, education, employment, income, violence and community connection – outcomes worsened as ACE exposure rose. Figures presented throughout this section represent the demographically adjusted percentages (accounting for age, sex, childhood deprivation, ethnic minority or migrant status, and country) for each outcome by ACE count.

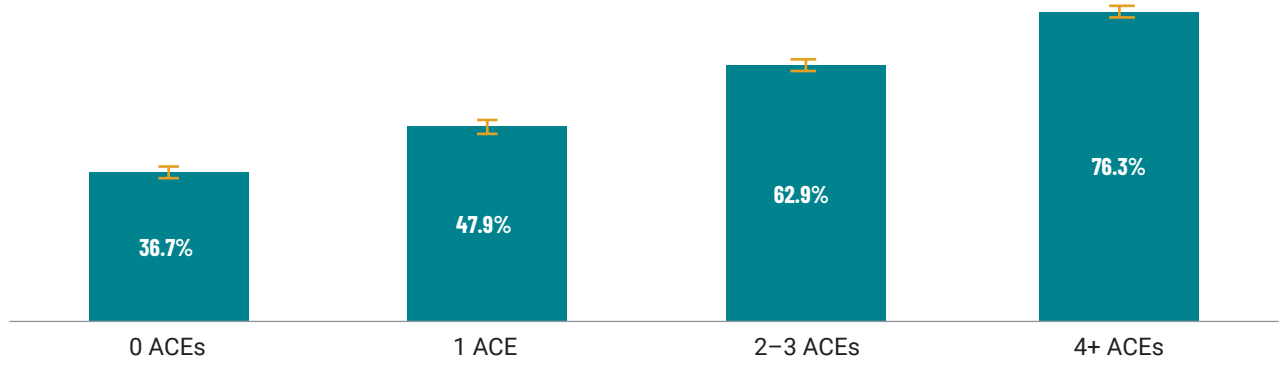
Mental health needs

Mental health needs rose sharply with ACE exposure. To measure mental health needs, young adults were asked whether they had felt that they needed professional mental health support in the last 12 months, whether they had tried to get this support, and whether they had received the support they needed.

Perceived need for mental health support rose with ACE exposure – doubling from 36.7% among those with no ACEs to 76.3% among those with four or more ACEs (Fig. 5). This higher rate was around 20 percentage points above the overall sample mean of 56.6%, suggesting that prevention of ACEs could reduce the underlying need for mental health in as many as one in five young adults.

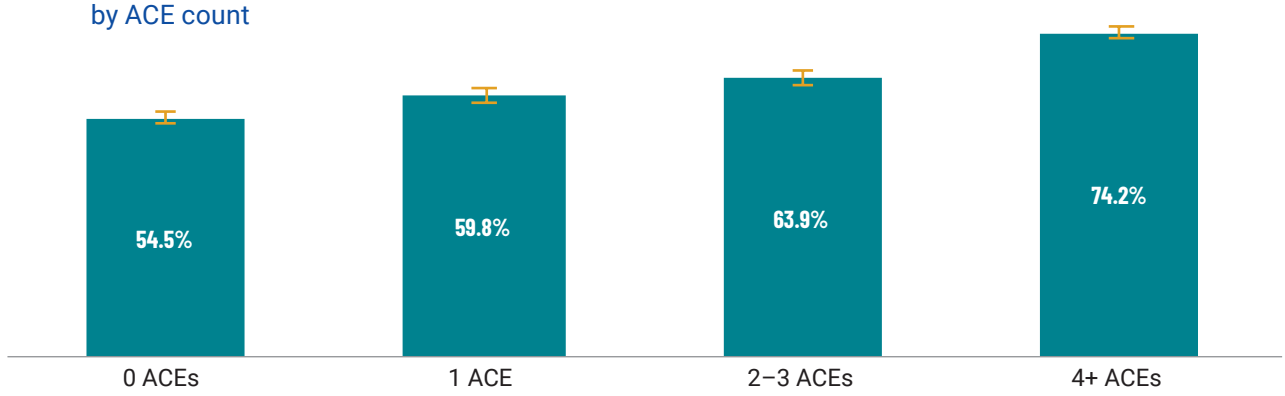
Among those who felt they needed support, young adults with more ACEs were more likely to try to access it: the rates were 54.5% among those with no ACEs and 74.2% among those with four or more ACEs (Fig. 6). Unmet need rose in step: 27.3% of young adults with no ACEs and 39.8% of those with four or more ACEs did not receive the support they needed (Fig. 7).

Fig. 5. Proportion of young adults who felt they needed mental health support by ACE count



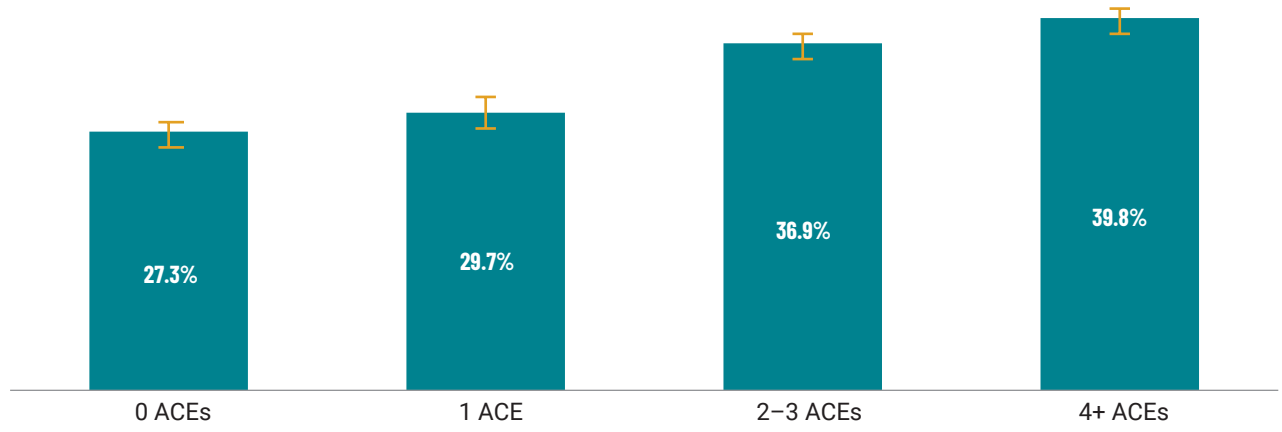
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Fig. 6. Proportion of young adults who felt they needed mental health support and tried to get this support by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Fig. 7. Proportion of young adults who tried but could not get mental health support by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Insights: It is not possible to determine the specific mental health conditions leading young adults to try to access support, or whether the severity of conditions also varied with ACEs. However, young adults with high numbers of ACEs may have less access to informal support, increasing their reliance on professional services. Unmet need was greater among those with more ACEs: 39.8% of young adults with four or more ACEs reported that they did not receive the support they needed compared to only 27.3% of those with no ACEs (Fig. 7). This raises concerns about whether services are sufficiently trauma-informed (that they understand and are responsive to the impacts of childhood trauma, including ACEs) and accessible to those with a history of ACEs.

The impact of ACEs on health-related quality of life

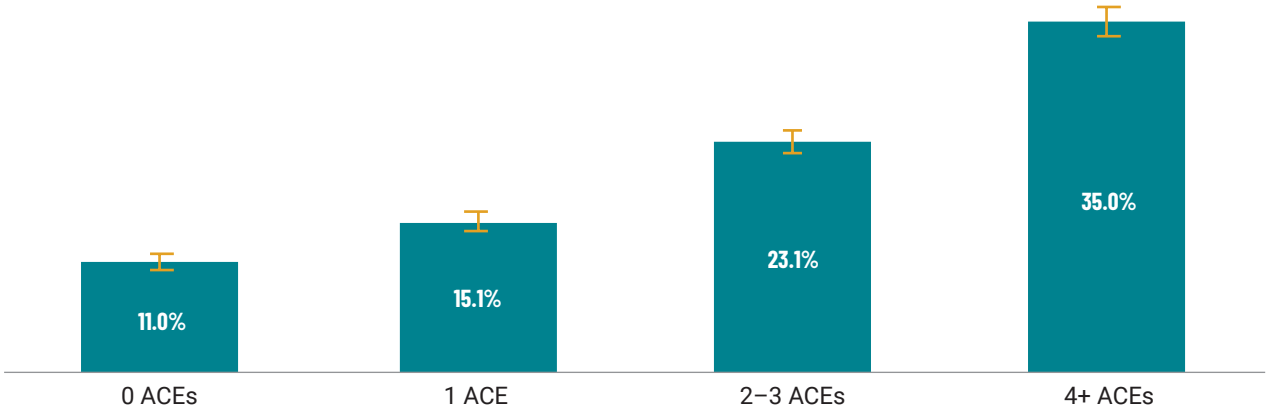
The impacts of ACEs are associated with substantial, costly losses in health-related quality of life. Health-related quality of life was assessed using the EQ-5D-5L *(43)*, which measures a person's overall health by capturing how they are currently functioning and feeling. It measures five dimensions: mobility, self-care, usual activities, pain or discomfort, and anxiety or depression. Each of these dimensions is rated from having no problems to having extreme problems (see section on health-related quality of life in Chapter 2).

Problems with mobility

Problems with mobility were highest among young adults with four or more ACEs. To measure mobility, young adults were asked whether they were currently experiencing any problems in walking about. Impaired mobility was defined as any problems (from slight problems to being unable to walk about).

Having any impairment to mobility rose with ACE exposure – more than tripling from 11.0% among those with no ACEs to 35.0% among those with four or more ACEs (Fig. 8).

Fig. 8. Proportion of young adults with any impairment to mobility by ACE count



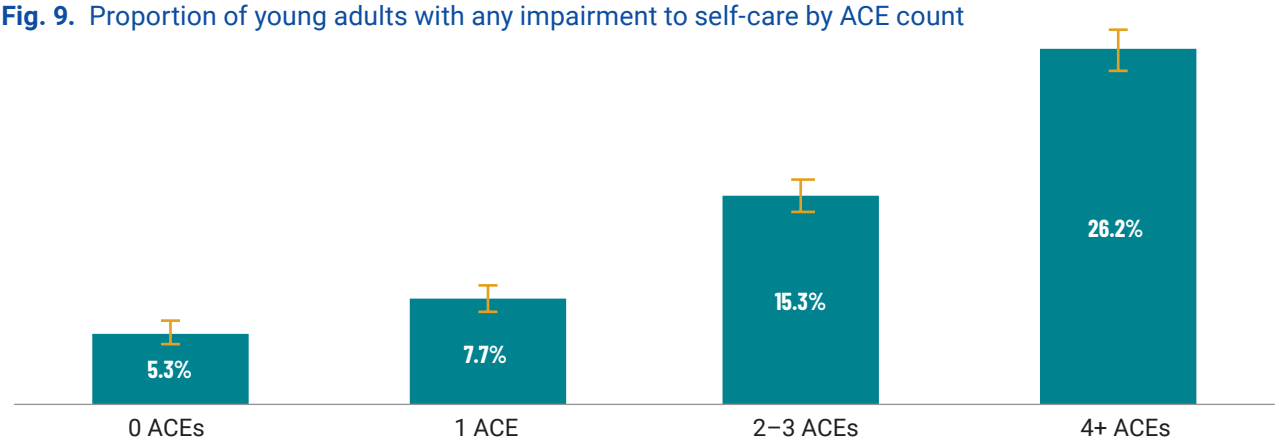
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Problems with self-care

Problems with self-care increased with ACE exposure. To measure self-care, young adults were asked whether they were currently experiencing any problems washing or dressing. Impaired self-care was defined as any problems (from slight problems to unable to wash or dress self).

Having any impairment to self-care rose significantly with ACE exposure, with an almost fivefold increase from 5.3% among those with no ACEs to 26.2% among those with four or more ACEs (Fig. 9).

Fig. 9. Proportion of young adults with any impairment to self-care by ACE count



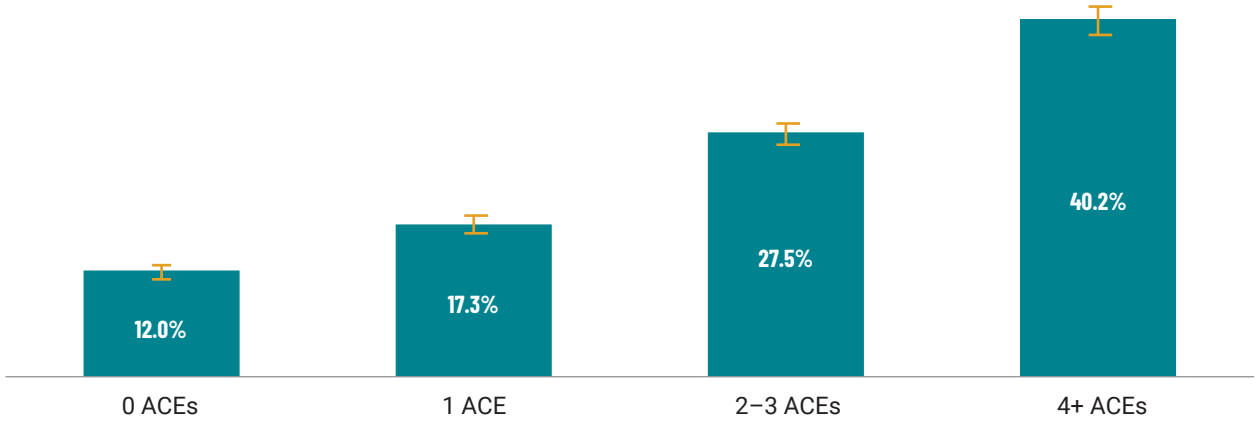
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Difficulties with everyday activities

ACEs contribute to difficulties with everyday activities. To measure ability to perform usual activities, young adults were asked whether they were currently experiencing any problems doing their usual activities (such as work, study, housework, family or leisure activities). Difficulties doing usual activities was defined as any problems (from slight problems to unable to do usual activities).

Having any difficulties doing usual activities rose with ACE exposure – more than tripling from 12.0% among those with no ACEs to 40.2% among those with four or more ACEs (Fig.10).

Fig. 10. Proportion of young adults with any difficulties doing usual activities by ACE count



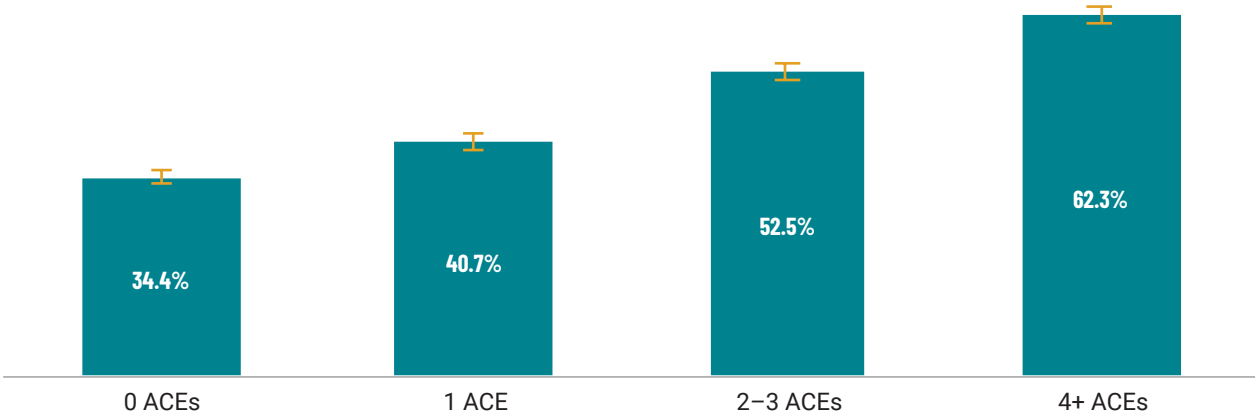
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Pain and discomfort

Pain and discomfort rose steadily with ACE exposure. Young adults were asked whether they were currently experiencing any pain or discomfort. Experiencing pain or discomfort was defined as experiencing any level (from slight to extreme pain or discomfort).

Experiencing any pain or discomfort rose with ACE exposure – almost doubling from 34.4% among young adults with no ACEs to 62.3% among those with four or more ACEs (Fig. 11).

Fig. 11. Proportion of young adults experiencing pain or discomfort by ACE count



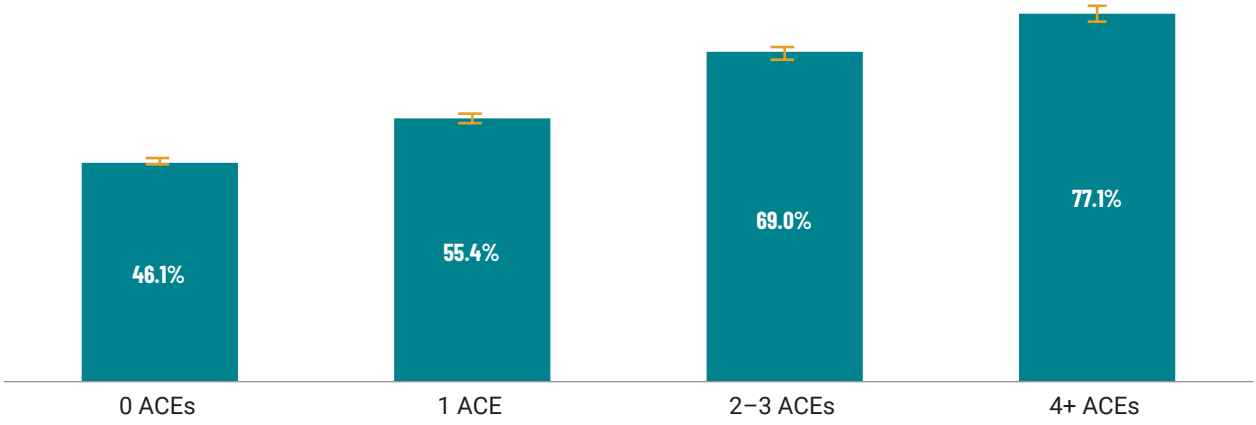
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Anxiety and depression

Anxiety and depression affect over three quarters of young adults with four or more ACEs. Young adults were asked whether they were currently experiencing anxiety or depression. Experiencing anxiety or depression was defined as experiencing these feelings at any level (from slight to extreme anxiety or depression).

Experiencing any anxiety or depression rose with ACE exposure – increasing by around a third from 46.1% among those with no ACEs to 77.1% among those with four or more ACEs (Fig. 12).

Fig. 12. Proportion of young adults experiencing any anxiety or depression by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Insights: Beyond mental health support needs, greater ACE exposure was associated with worse health outcomes across all five health-related quality of life dimensions. Despite good health being an expected characteristic of most young adults aged 18–30 years in high-income countries, reports of suffering pain, for instance, ranged from 34.4% among those with no ACEs to nearly double that rate (62.3%) among those with four or more ACEs (Fig. 11). Similarly, anxiety or depression were experienced by over three quarters of young adults in this sample with four or more ACEs (77.1%) compared to just under half of those with no ACEs (46.1%) (Fig. 12).

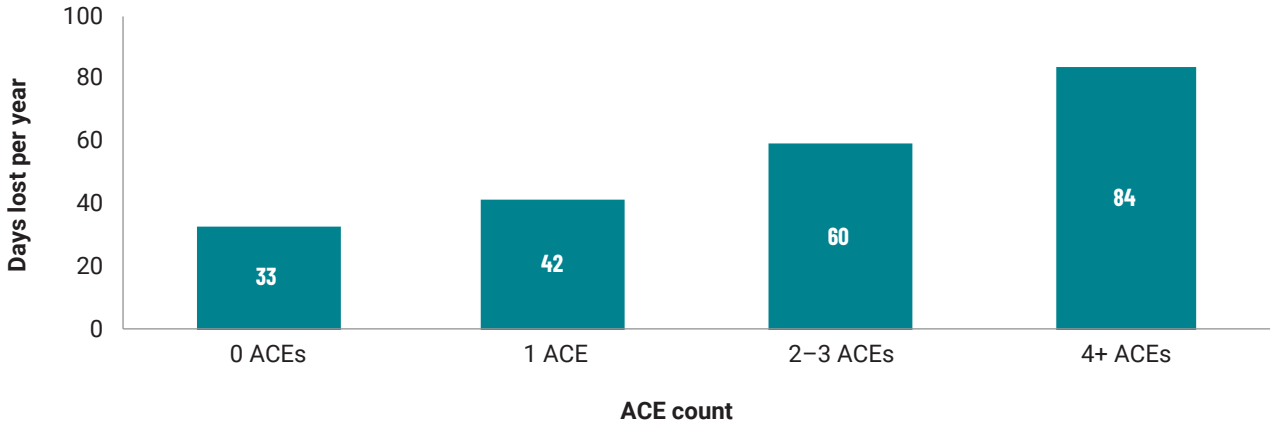
Perhaps not surprisingly, given this additional mental and physical health burden, higher ACE counts were also associated with greater problems with mobility (Fig. 8) and self-care (Fig. 9). The rate of those experiencing difficulties undertaking usual activities such as work or learning ranged from 12.0% among those with no ACEs to 40.2% among those with four or more ACEs (Fig. 10). Given the sample average of 22.6%, these findings suggest that the proportion of young adults experiencing difficulties undertaking usual activities could be nearly halved if ACEs were prevented.

Overall health-related quality of life utility value

The impact of ACEs costs young adults nearly two months of a healthy year, every year. An overall health-related quality of life utility value was calculated using the EQ-5D-5L dimensions *(43)* (see information on the study questionnaire in Chapter 2). Utility values range from 1 to 0, where 1 is equivalent to full health and 0 is equivalent to death.

Increasing ACE counts were significantly associated with a reduced utility value. Young adults with four or more ACEs in this sample lost 84 days of healthy life for every year of life lived between the ages of 18 and 30 years compared to 33 days lost per year among young adults with no ACEs (Fig. 13).

Fig. 13. Days of healthy life lost for every year of life (ages 18–30 years) by ACE count



The financial cost of ACEs

The financial cost of ACEs reaches €75 700 per person with four or more ACEs across the 13-year period (ages 18–30 years). QALYs provide a summary measure that combines both quality and length of life, with one QALY equating to one year lived in perfect health (Box 2). There is no accepted monetary value for a single QALY at a European level, so gross domestic product per person was used as a substitute measure (see the analysis section in Chapter 2). For European estimates, the data were taken from Eurostat's purchasing power parities and related economic indicators dataset, which reports the EU average gross domestic product per capita as €41 650 *(47)*.

BOX 2. QALYs

A QALY combines how long people live with how healthy those years are. A value of 1 means one year in perfect health. A value of 0 is equivalent to death. Lower QALY values reflect years lived with health problems or reduced quality of life. QALYs can be used to quantify how many years (or part years) of full health are lost over a number of years lived – for example, due to a history of ACEs.

Changes in QALYs can be used to assess the impact of health-care interventions, public health measures or health-related harms, indicating the number of days or years of healthy life gained or lost because of an intervention or exposure. QALYs have been criticized as they assign a numerical value to quality of life, which can be subjective and can vary between age groups and individuals with different long-term health conditions or disabilities *(50)*. Consequently, they should be considered (as they are in this study) only one of a range of measures of the impact of ACEs on health across the life course.

Compared to those with no ACEs, an additional 0.14 years of full health is lost per year (ages 18–30 years) by young adults in this sample with four or more ACEs; this is equivalent to 51 days of full health lost per year (Fig. 14). Calculated across the full 13 years between ages 18 and 30 years, those with four or more ACEs lost 1.82 years of healthy life compared to those with no ACEs (Fig. 15).

For a one-year period (during ages 18–30 years) the cost of QALY losses per person was estimated at €964 for one ACE and €5827 for four or more ACEs (Table 3). Across the full 13 years between the ages of 18 and 30 years, the cost of QALY losses per person was €12 542 for one ACE and €75 759 for four or more ACEs.

Fig. 14. QALYs (expressed as days) lost per person per year by ACE count

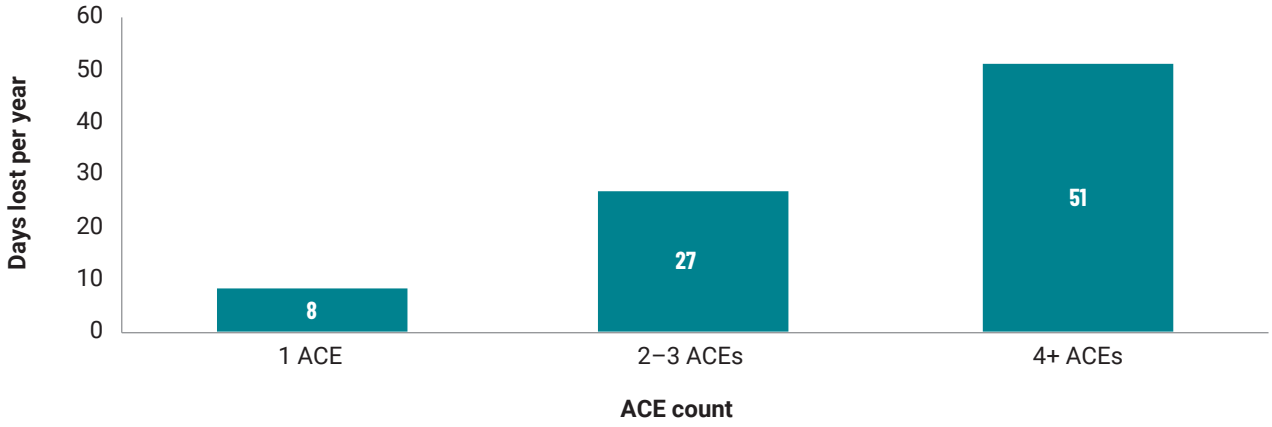


Fig. 15. QALYs lost per person over the 13-year period (ages 18–30 years) by ACE count

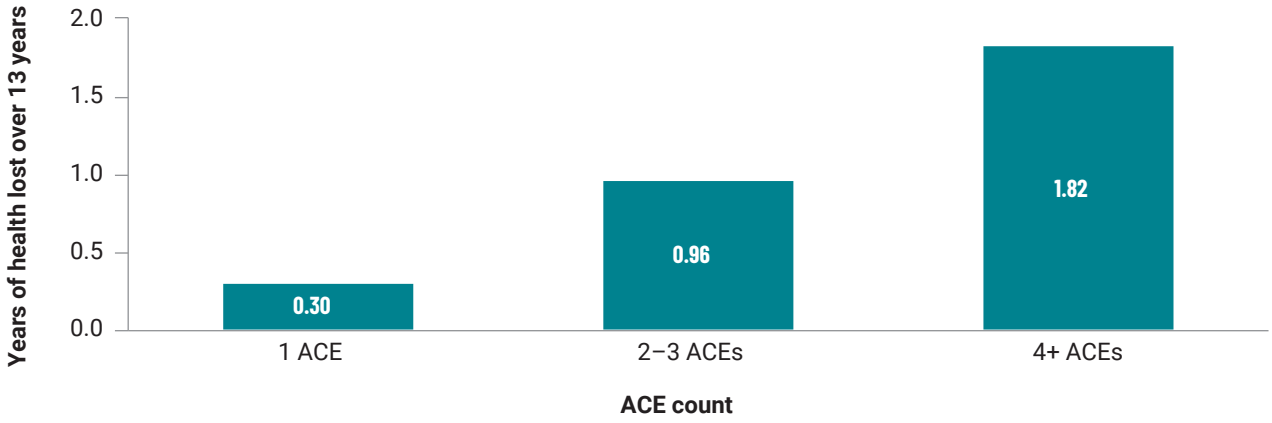


Table 3. Estimated costs of ACE-related QALY losses per person over 1-year and 13-year periods (ages 18–30 years)

Time period	ACE count		
	1 ACE	2–3 ACEs	4+ ACEs
Over 1 year	€964	€3 061	€5 827
Over 13 years	€12 542	€39 803	€75 759

Insights: Given that individuals in high-income countries and in this young age range would be expected to report higher levels of health in general, the loss of nearly two years of full health over a 13-year period is a substantial cost to the individual and their community.

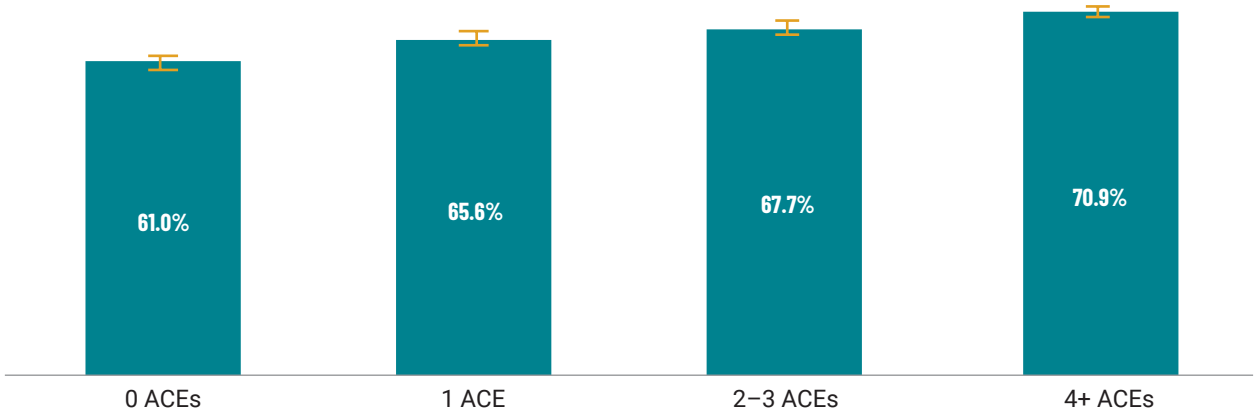
Since even conservative estimates suggest that just under half of people in Europe have experienced ACEs *(1)*, these costs are likely to represent a meaningful proportion of gross domestic product across the Region and among its constituent members. Policy development should consider that vast amounts of money are being lost through reduced productivity *(25)* and increased pressures on health-care and criminal justice systems *(3,5,51)* – costs that are avoidable if cost-effective, evidence-based prevention, resilience-building measures and trauma-informed responses are implemented.

Education, employment and financial outcomes

Educational attainment

Attainment of a university-level qualification was lower among those with more ACEs. Young adults were asked the highest level of education they had completed. No university-level qualification rose with ACE exposure, with a nearly 10 percentage point gap between those with no ACEs (61.0%) and those with four or more ACEs (70.9%) for this sample (Fig. 16).

Fig. 16. Proportion of young adults with no university-level qualification by ACE count

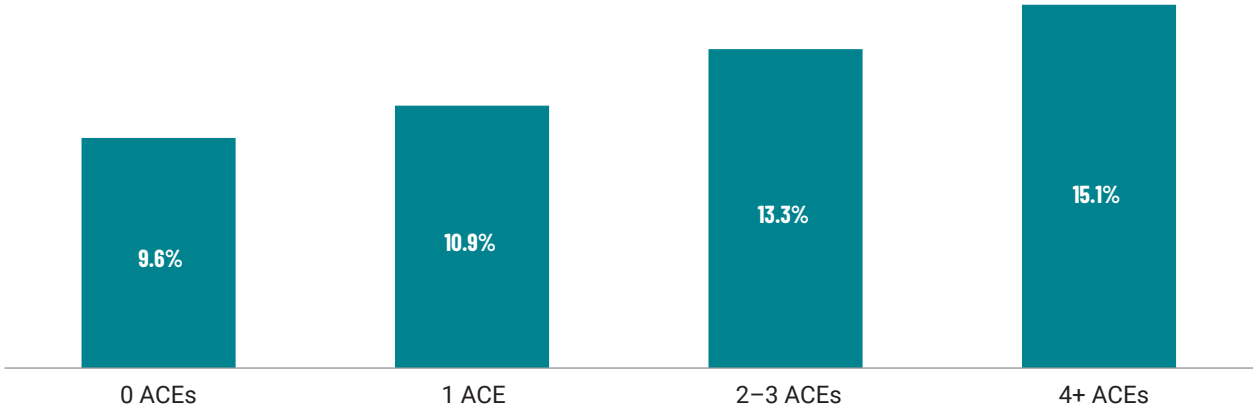


Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Those not currently in education, employment or training

Likelihood of not being in education, employment or training rose with ACE exposure. Young adults were asked their current employment status. Not currently being in education, employment or training (NEET) rose with ACE exposure, with a difference of 5.5 percentage points between those with no ACEs (9.6%) and those with four or more ACEs (15.1%) (Fig. 17).

Fig 17 Proportion of NEET young adults by ACE count

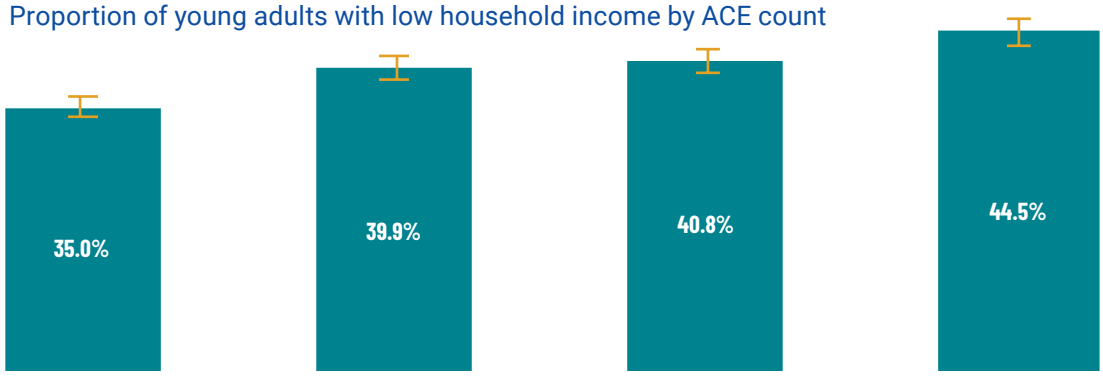


Lower household income

Higher ACE counts are linked to lower household income. Young adults were asked to describe their household's annual income, after tax and compulsory deductions, from all sources. Low household income was defined as falling into one of the bottom five income bands out of the 10 provided in the survey (based on deciles used in the European Social Survey Round 10/11 *(46)*, the Organisation for Economic Co-operation and Development (OECD) Income Distribution database *(47)* or national statistic surveys).

Low household income rose by 9.5 percentage points with ACE exposure – from 35.0% among those with no ACEs to 44.5% among those with four or more ACEs for this sample (Fig. 18).

Fig. 18. Proportion of young adults with low household income by ACE count



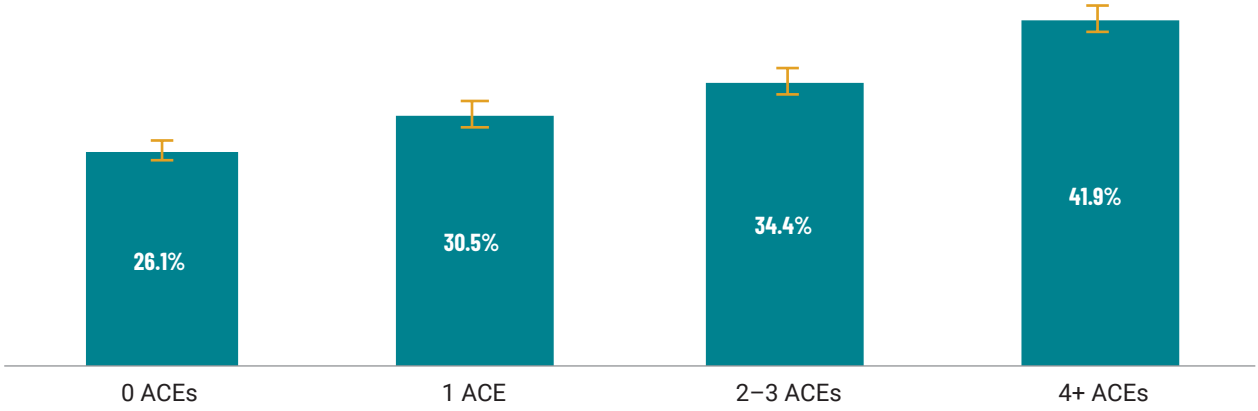
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Difficulty in making ends meet

Young adults with more ACEs struggle more to make ends meet. Young adults were asked how easy their household found it to make ends meet. Difficulty in making ends meet was defined as the household currently finding it difficult or very difficult to pay necessary expenses (such as rent, food and bills).

Difficulty in making ends meet rose with ACE exposure – from 26.1% among those with no ACEs to 41.9% among those with four or more ACEs (Fig. 19).

Fig. 19. Proportion of young adults in households finding it difficult to make ends meet by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Insights: ACEs and their childhood consequences can reduce school attendance and, in turn, educational attainment. This study found that young adults with four or more ACEs were significantly less likely to complete a university degree, and more likely to be NEET. Since employment protects mental health, breaking cycles of unemployment among young adults could improve their mental health and well-being as they start families – reducing children's exposure to parental mental ill health in the next generation. Importantly, though, many young adults with ACEs were in education, employment or training, and many achieved higher qualifications – demonstrating that ACEs alone do not determine outcomes.

Research suggests that individuals with high ACE counts report greater financial worries than those without ACEs, even when they have similar incomes *(52)*. While the reasons remain unclear, factors such as poorer mental health, lower trust in support systems and weaker social networks may contribute. The findings of the study are consistent with this earlier research, showing that ACEs are associated with poorer educational attainment, lower household income and greater difficulty in making ends meet.

Young adults will shape Europe's future workforce and tax base, while those out of work potentially draw on public resources. Preventing ACEs therefore supports both workforce development and economic growth. Because many jobseekers may themselves have experienced ACEs, employment support systems should be trauma-informed, ensuring that staff and services help people re-enter the workforce effectively.

Insights: These same young people will also start families of their own, so preventing ACEs today helps to break cycles of poverty in future generations. This study found a strong link between ACEs and poverty: children in the poorest two quintiles were over three times more likely to experience four or more ACEs than those in the most affluent quintile (see Table 2 above). Reducing unemployment and low income among young adults is therefore key to preventing ACEs in future generations – and reducing ACEs, in turn, improves employment and income prospects.

Exposure to violence

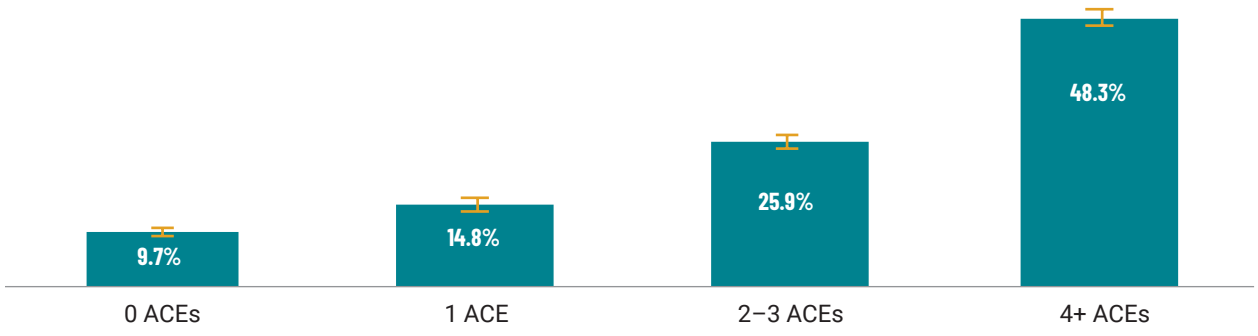
ACEs are strongly linked to both experiencing and perpetrating violence in young adulthood. Violence is a source of ACEs (such as physical abuse and domestic violence in the household), and multiple studies have shown that it is also often an outcome, as those exposed to more ACEs are more likely to be involved in violence across the life course *(3,5,19)*. In the findings of this study, the same strong links between experiencing ACEs and both being a perpetrator and being a victim of violence as a young adult were apparent.

Violence victimization

Being a victim of violence is significantly more common among those with four or more ACEs. Young adults were asked about their experience of being a victim of verbal or physical violence. Verbal violence victimization was defined as being frightened by someone or experiencing someone threatening to hurt them, kill them, use a weapon on them or hurt someone close to them in the last 12 months. Physical violence victimization was defined as having been hit, slapped, punched or kicked, or had a weapon used against them in the last 12 months.

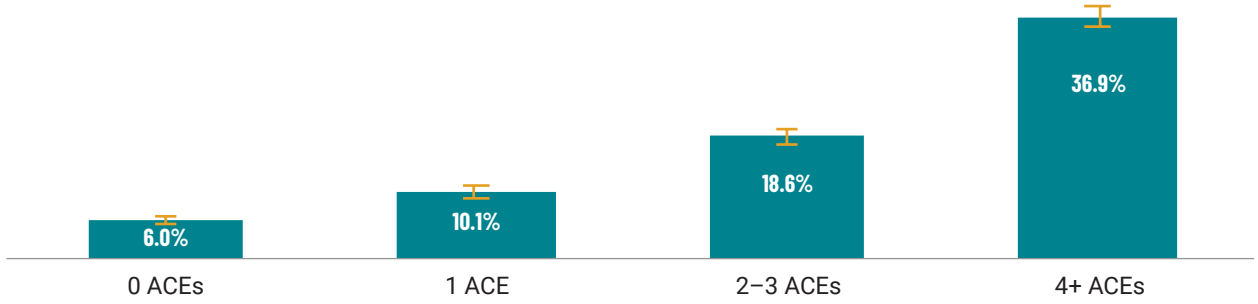
Experiencing verbal violence in the last 12 months rose with ACE exposure, from 9.7% among those with no ACEs to 48.3% among those with four or more ACEs – almost a fivefold increase (Fig. 20). Physical violence victimization showed a similar pattern, rising from 6.0% among those with no ACEs to 36.9% among those with four or more ACEs – roughly a sixfold increase (Fig. 21).

Fig. 20. Proportion of young adults who experienced verbal violence by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Fig. 21. Proportion of young adults who experienced physical violence by ACE count



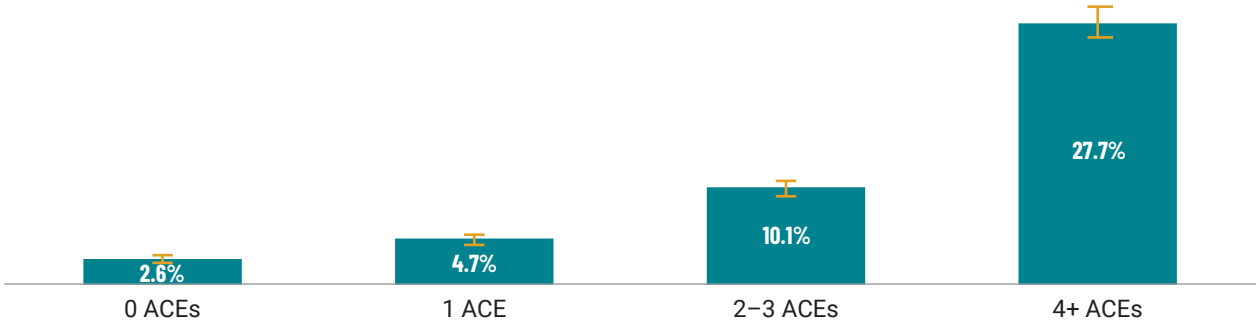
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Perpetration of violence

Perpetration of violence rose with ACE exposure. Young adults were asked about their experience of being a perpetrator of verbal or physical violence. Verbal violence perpetration was defined as frightening someone or threatening to hurt, kill or use a weapon on someone, or to hurt someone close to them in the last 12 months. Physical violence perpetration was defined as hitting, slapping, punching, kicking or using a weapon against someone in the last 12 months.

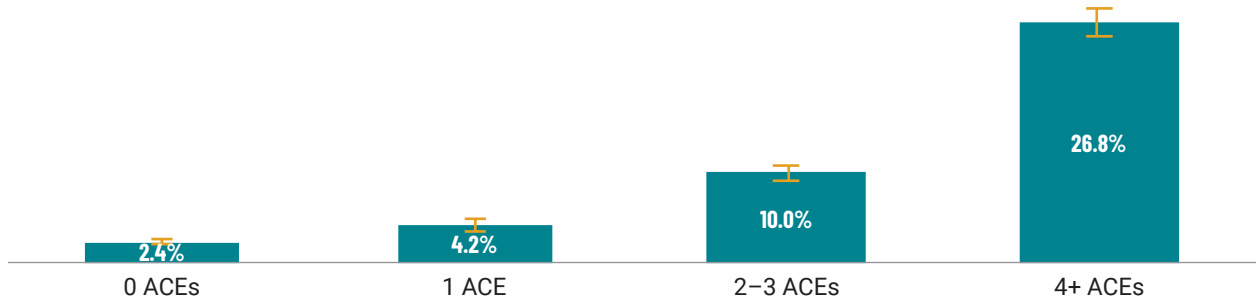
Perpetrating verbal violence in the last 12 months rose with ACE exposure, from 2.6% among those with no ACEs to 27.7% among those with four or more ACEs – a more than tenfold increase (Fig. 22). Physical violence perpetration showed a similar pattern, rising from 2.4% among those with no ACEs to 26.8% among those with four or more ACEs (Fig. 23).

Fig. 22. Proportion of young adults who perpetrated verbal violence by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Fig. 23. Proportion of young adults who perpetrated physical violence by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Insights: A concerning overall average of 7.5% of the sample had perpetrated physical violence in the last 12 months. Strong, consistent relationships between ACEs and both victimization and perpetration – across verbal and physical violence alike – point to violence as both a source and a consequence of childhood adversity. Increasingly, verbal violence is recognized as an important source of life-course harm to physical and mental health *(53)*.

These figures capture the strength of the relationship between ACEs and violence; however the survey did not collect information on who is involved in these experiences of violence or the relationships between victims and perpetrators. As such, it cannot distinguish violence within families or intimate relationships from violence in other settings, nor show how experiences differ for girls, boys and gender-diverse populations. Forms of abuse disproportionately experienced by women and girls are also not captured, and are therefore likely to sit unseen within these figures. Future research focused more specifically on experiences of violence in childhood and young adulthood could help to make these pathways visible.

Insights: The strong link between ACEs and violence is a shared priority for health and criminal justice agencies. Childhood abuse or trauma can make people more likely to see violence as an acceptable response, and those who use violence are also more likely to experience it themselves. They may also come to see violence as a normal part of relationships, making them more likely to tolerate abuse. This matters particularly for young people starting families: if they use or tolerate violence in relationships, their children face a higher risk of exposure to violence – continuing the cycle into the next generation.

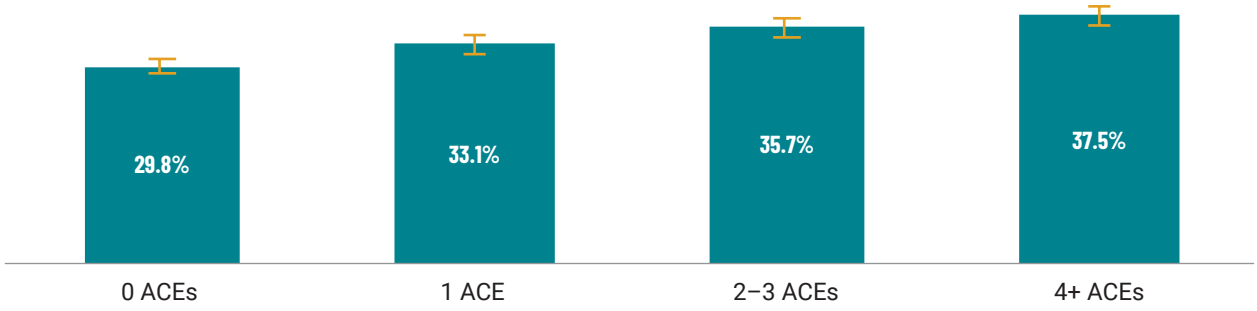
Community trust and connection

Low community trust

Trust in others fell as ACE exposure rose. Young adults were asked whether they felt that people cannot be trusted, whether they felt that most people would try to take advantage of them if they got the chance, and if most of the time, they think people are looking out for themselves. Low trust for each question was categorized as a score of 0–4 on a scale ranging from 0 (lowest trust) to 10 (highest trust).

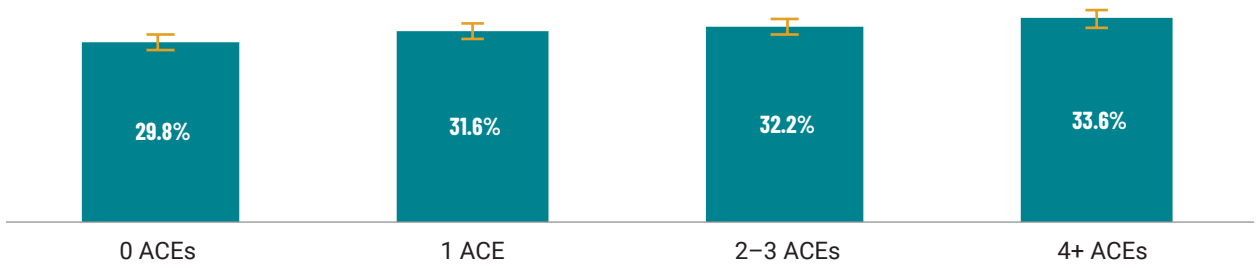
Overall, low trust in others rose with ACE exposure. Young adults feeling that people cannot be trusted rose with ACE exposure, showing a 7.7 percentage point increase from 29.8% among those with no ACEs to 37.5% among those with four or more ACEs (Fig. 24). The same trend was observed for young adults feeling that most people would try to take advantage of them if they got the chance, with a 3.8 percentage point increase from 29.8% among those with no ACEs to 33.6% among those with four or more ACEs (Fig. 25). Similarly, young adults feeling that most of the time people are looking out for themselves rose by 5.3 percentage points, with ACE exposure from 30.9% among those with no ACEs to 36.2% among those with four or more ACEs (Fig. 26).

Fig. 24. Proportion of young adults feeling that people cannot be trusted by ACE count



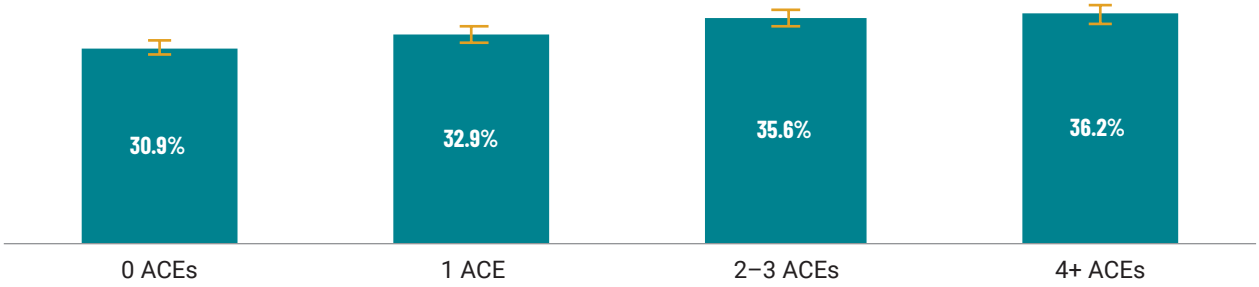
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Fig. 25. Proportion of young adults who reported feeling that most people would try to take advantage of them by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Fig. 26. Proportion of young adults feeling that most of the time people are looking out for themselves by ACE count



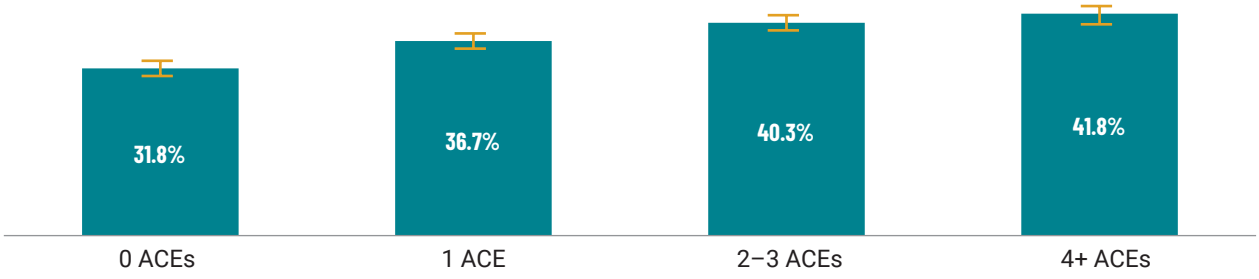
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Low community connection

Feeling disconnected from community increased with ACE count. Young adults were asked how connected they felt to several parts of their community – including their town or city, their region, their country and Europe. Low community connection was defined as feeling not very connected or not at all connected.

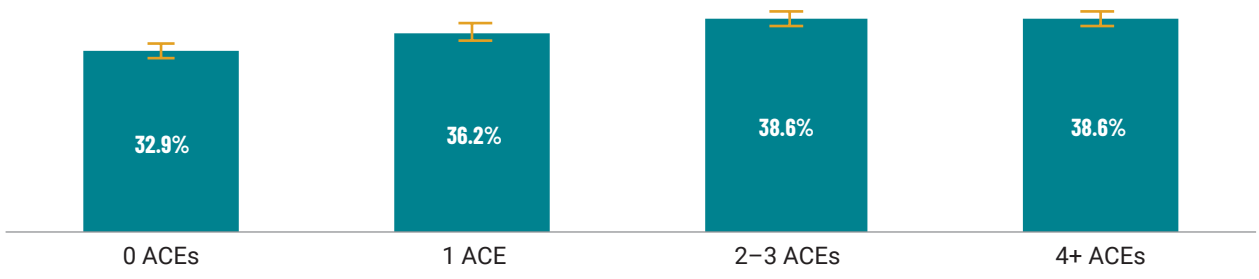
Feeling a low level of connection to various parts of the community rose with ACE exposure. Young adults feeling a low level of connection to their town or city rose by 10 percentage points from 31.8% among those with no ACEs to 41.8% among those with four or more ACEs (Fig. 27). A similar pattern could be seen for regional connection, which increased by 5.7 percentage points from 32.9% among those with no ACEs to 38.6% among those with four or more ACEs (Fig. 28). This trend continued at the national level, with low levels of connection to their country rising by 8.4 percentage points from 23.1% among those with no ACEs to 31.5% among those with four or more ACEs (Fig. 29). At the European level, feelings of low connection were also more common among young adults with ACE exposure compared to those experiencing none, although the differences were smaller and did not show a pronounced dose–response relationship (Fig. 30).

Fig. 27. Proportion of young adults not feeling connected to their town/city by ACE count



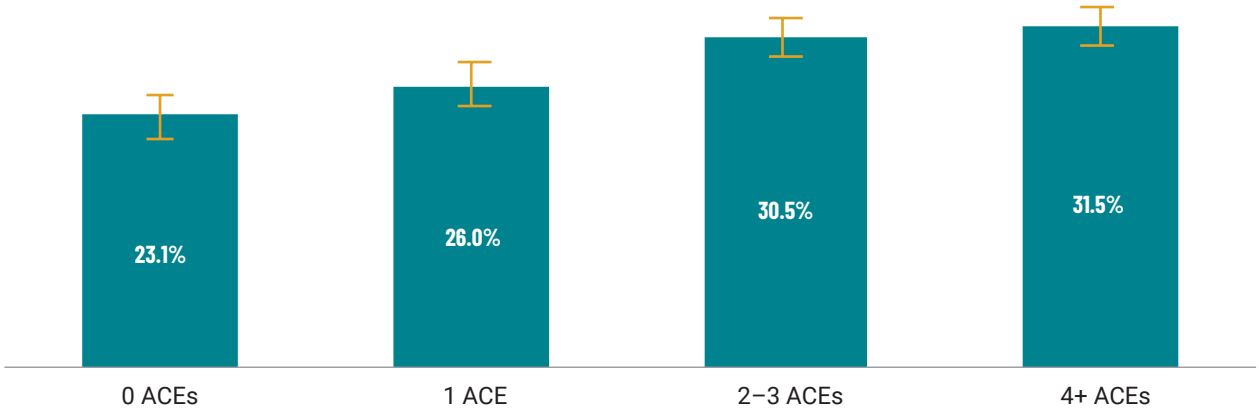
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Fig. 28. Proportion of young adults not feeling connected to their region by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Fig. 29. Proportion of young adults not feeling connected to their country by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Fig. 30. Proportion of young adults not feeling connected to Europe by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Insights: Community relationships provide important social capital and support for mental and physical well-being. However, individuals with ACEs may be less likely to trust others, and so have fewer community resources to draw upon *(54)*. Lower levels of trust can affect individuals' use of public services and uptake of advice from professionals or agencies *(55)*. Although not directly measured here, this lack of trust may reduce people's ability to access services successfully or adopt advice that may protect their health and that of their family (such as vaccination uptake).

While ACEs explain only part of the variation in trust and community connectedness, they are an important factor to consider. Across Europe, many communities face challenges in fostering trust, social cohesion and a shared sense of belonging, with social divisions sometimes contributing to antisocial behaviour and violence. As results here have demonstrated, individuals with ACEs often experience a greater burden of poor mental health, increased exposure to violence, lower trust in others and weaker community connectedness. They are also more likely to live in deprived and marginalized communities. Reducing ACEs may therefore moderate many factors that would otherwise have an adverse impact on community integration *(56)*.

ACEs and their relationship with exposure to other childhood trauma

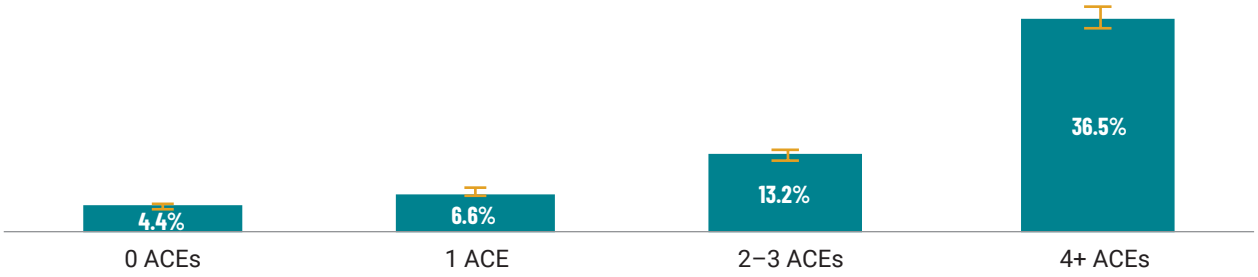
This section presents the relationships between the number of ACEs experienced and exposure to other forms of childhood trauma. Figures presented throughout represent the demographically adjusted percentages (accounting for age, sex, childhood deprivation, ethnic minority or migrant status, and country) for each outcome by ACE count.

Witnessing community violence

Witnessing community violence is more common among those with four or more ACEs. Young adults were asked about their experience of witnessing community violence during childhood. This was measured using items from ACE-IQ *(12)* – including seeing or hearing someone being beaten up, stabbed or shot, or threatened with a knife or gun in real life. Witnessing community violence was defined as experiencing any of the items many times.

Witnessing community violence rose with ACE exposure, showing a more than eightfold increase from 4.4% among those with no ACEs to 36.5% among those with four or more ACEs (Fig. 31).

Fig. 31. Proportion of young adults who witnessed community violence during childhood by ACE count



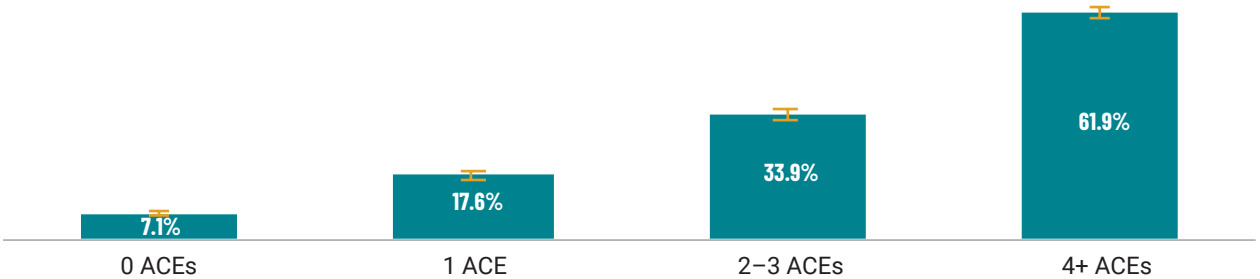
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Exposure to collective violence

Experience of collective violence rose sharply with ACE count. Young adults were asked about their exposure to collective violence while growing up. Exposure to some form of collective violence at least once was measured using the items from ACE-IQ – including being forced to live in another place, deliberate destruction of their home, or themselves or a family member or friend being beaten up by soldiers, police, militia or gangs.

Collective violence rose with ACE exposure, with a more than eightfold increase from 7.1% among those with no ACEs to 61.9% among those with four or more ACEs (Fig. 32).

Fig. 32. Proportion of young adults exposed to collective violence during childhood by ACE count



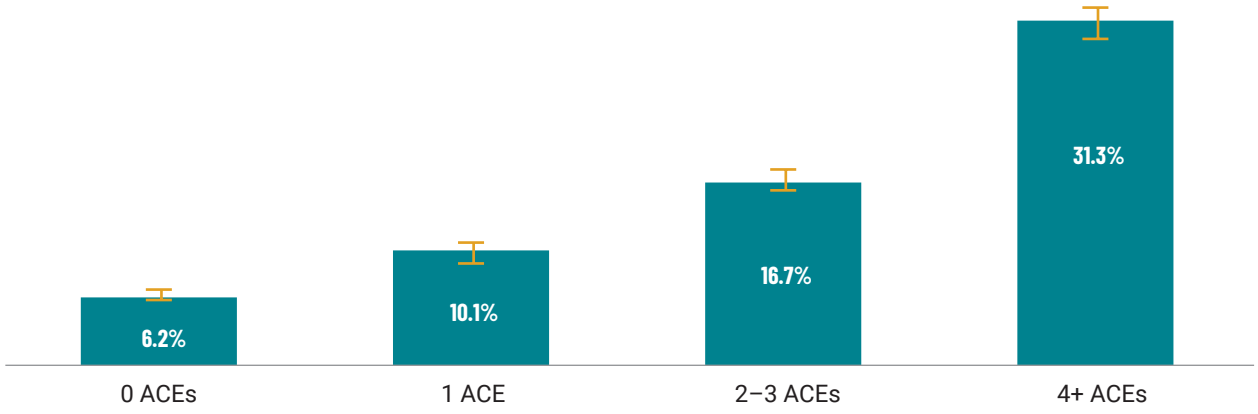
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Exposure to childhood bullying

Childhood bullying is significantly more common among young adults with four or more ACEs. Young adults were asked about their exposure to bullying during childhood. This was defined as experiencing bullying many times throughout childhood, measured using one item from ACE-IQ.

Being bullied rose with ACE exposure, with a fivefold increase from 6.2% among those with no ACEs to 31.3% among those with four or more ACEs (Fig. 33).

Fig. 33. Proportion of young adults bullied during childhood by ACE count



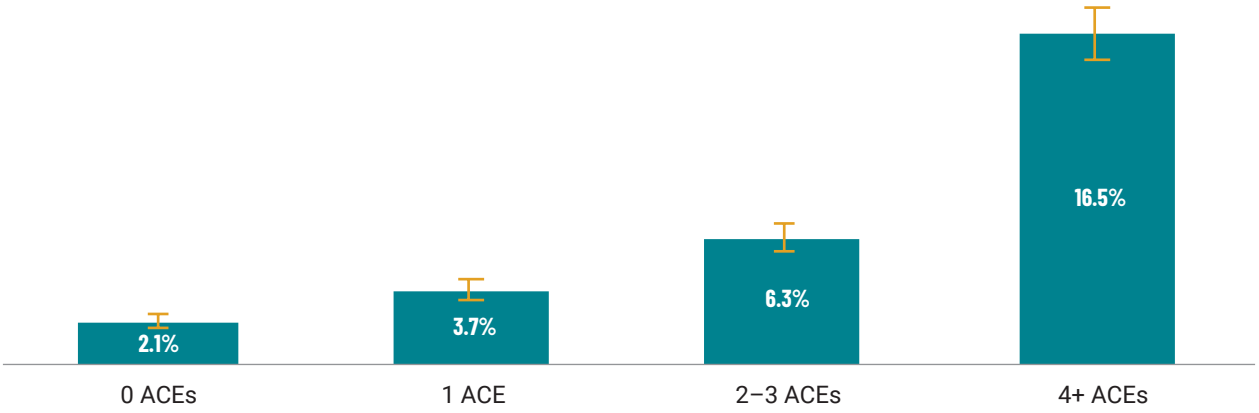
Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Exposure to cyberbullying

Exposure to cyberbullying rose markedly with ACE count. Young adults were asked about their exposure to cyberbullying during childhood. This was defined as being exposed to cyberbullying many times before the age of 19 (such as being sent mean instant messages, email or text messages).

Exposure to cyberbullying rose with ACE exposure, with an almost eightfold increase from 2.1% among those with no ACEs to 16.5% among those with four or more ACEs (Fig. 34).

Fig. 34. Proportion of young adults exposed to cyberbullying during childhood by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

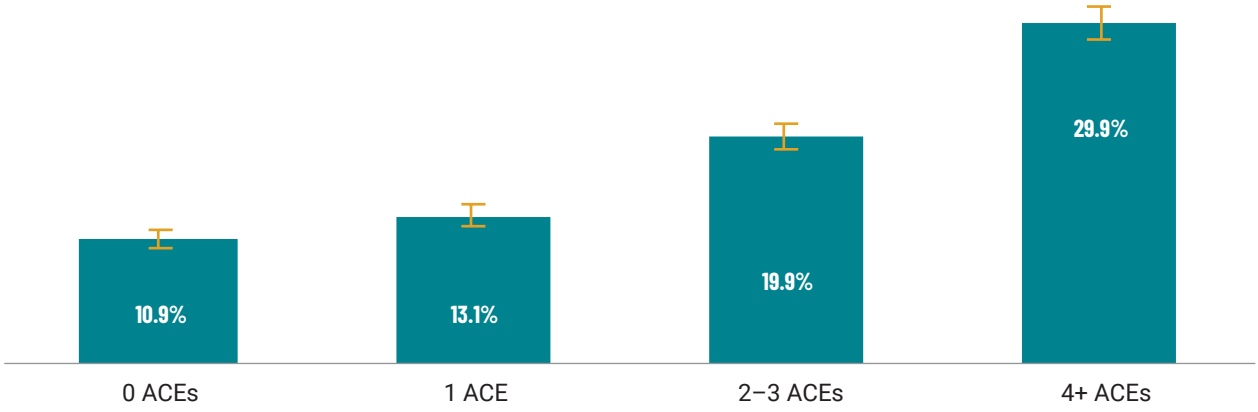
Exposure to harmful online content

Exposure to online harmful content increased with ACE exposure. Young adults were asked whether they had been exposed to harmful online content while growing up. Harmful content was defined as online content that

felt harmful or hurtful, containing violent, sexually explicit, defamatory, criminal or misinformative material – intentionally or unintentionally.

Exposure to harmful online content rose with ACE exposure, nearly tripling from 10.9% among those with no ACEs to 29.9% among those with four or more ACEs (Fig. 35).

Fig. 35. Proportion of young adults exposed to harmful online content during childhood by ACE count



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Insights: This study focused on nine ACEs commonly examined in ACE research. However, childhood trauma can extend beyond maltreatment and household adversity to include exposure to a range of other negative experiences. Notably, cyberbullying, harmful online content and other technology-mediated harms may represent emerging pathways through which social disadvantage and adversity are experienced and amplified. Future monitoring and prevention efforts should consider how digital environments interact with established ACEs and contribute to inequalities in mental health and well-being.

The study findings show that each of the experiences examined was significantly associated with increased exposure to the nine ACEs, highlighting the co-occurrence of multiple forms of childhood adversity. Exposure to these other childhood traumas increased consistently with ACE count, and prevalence was highest among those experiencing four or more ACEs. This cumulative burden is particularly important, as exposure to multiple forms of trauma is associated with substantially greater risks of adverse health, developmental and social outcomes *(57)*. For example, witnessing community violence has been linked to poorer emotional, behavioural and developmental outcomes, while exposure to collective violence can undermine children's sense of safety and contribute to long-term psychological distress *(58,59)*. Similarly, bullying and cyberbullying are associated with negative impacts on mental health, social functioning and well-being across the life course *(60,61)*. These findings underscore the importance of adopting a broader, trauma-informed approach to childhood adversity that recognizes the cumulative and interconnected nature of children's traumatic experiences.

The impact of childhood resilience on relationship between ACEs and mental health

Higher levels of resilience in childhood can reduce the impact of ACEs on mental health. This section presents the impact of childhood resilience on the association between ACEs and mental health. Childhood resilience was measured using three items related to the presence of supportive and caring adults during childhood (Box 3), while mental health was defined as feeling the need for professional mental health support in the last 12 months. Relationships between ACEs, childhood resilience and mental health were adjusted to account for age, sex, childhood deprivation, ethnic minority or migrant status, and country (see Chapter 2).

BOX 3. Building resilience in childhood

Resilience is built through relationships, communities and systems. It can be understood as the dynamic process of adapting and responding positively to stress, trauma and other forms of adversity. Key protective factors that can help to support the development of resilience during childhood include the following.

Supportive adult relationships

This refers to having at least one stable, trusted adult relationship. It may include support and security from parents, carers, other family members, friends, teachers, community organizations or professionals within public services (the main aspect of childhood resilience measured in this survey).

Social and interpersonal skills

This refers to developing the ability to communicate effectively, build positive relationships, cooperate with others and navigate different social situations. These skills can be learned through positive role models and supportive experiences.

Personal development and achievement

This refers to having opportunities to gain qualifications, develop skills and apply strengths in meaningful ways – such as through education, employment, volunteering or caring responsibilities. Opportunities to demonstrate responsibility and contribute positively can strengthen confidence and self-belief. Role models who have flourished after experiencing similar childhoods to one's own can also help with development.

Community belonging and inclusion

This refers to feeling accepted, valued and treated fairly within the community. A sense of belonging, alongside opportunities to participate in community life and maintain cultural and family traditions, can strengthen resilience and identity.

Security and basic needs

This refers to having confidence that essential needs – including food, housing, safety and financial security – will be met. Stability in these areas provides a foundation for coping with challenges.

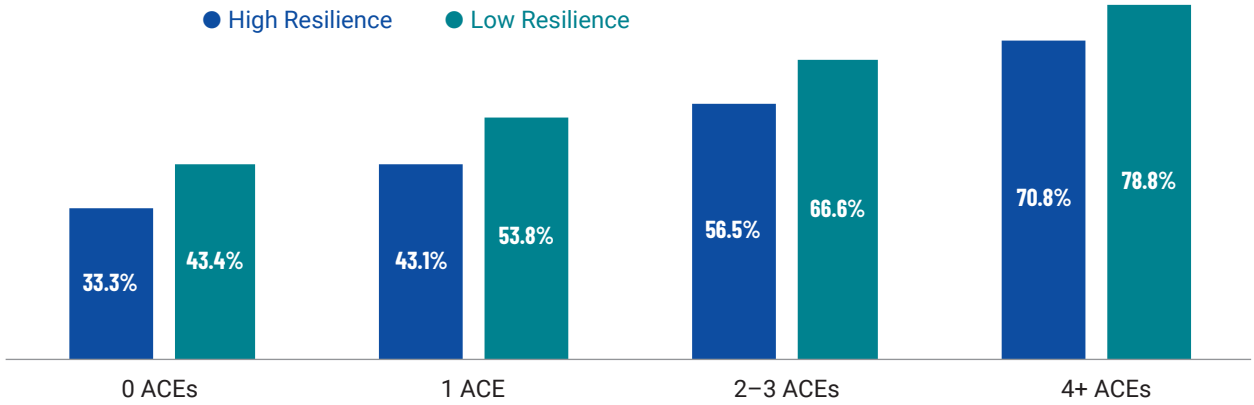
Access to specialist support

This refers to being able to access timely and appropriate mental health, emotional well-being and other specialist services when needed, which can help individuals manage difficulties and build resilience over time.

Resilience is not simply an individual characteristic; it is shaped by the quality of relationships, the availability of resources, and the wider social, economic and community environments in which people live.

The overall percentage of young adults who felt they needed mental health support significantly decreased as resilience scores increased. In contrast, the overall percentage of young adults who felt they needed mental health support significantly increased as ACEs increased. Across all ACE count categories, perceived need for mental health support was lower among those with the higher levels of resilience. For example, the share of those with four or more ACEs needing mental health support was 70.8% among those with the highest resilience and 78.8% among those with the lowest resilience (Fig. 36). Even among those with no ACEs, perceived need for mental health support was lower among those with higher levels of resilience.

Fig. 36. Proportion of young adults who felt they needed mental health support by ACE count and level of childhood resilience



Note: Error bars on all figures indicate the 95% confidence intervals, which represent the variability within the data.

Insights: Childhood resilience, measured through the presence of supportive and attentive caregivers and adults during childhood, was associated with a significantly lower likelihood of reporting a need for professional mental health support among young adults – even among those exposed to ACEs. While the need for mental health support increased substantially with rising ACE exposure, higher levels of childhood resilience consistently moderated this relationship, reducing the proportion of young adults reporting mental health difficulties in each ACE count category. These findings support existing evidence showing that supportive and stable adult relationships in childhood can act as an important protective factor, helping to buffer the long-term mental health impacts of adversity, although they do not eliminate the increased risks of life-course harms associated with high ACE exposure *(5,34)*.



4.

Policy actions

This multi-country study across the EU, Iceland and Norway points to a clear set of policy and intervention measures that can prevent ACEs, build resilience and moderate their impact, while ensuring that services and support networks are trauma-informed so that those affected can access support throughout their lives. The findings carry particular urgency because ACEs pass across generations: individuals who experienced ACEs are more likely to raise children in environments marked by mental health problems, poverty and violence – including between parents and towards children. Breaking this intergenerational cycle is both feasible and imperative.

Because ACEs originate in, and act through, the family, the school, the neighbourhood, the justice system, housing and the labour market all at once, an effective response has to move on all these fronts together. While this survey was not intended to measure prevalence of ACEs at either the national or European levels, many studies have already established that they are common, affecting large proportions of the population, with major consequences reaching into health, education, employment, income, trust and community life simultaneously. Matching that scale and overlap is the central task for policy: sustained, concurrent action across education, social protection, justice, housing, employment and health, delivered together and over the life course. However, delivering effective prevention and response requires more than identifying actions across sectors. Countries may need governance arrangements that support shared accountability, coordinated planning, needs-based resource allocation, monitoring of inequalities and public reporting on progress. Health ministries have an important convening role, but responsibility for preventing ACEs and mitigating their consequences extends across government and society.

The following sections identify a range of policy and other intervention measures that aim to prevent childhood adversity, strengthen the resilience of children and families and embed trauma-informed practice across public services. Together they reduce the long-term human, social and economic costs of ACEs and build the foundations for healthier more cohesive and more resilient societies.

Preventing ACEs: targeting root causes of childhood adversity through cross-sectoral action

Primary prevention efforts should tackle the root causes of childhood adversity at multiple levels. ACEs arise within the wider conditions in which children are born, grow, learn and live. Safe and affordable housing, adequate income, quality education, social inclusion, supportive relationships, secure neighbourhoods and accessible services are not simply protective factors but essential conditions for health and well-being. Strengthening these conditions can reduce both ACE exposure and the unequal distribution of ACEs across populations.

Based on the study findings and existing best practices, key prevention strategies include the following.

Tackling socioeconomic and community risk factors

Poverty, social exclusion and community violence are powerful drivers of ACEs. Governments should invest in upstream social and community policies that reduce these risks at the population level; for example, by:

- alleviating poverty and inequality through income support, housing stability programmes and efforts to reduce social and gender inequalities that contribute to household stress;
- preventing community violence and substance misuse through community policing, youth engagement programmes and substance use harm reduction policies to reduce children's exposure to violence and addiction in their homes and neighbourhoods;
- targeting prevention efforts towards groups shown in this study to face a disproportionate burden of ACEs – including women, those with ethnic minority or migrant status, and those growing up in deprived environments – through outreach, resourcing and inclusive service design that reflect their heightened exposure and additional barriers to support;
- at a broader scale, strengthening legal reforms and enforcement to protect children from maltreatment (such as by banning corporal punishment and strengthening child protection laws); and
- shifting harmful cultural norms – particularly around the use of violence or harsh discipline – alongside tackling structural determinants such as unemployment and inadequate housing.

Early years interventions

Investment in early childhood care and education has a dual benefit: it supports parents while also fostering child development in a safe setting. Governments should invest in high-quality, universal early years programmes that detect trauma early and build strong parenting and family relationships; for example, by:

- strengthening routine well-child visits within primary health care, including developmental surveillance, parental support, early identification of family stressors, neglect, violence and other risk factors, and referral pathways to appropriate health, social and protection services when concerns are identified; and
- investing in universal programmes promoting positive parenting and family relationships that teach caregivers skills in managing stress, non-violent discipline strategies and child attachment (such as evidence-based home visits and preschool enrichment programmes) – ensuring that these are accessible for families with ethnic minority or migrant status.

These efforts not only prevent immediate harm but also yield long-term societal benefits in health, educational attainment and productivity by giving children a stronger start in life.

Supporting parents, caregivers and families

Many ACEs can be prevented by strengthening families and ensuring that children grow up in safe, stable and nurturing environments. Governments should invest in accessible, evidence-based support for parents and caregivers – particularly in deprived communities; for example, by:

- delivering home visiting programmes by nurses that provide guidance and support to new parents, as these have shown positive impacts on parenting and child outcomes;
- expanding parenting programmes and family support services that address known triggers of abuse and neglect – such as caregiver substance misuse, mental health problems or domestic violence – especially in deprived communities; and
- reducing family stress through paid parental leave, affordable childcare and community-based parenting classes, which can bolster parents' capacity to provide a safe and nurturing upbringing.

Healthy relationships, gender equality and violence prevention

Evidence increasingly suggests that preventing childhood adversity requires attention to the social norms and relationship dynamics that shape the risk of violence across the life course. Exposure to violence in childhood can influence attitudes towards relationships, conflict resolution and the acceptability of violence. Therefore, investment in strategies and interventions that promote healthy relationships, gender equality, respectful communication and consent can include:

- delivering comprehensive sexuality education in schools and community settings, to equip children and adolescents with the knowledge, skills and attitudes to build respectful relationships and recognize unhealthy, coercive or violent behaviours;
- providing relationship education that supports young people in developing conflict resolution and communication skills; and
- addressing harmful social and gender norms that normalize violence or unequal power dynamics within relationships and families.

Building resilience: strengthening protective factors across the life course

Even when ACEs cannot be eliminated, building resilience can help individuals to withstand and recover from adversity. Resilience is shaped by the presence of protective factors in childhood and beyond. A stable, caring relationship with at least one supportive adult (such as a parent, teacher, coach, police officer or mentor) is one of the most potent buffers against the impacts of trauma from ACEs; therefore, resilience-building strategies deserve emphasis in European policy and practice; for example, by:

- enhancing supportive relationships by investing in evidence-based mentorship programmes, family mentoring and community-based youth clubs that provide support and positive role models, and "Big Brothers Big Sisters" mentoring programmes; and
- training parents, teachers, youth workers and other groups in regular contact with young people to build emotional literacy and foster safe, trusting relationships with children to strengthen those essential bonds.

While this study focuses on supportive adult relationships as a source of resilience, resilience is also influenced by boarder social, institutional and community factors. Safe and supportive services, inclusive environments, gender equality and opportunities for participation may all contribute to reducing the long-term impacts of childhood adversity.

Life skills and education for coping

Resilience can be cultivated through social–emotional learning and skills training that help children and adolescents manage stress, build self-esteem and solve conflicts constructively. Schools are a critical platform for this work, and can contribute more broadly through a whole-school Health Promoting Schools approach that integrates health and well-being into school policies, the physical and social environment, partnerships with families and communities, and access to support services. Governments should invest in embedding evidence-based preventive curricula throughout education systems, while also ensuring that young adults who have already experienced ACEs have access to skills building support; for example, by:

- embedding social–emotional learning in schools, to teach children and adolescents coping strategies, emotional regulation and healthy relationship skills;
- supporting adoption of a Health Promoting Schools approach, to strengthen protective factors, promote resilience and help identify children experiencing adversity at an early stage;
- delivering evidence-based school programmes – such as school-based life skills education and antibullying initiatives – to equip children with problem-solving and communication skills that help to mitigate ACE impacts and reduce the risk of future adversity; and
- supporting young adults who have already experienced ACEs through targeted interventions like peer support groups, mental health services (such as counselling) and skills workshops (for managing anger, or financial stress and parental coping).

Empowering communities and leveraging cultural strengths

Resilience is also fostered by connected, supportive communities (something often lacking for those with ACEs) (see Box 3), and governments should invest in initiatives that build social cohesion and cultural belonging, and reduce loneliness – particularly for marginalized young people and those with ethnic minority or migrant status; for example, by:

- investing in community programmes that boost social cohesion and trust such as sports, arts or volunteering initiatives; and
- delivering culturally tailored interventions that engage extended family networks and give access to cultural traditions, providing additional layers of support and identity especially for marginalized young people and those with ethnic minority or migrant status.

Trauma-informed systems: reshaping responsive and healing services

While primary prevention and resilience building are ideal, many young people will inevitably still experience ACEs – often with few or no resilience assets moderating their impacts on health and well-being. Consequently, it is crucial for public policy and services to respond in a trauma-informed way. Trauma-informed health, education, justice and social care systems can recognize and address the needs of individuals with ACE histories sensitively, without re-traumatizing them. Findings that trauma-exposed young adults have reduced trust in individuals and localities underscore the need for reforms that make services more accessible, safe and attuned to past trauma. Key actions include the following.

Training and awareness for professionals

Front-line practitioners – from doctors and nurses to teachers, social workers, police officers and employers – can receive training on ACEs and trauma-informed care. This training helps professionals to recognize signs of trauma and adjust their interactions accordingly (for example, by using empathy, offering choices and control, and avoiding practices that could trigger traumatic memories). An informed workforce is better equipped to engage vulnerable young people, build trust and guide them to help, thereby reducing barriers to accessing care.

Understanding ACE histories and developing referral pathways

While the benefits or harms of routine enquiries about ACEs or trauma exposure in medical, educational or justice settings is still a matter of debate, individuals' trauma histories should be an important consideration in their care. Young people with significant ACE histories and trauma-related needs require pathways that connect them to appropriate support. This can be facilitated through integrated multi-sector collaboration – so that, for instance, a teacher's concern about a student's family environment can quickly mobilize health-related support or child protection if needed.

Reshaping service delivery

Adopting a trauma-informed lens often involves organizational change. Health, social care, education and criminal justice agencies can review their policies and environments to ensure that they foster trust and healing. For example, the health system might provide additional support or different settings for individuals who have had intensive trauma-related contact with health services in childhood; schools might implement restorative practices instead of punitive discipline; and police might develop protocols to handle cases involving trauma – especially trauma to children – sensitively.

Many of the evidence-informed approaches described above are detailed in the publications listed in Box 4.

BOX 4. A selection of publications that summarize evidence on preventing ACEs, building resilience and developing trauma-informed services

- *Tackling adverse childhood experiences (ACEs): state of the art and options for action (1)* is an evidence summary of ACEs and what works to prevent ACEs, develop resilience and support the development of a trauma-informed society.
- *A practical handbook on adverse childhood experiences (ACEs): delivering prevention, building resilience and developing trauma-informed systems – a resource for professionals and organisations (13)* is a resource that supports action on ACEs by providing practical advice on implementing work to prevent ACEs, build resilience and develop trauma-informed organizations, sectors and systems.
- *INSPIRE: seven strategies for ending violence against children (62)* is an evidence-based framework developed by WHO to prevent and respond to child abuse and violence. It outlines seven core strategies proven to reduce child maltreatment – designed for governments, civil society and communities.
- *Preventing violence against children: a social determinants framework for INSPIRE implementation (63)* is an evidence-based framework presenting seven policy and legislative strategies that either directly prevent violence against children or positively influence intermediary determinants that affect children's risk of violence.
- *Respect women: preventing violence against women (64)* is an evidence-based framework for policy-makers to strengthen and scale up efforts to prevent violence against women.
- *International technical guidance on sexuality education (65)* was developed to assist education, health and other relevant authorities in the development and implementation of school-based and out-of-school comprehensive sexuality education programmes and materials.
- *Helping Adolescents Thrive Toolkit (66)* provides a set of evidence-informed strategies to promote and protect adolescent mental health, focusing on implementation and enforcement of laws and policies; environments to promote and protect adolescent mental health; provision of support to parents and other caregivers; and psychosocial interventions for adolescents, including for groups exposed to vulnerabilities.
- *Pocket book of primary health care for children and adolescents (67)* is a set of guidelines for health promotion, disease prevention and management from the newborn period to adolescence.
- *Making every school a health-promoting schools (68)* provides practical strategies to implement and strengthen school health services as part of a whole-school approach. It serves as the implementation guidance for the *WHO guideline on school health services (68)*.

The economic case: why investment in prevention and early intervention pays off

While implementation of the measures described above requires public investment, the costs of inaction are considerable. Given the evidence supporting the effectiveness and cost–effectiveness of many ACE prevention and mitigation programmes, scaling up action across Europe is likely to yield substantial returns on investment through improved health, well-being, educational attainment, labour market participation and productivity, social cohesion, and reduced demand on public services.

For instance, home visiting programmes, such as the Nurse-Family Partnership *(69)* – which aims to create safer home environments, strengthen parenting skills, and connect families with health and social services – have been found to generate savings of around four times the cost of implementation. Evidence across several countries suggests that parenting programmes have large benefit-to-cost ratios in preventing violence against children, as do programmes aimed at preventing school bullying.

For participants in this survey, QALY-based calculations suggest a loss of up to €75 759 per person over 13 years. Based on a conservative 10% of Europeans (aged 18–30 years) having experienced four or more ACEs, costs from exposure to four or more ACEs alone would exceed €40 billion per year. While substantive, these costs exclude those resulting from long-term conditions typically arising in later life (such as type 2 diabetes, cancer, respiratory disease and cardiovascular disease). In other studies examining older cohorts, such noncommunicable diseases have also been found to be strongly associated with ACEs. However, in this study, the results indicate that individuals in early adulthood with any number of ACEs are already showing an accelerated trajectory towards long-term ill health (see Fig. 8–11).

Moreover, costs associated with lowered feelings of connectedness to communities and to geographical and administrative regions are also not reflected in calculations. However, these are also likely to be substantive – ranging from the costs of major harms to mental and physical health known to result from loneliness, to the antisocial behaviours and community tensions that can arise when individuals and groups do not feel grounded in their localities or represented by administrations (see Fig. 27–30).



5.
Conclusions

This first 29-country ACE study across the EU, Iceland and Norway highlights the substantial and pervasive impact of ACEs on young adults aged 18–30 years across participating countries. Multiple studies already identify ACEs are both common across Europe. This study, using a consistent methodology across all countries, reveals that they are both common and strongly associated with poorer outcomes across multiple domains – including mental health, health-related quality of life, education, employment, income, exposure to violence in adulthood and other childhood traumas, and levels of trust and community connectedness. The findings show consistently that an increase in the number of ACEs experienced is associated with a higher risk of adverse outcomes as adulthood begins. However, they also emphasize that these relationships are not deterministic. Many young adults with high ACE counts achieve positive educational and employment outcomes, illustrating the potential importance of resilience and protective factors, which can alter the health and economic trajectory of young adults even with high ACE counts *(5,34)*. These results reinforce the importance of recognizing ACEs as a major public health and societal issue across the WHO European Region, with implications that extend beyond individual well-being to economic productivity, public service demand and community cohesion. The growing importance of harmful online content, cyberbullying and other forms of online exposure also highlights the need to understand how changing social and digital environments shape childhood adversity. Emerging evidence suggests that technology-facilitated forms of abuse and harmful relationship dynamics may represent additional pathways linking childhood adversity to poor health and social outcomes.

The evidence presented here builds on the existing evidence base, and makes a compelling case for coordinated, multi-level policy responses that prioritize prevention, resilience-building and trauma-informed systems. Investing in safe and nurturing childhoods, addressing socioeconomic inequalities, and strengthening family and community support structures are essential to reducing the extent and impact of ACEs. At the same time, embedding trauma-informed approaches across health, education and social care can improve access to and effectiveness of support for those already affected. Given the significant human and economic costs associated with unaddressed ACEs – including losses in healthy life-years and productivity – such investments are likely to yield substantial returns for individuals, communities and European societies. While it is the responsibility of individual countries to understand the scale and trajectory of ACEs within their populations, the study findings suggest that reducing childhood adversity offers universal benefits. By preventing ACEs and disrupting intergenerational cycles of harm, countries can improve population health and health equity, strengthen social cohesion, and support the long-term resilience, prosperity and sustainable development within nations and across Europe.



References[7]

[7] All references were accessed on 13–17 August 2026.

1. Bellis MA, Wood S, Hughes K, Quigg Z, Butler N., Brown C and Passmore, J Tackling adverse childhood experiences (ACEs): state of the art and options for action. Wrexham: Public Health Wales NHS Trust; 2023 (https://phw.nhs.wales/reports/tackling-adverse-childhood-experiences-aces-state-of-the-art-and-options-for-action/).

2. Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. Am J Prev Med. 1998;14(4):245–258 (https://doi.org/10.1016/s0749-3797(98)00017-8).

3. Hughes K, Bellis MA, Hardcastle KA, Sethi D, Butchart A, Mikton C et al. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. Lancet Public Health. 2017;2(8):e356–e366 (https://doi.org/10.1016/S2468-2667(17)30118-4).

4. Bhutta ZA, Bhavnani S, Betancourt TS, Tomlinson M, Patel V. Adverse childhood experiences and lifelong health. Nature Med. 2023;9(7):1639–1648 (https://doi.org/10.1038/s41591-023-02426-0).

5. Quigg Z, Bellis MA, Butler N, Wilson C, Harris J, Hearne E et al. Adverse childhood experiences, and violence and criminal justice outcomes in adulthood – the moderating role of protective and compensatory childhood experiences. BMC Med. 2025;23(1):632 (https://doi.org/10.1186/s12916-025-04459-3).

6. Hughes K, Bellis MA, Sethi D, Andrew R, Yon Y, Wood S et al. Adverse childhood experiences, childhood relationships and associated substance use and mental health in young Europeans. Eur J Public Health. 2019;29(4):741–747 (https://doi.org/10.1093/eurpub/ckz037).

7. Bellis MA, Hughes K, Ford K, Ramos Rodriguez G, Sethi D, Passmore J. Life course health consequences and associated annual costs of adverse childhood experiences across Europe and North America: a systematic review and meta-analysis. Lancet Public Health. 2019;4(10):e517–e528 (https://doi.org/10.1016/S2468-2667(19)30145-8)

8. Second European Programme of Work, 2026–2030: United Action for Better Health. Copenhagen: WHO Regional Office for Europe; 2026 (https://iris.who.int/handle/10665/386586). Licence: CC BY-NC-SA 3.0 IGO.

9. Seventy-fifth Regional Committee for Europe: Copenhagen, 28–30 October 2025: a healthy start for a healthy life: a strategy for child and adolescent health and well-being in the WHO European Region, 2026–2030. Copenhagen: WHO Regional Office for Europe; 2025 (https://iris.who.int/handle/10665/382728).

10. Special Initiative on Violence against Women and Girls [website]. WHO Regional Office for Europe; 2026 (https://www.who.int/europe/initiatives/special-initiative-on-violence-against-women-and-girls-sivawg).

11. Communication on a comprehensive approach to mental health. Brussels: European Commission; 2023 (COM(2023) 298 final; https://health.ec.europa.eu/publications/comprehensive-approach-mental-health_en).

12. World Health Organization. Adverse Childhood Experiences International Questionnaire. In Adverse Childhood Experiences International Questionnaire (ACE-IQ). [website]: Geneva: WHO, 2018. (https://www.who.int/publications/m/item/adverse-childhood-experiences-international-questionnaire-%28ace-iq%29).

13. Wood S, Janssen H, Hughes K, Passmore J, Bellis MA. A practical handbook on adverse childhood experiences (ACEs): delivering prevention, building resilience and developing trauma-informed systems – a resource for professionals and organisations. Wrexham: Public Health Wales NHS Trust; 2023 (https://phwwhocc.co.uk/resources/a-practical-handbook-on-adverse-childhood-experiences-aces/).

14. The EU Strategy on the Rights of the Child and the European Child Guarantee [website]. European Commission; 2026 (https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/rights-child/eu-strategy-rights-child-and-european-child-guarantee_en).

15. European Commission. A new EU approach to mental health. Publications Office of the European Union; 2023 (https://data.europa.eu/doi/10.2875/654952).

16. Sethi D, Yon Y, Parekh N, Anderson T, Huber J, Rakovac I et al. European status report on preventing child maltreatment. Copenhagen: WHO Regional Office for Europe; 2018 (https://iris.who.int/handle/10665/342240).

17. Policy brief: child and adolescent mental health – the state of the children in the EU 2024. New York: United Nations Children's Fund; 2024 (https://www.unicef.org/eu/documents/policy-brief-child-and-adolescent-mental-health).

18. Shonkoff JP, Garner AS. The lifelong effects of early childhood adversity and toxic stress. Pediatrics. 2012;129(1):e232–e246 (https://doi.org/10.1542/peds.2011-2663).

19. Fagan AA. Adverse childhood experiences and adolescent exposure to violence. J Interpers Violence. 2022;37(3–4):1708–1731 (https://doi.org/10.1177/0886260520926310).

20. Graf GH, Chihuri S, Blow M, Li G. Adverse childhood experiences and justice system contact: a systematic review. Pediatrics. 2021;147(1):e2020021030 (https://doi.org/10.1542/peds.2020-021030).

21. Bellis MA, Hughes K, Ford K, Hardcastle KA, Sharp CA, Wood S et al. Adverse childhood experiences and sources of childhood resilience: a retrospective study of their combined relationships with child health and educational attendance. BMC Public Health. 2018;8(1):792 (https://doi.org/10.1186/s12889-018-5699-8).

22. Sonu S, Post S, Feinglass J. Adverse childhood experiences and the onset of chronic disease in young adulthood. Prev Med. 2019;123:163–170 (https://doi.org/10.1016/j.ypmed.2019.03.032).

23. Rogers CJ, Pakdaman S, Forster M, Sussman S, Grigsby TJ, Victoria J et al. Effects of multiple adverse childhood experiences on substance use in young adults: a review of the literature. Drug Alcohol Depend. 2022;234:109407 (https://doi.org/10.1016/j.drugalcdep.2022.109407).

24. Merrill RM, Scott EN, Sumsion L. Adverse childhood experiences impact unemployment and inability to work among adults in the United States. Front Psychol. 2026;17:1630105 (https://doi.org/10.3389/fpsyg.2026.1630105).

25. Hardcastle K, Bellis MA, Ford K, Hughes K, Garner J, Ramos Rodiguez G. Measuring the relationships between adverse childhood experiences and educational and employment success in England and Wales: findings from a retrospective study. Public Health. 2018;165:106–116 (https://doi.org/10.1016/j.puhe.2018.09.014).

26. Metzler M, Merrick MT, Klevens J, Ports KA, Ford DC. Adverse childhood experiences and life opportunities: shifting the narrative. Children Youth Serv Rev. 2017;72:141–149 (https://doi.org/10.1016/j.childyouth.2016.10.021).

27. Schurer S, Trajkovski K, Hariharan T. Understanding the mechanisms through which adverse childhood experiences affect lifetime economic outcomes. Labour Economics. 2019;61:101743 (https://doi.org/10.1016/j.labeco.2019.06.007).

28. Hughes K, Ford K, Bellis MA, Glendinning F, Harrison E, Passmore J. Health and financial costs of adverse childhood experiences in 28 European countries: a systematic review and meta-analysis. Lancet Public Health. 2021. 6(11):e848–e857 (https://doi.org/10.1016/S2468-2667(21)00232-2).

29. Russotti J, Warmingham JM, Handley ED, Rogosch FA, Cicchetti D. Child maltreatment: an intergenerational cascades model of risk processes potentiating child psychopathology. Child Abuse Negl. 2021;112:104829 (https://doi.org/10.1016/j.chiabu.2020.104829).

30. Pear VA, Petito LC, Abrams B. The role of maternal adverse childhood experiences and race in intergenerational high-risk smoking behaviors. Nicotine Tob Res. 2017;19(5):623–630 (https://doi.org/10.1093/ntr/ntw295).

31. Sun J, Patel F, Rose-Jacobs R, Frank DA, Black MM, Chilton M. Mothers' adverse childhood experiences and their young children's development. Am J Prev Med. 2017;53(6):882–891 (https://doi.org/10.1016/j.amepre.2017.07.015).

32. Doi S, Fujiwara T, Isumi A. Association between maternal adverse childhood experiences and mental health problems in offspring: an intergenerational study. Dev Psychopathol. 2021;33(3):1041–1058 (https://doi.org/10.1017/S0954579420000334).

33. Plant DT, Pawlby S, Pariante CM, Jones FW. When one childhood meets another – maternal childhood trauma and offspring child psychopathology: a systematic review. Clin Child Psychol Psychiatry. 2018;23(3):483–500 (https://doi.org/10.1177/1359104517742186).

34. Bellis MA, Hardcastle K, Ford K, Hughes K, Ashton K, Quigg Z et al. Does continuous trusted adult support in childhood impart life-course resilience against adverse childhood experiences - a retrospective study on adult health-harming behaviours and mental well-being. BMC Psychiatry. 2017;17(1):110 (https://doi.org/10.1186/s12888-017-1260-z).

35. The economic case for preventing mental ill health. Paris: OECD Publishing; 2026 (https://doi.org/10.1787/16668f16-en).

36. Child and youth mental health in the WHO European Region Status and actions to strengthen quality of care. Copenhagen: WHO Regional Office for Europe; 2025 (https://iris.who.int/handle/10665/383353). Licence: CC BY-NC-SA 3.0 IGO.

37. Panisch LS, LaBrenz CA, Lawson J, Gerlach B, Tennant PS, Nulu S et al. Relationships between adverse childhood experiences and protective factors among parents at-risk for child maltreatment. Child Youth Serv Rev. 2020;110:104816 (https://doi.org/10.1016/j.childyouth.2020.104816).

38. Russell KN, Voith LA, Withrow AS. Exploring the link between adverse childhood experiences and adolescent dating violence perpetration and victimization: a review of the literature. Youth. 2024;4(4):1505–1513 (https://doi.org/10.3390/youth4040096).

39. Zhu J, Exner-Cortens D, Dobson K, Wells L, Noel M, Madigan S. Adverse childhood experiences and intimate partner violence: a meta-analysis. Dev Psychopathol. 2024;36(2):929–943 (https://doi.org/10.1017/S0954579423000196).

40. Marchment Z, Clemmow C, Gill P. Adverse childhood experiences and susceptibility to violent extremism. Terror Polit Violence. 2025;1–15 (https://doi.org/10.1080/09546553.2025.2557594).

41. Violence and injuries in Europe: burden, prevention and priorities for action. Copenhagen: WHO Regional Office for Europe; 2020 (https://iris.who.int/handle/10665/332919). Licence: CC BY-NC-SA 3.0 IGO.

42. Sustainable Development Goals [website]. New York: United Nations; 2026 (https://sdgs.un.org/goals).

43. EQ-5D-5L [website]. EuroQol; 2026 (https://euroqol.org/information-and-support/euroqol-instruments/eq-5d-5l/).

44. Łaszewska A, Sajjad A, Busschbach J, Simon J, Hakkaart-van Roijen L. Conceptual framework for optimised proxy value set selection through supra-national value set development for the EQ-5D instruments. PharmacoEconomics. 2022;40:1221–1234 (https://doi.org/10.1007/s40273-022-01194-y).

45. Dolan P. Modeling valuations for EuroQol health states. Med Care. 1997;35(11):1095–108 (https://doi.org/10.1097/00005650-199711000-00002).

46. Population on 1 January by age and sex [website]. Eurostat; 2026 https://ec.europa.eu/eurostat/databrowser/view/demo_pja/default/table?lang=en).

47. Gross domestic product (GDP) and main components per capita - annual data [website]. Eurostat; 2026 (https://ec.europa.eu/eurostat/databrowser/view/nama_10_pc/default/table?lang=en).

48. Bellis MA, Ashton K, Hughes K, Ford K, Bishop J, Bishop S. Adverse childhood experiences and their impact on health-harming behaviours in the Welsh adult population. Wrexham: Public Health Wales NHS Trust; 2016 (https://phw.nhs.wales/reports/adverse-childhood-experiences-and-their-impact-on-health-harming-behaviours-in-the-welsh-adult-population/).

49. Bellis MA, Hughes K, Leckenby N, Perkins C, Lowey H. National household survey of adverse childhood experiences and their relationship with resilience to health-harming behaviors in England. BMC Med. 2014;12(1):72 (https://doi.org/10.1186/1741-7015-12-72).

50. Alabbad A, Cochrane M, Mitchell PM. Preferences for health-related quality of life: do they vary by age? A systematic literature review on the EQ-5D measure. Eur J Health Econ. 2025;26(7):1275–1291 (https://doi.org/10.1007/s10198-025-01766-7).

51. Bellis MA, Hughes K, Hardcastle K, Ashton K, Ford K, Quigg Z et al. The impact of adverse childhood experiences on health service use across the life course using a retrospective cohort study. J Health Serv Res Policy. 2017;22(3):168–177 (https://doi.org/10.1177/1355819617706720).

52. Harter CL, Harter JFR. The link between adverse childhood experiences and financial security in adulthood. J Fam Econ Iss. 2022;43:832–842 (https://doi.org/10.1007/s10834-021-09796-y).

53. Bellis MA, Hughes K, Ford K, Quigg Z, Butler N, Wilson C. Comparative relationships between physical and verbal abuse of children, life course mental well-being and trends in exposure: a multi-study secondary analysis of cross-sectional surveys in England and Wales. BMJ Open. 2025;15:e098412 (https://doi.org/10.1136/bmjopen-2024-098412).

54. Bellis MA, Hughes K, Ford K, Sharp C, Hill R. Associations between adverse childhood experiences and trust in health and other information from public services, professionals and wider sources: national cross sectional survey. BMJ Public Health. 2024;2(1):e000868 (https://doi.org/10.1136/bmjph-2023-000868).

55. Bellis MA, Hughes K, Ford K, Madden HCE, Glendinning F, Wood S. Associations between adverse childhood experiences, attitudes towards COVID-19 restrictions and vaccine hesitancy: a cross-sectional study. BMJ Open. 2022;12(2):e053915 (https://doi.org/10.1136/bmjopen-2021-053915).

56. Fowler Davis S, Davies M. Understanding the effects of social cohesion on social wellbeing: a scoping review. Int J Public Health. 2025;70:1607414 (https://doi.org/10.3389/ijph.2025.1607414).

57. Finkelhor D, Shattuck A, Turner H, Hamby S. A revised inventory of adverse childhood experiences. Child Abuse Negl. 2015;48:13–21 (https://doi.org/10.1016/j.chiabu.2015.07.011).

58. Ceballo R, Alers-Rojas F, Mora AS, Cranford JA. Exposure to community violence: toward a more expansive definition and approach to research. Child Dev Perspect. 2022;16: 96–102 (https://doi.org/10.1111/cdep.12448).

59. Sharma, N., Dajani, R., Tofail, F., Black, C., Tutlam, N., & Bhutta, Z. A. (2026). Long term effects of childhood exposure to violence in fragile and conflict affected settings. BMJ (Clinical research ed.). 2026; 392: e086040 (https://doi.org/10.1136/bmj-2025-086040).

60. Juvonen J, Graham S. Bullying in schools: the power of bullies and the plight of victims. Annu Rev Psychol. 2014;65:159–185 (https://doi.org/10.1146/annurev-psych-010213-115030).

61. Hutson E, Kelly S, Militello LK. Systematic review of cyberbullying interventions for youth and parents with implications for evidence-based practice. Worldviews Evid Based Nurs. 2018;15(1):72–79 (https://doi.org/10.1111/wvn.12257).

62. INSPIRE: seven strategies for ending violence against children. Geneva: World Health Organization; 2016 (https://iris.who.int/handle/10665/207717). Licence: CC BY-NC-SA 3.0 IGO.

63. Preventing violence against children: a social determinants framework for INSPIRE implementation. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/381460). Licence: CC BY-NC-SA 3.0 IGO.

64. Respect women: preventing violence against women, second edition. Geneva: World Health Organization; 2025 (https://iris.who.int/handle/10665/383401). Licence: CC BY-NC-SA 3.0 IGO.

65. United Nations Educational, Scientific and Cultural Organization (UNESCO); 2018 (https://unesdoc.unesco.org/ark:/48223/pf0000260770). License: http://creativecommons.org/licenses/by-nc-nd/3.0/igo/.

66. World Health Organization & United Nations Children's Fund. Helping adolescents thrive toolkit: strategies to promote and protect adolescent mental health and reduce self-harm and other risk behaviours. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/341327). License: CC BY-NC-SA 3.0 IGO

67. Pocket book of primary health care for children and adolescents: guidelines for health promotion, disease prevention and management from the newborn period to adolescence. Copenhagen: WHO Regional Office for Europe; 2022. (https://www.who.int/europe/publications/i/item/9789289057622). Licence: CC BYNC-SA 3.0 IGO.

68. Making every school a health-promoting school: implementation guidance for school health services. Geneva: World Health Organization; 2025. (https://iris.who.int/items/c8f012a1-1a12-4cec-9202-9f9b972a0763). Licence: CC BY-NC-SA 3.0 IGO.

69. Nurse-Family Partnership [website]. Office for Health Improvement and Disparities, United Kingdom Government; 2024 (https://www.gov.uk/guidance/family-nurse-partnership-programme).

Annexes



Annex 1. Individual country sampling methods

Details of the specific sampling method for each country are provided in Table A1, including the country regions used for sampling stratification, the languages the survey was available in, the recruitment method and total country sample size.

Table A1. Sampling methods by country

Country	Country regions	Survey languages available	Recruitment method	Sample size
Austria	Burgenland, Kärnten, Niederösterreich, Oberösterreich, Salzburg (Land), Steiermark, Tirol, Vorarlberg, Wien (Land)	German	Online	1011
Belgium	Anvers/Antwerpen, Brabant Flamand/Vlaams-Brabant, Brabant Wallon/Waals-Brabant, Flandre Occidentale/West-Vlaanderen, Flandre Orientale/Oost-Vlaanderen, Hainaut/Henegouwen, Liège/Luik, Limbourg/Limburg, Luxembourg/Luxemburg, Namur/Namen, Région de Bruxelles-Capitale/Brussels Hoofdstede	Dutch and French	Online	1004
Bulgaria	Северен централен (Severen tsentralen), Североизточен (Severoiztochen), Северозападен (Severozapaden), Югоизточен (Yugoiztochen), Югозападен (Yugozapaden), Южен централен (Yuzhen tsentralen)	Bulgarian	Online	1004
Croatia	Grad Zagreb, Jadranska Hrvatska, Panonska Hrvatska, Sjeverna Hrvatska	Croatian	Online	1008
Cyprus	Famagusta, Larnaca, Limassol, Nicosia, Paphos	Greek	Online	501
Czechia	Jihozápad, Jihovýchod, Moravskoslezsko, Praha, Severovýchod, Severozápad, Střední Čechy, Střední Morava	Czech	Online	1006
Denmark	Hovedstaden, Midtjylland, Nordjylland, Sjælland, Syddanmark	Danish	Online	1008
Estonia	Kesk-Eesti, Kirde-Eesti, Lõuna-Eesti, Lääne-Eesti, Põhja-Eesti	Estonian and Russian	Online	1002
Finland	Ahvenanmaa, Etelä-Suomi, Helsinki-Uusimaa, Länsi-Suomi, Pohjois- ja Itä-Suomi	Finnish and Swedish	Online	1017

Country	Country regions	Survey languages available	Recruitment method	Sample size
France	Alsace, Aquitaine, Auvergne, Basse-Normandie, Bourgogne, Bretagne, Centre, Champagne-Ardenne, Corse, Franche-Comté, Haute-Normandie, Île-de-France, Languedoc-Roussillon, Limousin, Lorraine, Midi-Pyrénées, Nord-Pas-de-Calais, Pays de la Loire, Picardie, Poitou-Charentes, Provence-Alpes-Côte d'Azur, Rhône-Alpes	French	Online	1012
Germany	Baden-Württemberg, Bayern, Berlin, Brandenburg, Bremen, Hamburg, Hessen, Mecklenburg-Vorpommern, Niedersachsen, Nordrhein-Westfalen, Rheinland-Pfalz, Saarland, Sachsen, Sachsen-Anhalt, Schleswig-Holstein, Thüringen	German	Online	1011
Greece	Anatoliki Makedonia, Thraki, Attiki, Dytiki Ellada, Dytiki Makedonia, Ionia Nisia, Ipeiros, Kentriki Makedonia, Kriti, Notio Aigaio, Peloponnisos, Sterea Ellada, Thessalia, Voreio Aigaio	Greek	Online	1001
Hungary	Budapest, Dél-Alföld, Dél-Dunántúl, Észak-Alföld, Észak-Magyarország, Közép-Dunántúl, Nyugat-Dunántúl, Pest	Hungarian	Online	1006
Iceland	Capital Region, Eastern Region, Northeastern Region, Northwestern Region, Southern Peninsula, Southern Region, Westfjords, Western Region	Icelandic	Telephone	511
Ireland	Eastern and Midland Region, Northern and Western Region, Southern Region	English	Online and telephone	511
Italy	Abruzzo, Basilicata, Calabria, Campania, Emilia Romagna, Friuli Venezia Giulia, Lazio, Liguria, Lombardia, Marche, Molise, Piemonte, Puglia, Sardegna, Sicilia, Toscana, Trentino Alto Adige, Umbria, Valle d'Aosta, Veneto	Italian	Online	1016
Latvia	Kurzeme, Latgale, Pierīga, Rīga, Vidzeme, Zemgale	Latvian and Russian	Online	1003
Lithuania	Sostinės regionas, Vidurio ir vakarų Lietuvos regionas	Lithuanian	Online	1006
Luxembourg	–	French, German and Luxembourgish	Online	503
Malta	Gozo and Comino, Northern, Northern Harbour, South Eastern, Southern Harbour, Western	Maltese and English	Online and telephone	500
Netherlands (Kingdom of the)	Drenthe, Flevoland, Friesland, Gelderland, Groningen, Limburg, Noord-Brabant, Noord-Holland, Overijssel, Utrecht, Zeeland, Zuid-Holland	Dutch	Online	1012

Country	Country regions	Survey languages available	Recruitment method	Sample size
Norway	Agder og Sør-Østlandet, Innlandet, Nord-Norge, Oslo og Viken, Trøndelag, Vestlandet	Norwegian	Online	1005
Poland	Dolnośląskie, Kujawsko-Pomorskie, Lubelskie, Lubuskie, Łódzkie, Małopolskie, Mazowieckie, Opolskie, Podkarpackie, Podlaskie, Pomorskie, Śląskie, Świętokrzyskie, Warmińsko-Mazurskie, Wielkopolskie, Zachodniopomorskie	Polish	Online	1044
Portugal	Alentejo, Algarve, Centro, Lisboa, Norte, Região Autónoma da Madeira, Região Autónoma dos Açores	Portuguese	Online	1001
Romania	Bucuresti, Centru, Nord-Est, Nord-Vest, Sud, Sud-Est, Sud-Vest, Vest	Romanian	Online	1004
Slovakia	Bratislavský kraj, Stredné Slovensko, Východné Slovensko, Západné Slovensko	Slovak	Online	1001
Slovenia	Vzhodna Slovenija, Zahodna Slovenija	Slovenian	Online	1007
Spain	Andalucía, Aragón, Canarias, Cantabria, Castilla y León, Castilla-La Mancha, Cataluña, Ciudad Autónoma de Ceuta, Ciudad Autónoma de Melilla, Comunidad de Madrid, Comunidad Foral de Navarra, Comunidad Valenciana, Extremadura, Galicia, Islas Baleares, La Rioja, País Vasco, Principado de Asturias, Región de Murcia	Spanish	Online	1024
Sweden	Mellersta Norrland, Norra Mellansverige, Östra Mellansverige, Stockholm, Småland med öar, Sydsverige, Västsverige, Övre Norrland	Swedish	Online	1002

Annex 2. Questionnaire items and qualifying responses

The questions and their corresponding qualifying responses **(QRs)** used in the study analysis are presented below.

Adverse childhood experiences (ACEs)

Physical abuse

(QR responses to Q1, Q2 or both were coded as physical abuse.)

Q1. When you were growing up, during the first 18 years of your life, did a parent, guardian or other household member spank, slap, kick, punch or beat you up?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Q2. When you were growing up, during the first 18 years of your life, did a parent, guardian or other household member hit or cut you with an object, such as a stick (or cane), bottle, club, knife, whip or similar?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Emotional abuse

(QR responses to Q3, Q4 or both were coded as emotional abuse.)

Q3. When you were growing up, during the first 18 years of your life, did a parent, guardian or other household member yell, scream or swear at you, insult or humiliate you?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Q4. When you were growing up, during the first 18 years of your life, did a parent, guardian or other household member threaten to, or actually, abandon you or throw you out of the house?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Sexual abuse

(QR responses to one or more of Q5–Q8 were coded as sexual abuse.)

Q5. When you were growing up, during the first 18 years of your life, did someone at least five years older than you touch or fondle you in a sexual way when you did not want them to?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once **(QR)**
- ☐ Never
- ☐ Prefer not to say

Q6. When you were growing up, during the first 18 years of your life, did someone at least five years older than you make you touch their body in a sexual way when you did not want them to?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once **(QR)**
- ☐ Never
- ☐ Prefer not to say

Q7. When you were growing up, during the first 18 years of your life, did someone at least five years older than you attempt oral, anal or vaginal intercourse with you when you did not want them to?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once **(QR)**
- ☐ Never
- ☐ Prefer not to say

Q8. When you were growing up, during the first 18 years of your life, did someone at least 5 years older than you, actually have oral, anal or vaginal intercourse with you when you did not want them to?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once **(QR)**
- ☐ Never
- ☐ Prefer not to say

Physical neglect

(QR responses to one or more of Q9–Q11 were coded as physical neglect.)

Q9. When you were growing up, during the first 18 years of your life, were your parents/guardians too drunk or intoxicated by drugs to take care of you?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Q10. When you were growing up, during the first 18 years of your life, how often did your parents/guardians not give you enough food even when they could easily have done so?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Q11. When you were growing up, during the first 18 years of your life, how often did your parents/guardians not send you to school even when it was available?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Household substance use

Q12. When you were growing up, during the first 18 years of your life, did you live with a household member who was a problem drinker or alcoholic, or who misused street or prescription drugs?

- ☐ Yes **(QR)**
- ☐ No
- ☐ Prefer not to say

Household mental illness

Q13. When you were growing up, during the first 18 years of your life, did you live with a household member who was depressed, mentally ill or suicidal?

- ☐ Yes **(QR)**
- ☐ No
- ☐ Prefer not to say

Household incarceration

Q14. When you were growing up, during the first 18 years of your life, did you live with a household member who was ever sent to jail or prison?

- ☐ Yes **(QR)**
- ☐ No
- ☐ Not applicable
- ☐ Prefer not to say

Parental separation or death

(QR responses to Q15, Q16 or both were coded as parental separation or death.)

Q15. When you were growing up, during the first 18 years of your life, were your parents ever separated or divorced?

- ☐ Yes **(QR)**
- ☐ No
- ☐ Don't know/not sure
- ☐ Prefer not to say

Q16. When you were growing up, during the first 18 years of your life, did your mother, father or guardian die?

- ☐ Yes **(QR)**
- ☐ No
- ☐ Prefer not to say

Witnessing domestic violence

(QR responses to one or more of Q17–Q19 were coded as witnessing domestic violence.)

Q17. When you were growing up, during the first 18 years of your life, did you see or hear a parent or household member in your home being yelled at, screamed at, sworn at, insulted or humiliated?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Q18. When you were growing up, during the first 18 years of your life, did you see or hear a parent or household member in your home being slapped, kicked, punched or beaten up?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Q19. When you were growing up, during the first 18 years of your life, did you see or hear a parent or household member in your home being hit or cut with an object, such as a stick (or cane), bottle, club, knife, whip or similar?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Sociodemographic factors

Q20. How old are you?

Q21. What was your sex assigned at birth?

- ☐ Male **(QR)**
- ☐ Female **(QR)**
- ☐ Don't know
- ☐ Prefer not to say

Q22. Do you identify as ANY of the following? Select all that apply.

- ☐ Ethnic, religious or another minority **(QR)**
- ☐ Migrant, refugee, asylum seeker or displaced person **(QR)**
- ☐ None of the above
- ☐ Don't know
- ☐ Prefer not to say

Q23. Thinking back to when you were around 14 years old, how would you rate your family's situation in each of the following areas?

- Type of house(s) you lived in
  - ☐ Among the worst (bottom 20%)
  - ☐ Worse than average (just below the middle 20%)
  - ☐ About average (middle 20%)
  - ☐ Better than average (just above the middle 20%)
  - ☐ Among the best (top 20%)
- Neighbourhood(s) you lived in
  - ☐ Among the worst (bottom 20%)
  - ☐ Worse than average (just below the middle 20%)
  - ☐ About average (middle 20%)
  - ☐ Better than average (just above the middle 20%)
  - ☐ Among the best (top 20%)

- How easily your family could afford things (such as holidays, new clothes or activities)
  - ☐ Among the worst (bottom 20%)
  - ☐ Worse than average (just below the middle 20%)
  - ☐ About average (middle 20%)
  - ☐ Better than average (just above the middle 20%)
  - ☐ Among the best (top 20%)

Mental health

Q24. Was there a time in the last 12 months when you felt you might have needed professional mental health support or services?

- ☐ Yes **(QR)**
- ☐ No
- ☐ Don't know
- ☐ Prefer not to say

Q25. Did you try to get help? (Applicable only if 'Yes' was selected in Q24)

- ☐ Yes, and I received the support I needed **(QR)**
- ☐ Yes, but I did not receive the support I needed **(QR)**
- ☐ No, I did not try to get help
- ☐ Prefer not to say

Health-related quality of life

Q26. Please select the ONE answer that best describes your health today – **mobility**

- ☐ I have no problems in walking about
- ☐ I have slight problems in walking about **(QR)**
- ☐ I have moderate problems in walking about **(QR)**
- ☐ I have severe problems in walking about **(QR)**
- ☐ I am unable to walk about **(QR)**

Q27. Please select the ONE answer that best describes your health today – **self-care**

- ☐ I have no problems washing or dressing myself
- ☐ I have slight problems washing or dressing myself **(QR)**
- ☐ I have moderate problems washing or dressing myself **(QR)**
- ☐ I have severe problems washing or dressing myself **(QR)**
- ☐ I am unable to wash or dress myself (**QR)**

Q28. Please select the ONE answer that best describes your health today – **usual activities** *(such as work, study, housework, family or leisure activities)*

- ☐ I have no problems doing my usual activities
- ☐ I have slight problems doing my usual activities **(QR)**
- ☐ I have moderate problems doing my usual activities **(QR)**
- ☐ I have severe problems doing my usual activities **(QR)**
- ☐ I am unable to do my usual activities **(QR)**

Q29. Please select the ONE answer that best describes your health today – **pain/discomfort**

- ☐ I have no pain or discomfort
- ☐ I have slight pain or discomfort **(QR)**
- ☐ I have moderate pain or discomfort **(QR)**
- ☐ I have severe pain or discomfort **(QR)**
- ☐ I have extreme pain or discomfort **(QR)**

Q30. Please select the ONE answer that best describes your health today – **anxiety/depression**

- ☐ I am not anxious or depressed
- ☐ I am slightly anxious or depressed **(QR)**
- ☐ I am moderately anxious or depressed **(QR)**
- ☐ I am severely anxious or depressed **(QR)**
- ☐ I am extremely anxious or depressed **(QR)**

Education, employment and income

Q31. What is the highest level of education you have successfully completed?

- ☐ Completed university degree or equivalent **(QR)**
- ☐ Completed post-secondary non-university qualification
- ☐ Completed comprehensive school or upper secondary school or equivalent vocational qualification
- ☐ Completed basic education
- ☐ No formal qualification
- ☐ None of the above
- ☐ Prefer not to say

Q32. Which of the following best describes your current employment status?

- ☐ Employed full time
- ☐ Employed part time
- ☐ Self-employed
- ☐ Student/pupil (full time)
- ☐ Unemployed but looking for a job **(QR)**
- ☐ Unemployed and not looking for a job/long-term sick/disabled **(QR)**
- ☐ Homemaker/looking after the home **(QR)**
- ☐ Retired
- ☐ Other
- ☐ Prefer not to say

Q33. Which category best describes your household's annual income, after tax and compulsory deductions, from all sources? If you don't know the exact figure, please use an estimate.

- ☐ 1 (lowest income decile) to 10 (highest income decile) **(QR deciles 1–5)**
- ☐ Don't know
- ☐ Prefer not to say

Q34. Thinking of your household's total income, how easy does your household find it to make ends meet – namely, to pay for its usual necessary expenses (such as rent, food and bills)?

- ☐ Very difficult **(QR)**
- ☐ Somewhat difficult **(QR)**
- ☐ Neither difficult nor easy
- ☐ Somewhat easy
- ☐ Very easy
- ☐ Don't know
- ☐ Prefer not to say

Exposure to violence

Q35. Have you been frightened or threatened by someone in any way in the last 12 months?
(For example, they may have threatened to hurt you, to kill you, to use a weapon on you or to hurt someone close to you.)

- ☐ Yes **(QR)**
- ☐ No
- ☐ Prefer not to say

Q36. Have you been hit, slapped, punched or kicked or has a weapon been used against you by someone in the last 12 months?

- ☐ Yes **(QR)**
- ☐ No
- ☐ Prefer not to say

Q37. Have you frightened or threatened someone in any way in the last 12 months?
(For example, you may have threatened to hurt someone, to kill someone, to use a weapon on someone or to hurt someone close to them.)

- ☐ Yes **(QR)**
- ☐ No
- ☐ Prefer not to say

Q38. Have you hit, slapped, punched or kicked or used a weapon against someone in the last 12 months?

- ☐ Yes **(QR)**
- ☐ No
- ☐ Prefer not to say

Community trust and connection

Q39. Generally speaking, would you say that most people can be trusted, or that you cannot be too careful in dealing with people (on a scale of 0–10)?

You can't be too careful										Most people can be trusted
0	1	2	3	4	5	6	7	8	9	10

- ☐ Don't know
- ☐ Prefer not to say

0–4 **(QR)**

Q40. Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair (on a scale of 0–10)?

Most people would try to take advantage of me										Most people would try to be fair
0	1	2	3	4	5	6	7	8	9	10

- ☐ Don't know
- ☐ Prefer not to say

0–4 **(QR)**

Q41. Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves (on a scale of 0–10)?

People mostly look out for themselves										People mostly try to be helpful
0	1	2	3	4	5	6	7	8	9	10

- ☐ Don't know
- ☐ Prefer not to say

0–4 **(QR)**

Q42. People have different views about themselves and how they relate to the world. How much do you feel a part of or connected to:

- Your town or city?
  - ☐ Very connected
  - ☐ Somewhat connected
  - ☐ Not very connected **(QR)**
  - ☐ Not at all connected **(QR)**
  - ☐ Don't know
  - ☐ Prefer not to say
- Your region?
  - ☐ Very connected
  - ☐ Somewhat connected
  - ☐ Not very connected **(QR)**
  - ☐ Not at all connected **(QR)**
  - ☐ Don't know
  - ☐ Prefer not to say
- Your country?
  - ☐ Very connected
  - ☐ Somewhat connected
  - ☐ Not very connected **(QR)**
  - ☐ Not at all connected **(QR)**
  - ☐ Don't know
  - ☐ Prefer not to say
- Europe?
  - ☐ Very connected
  - ☐ Somewhat connected
  - ☐ Not very connected **(QR)**
  - ☐ Not at all connected **(QR)**
  - ☐ Don't know
  - ☐ Prefer not to say

Exposure to other childhood trauma

Witnessing community violence

(QR responses to one or more of Q43–Q45 were coded as witnessing community violence.)

Q43. When you were growing up, during the first 18 years of your life, did you see or hear someone being beaten up in real life?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Q44. When you were growing up, during the first 18 years of your life, did you see or hear someone being stabbed or shot in real life?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Q45. When you were growing up, during the first 18 years of your life, did you see or hear someone being threatened with a knife or gun in real life?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Exposure to collective violence

(QR responses to one or more of Q46–Q49 were coded as exposure to collective violence.)

Q46. When you were growing up, during the first 18 years of your life, were you forced to go and live in another place due to any of these events?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once **(QR)**
- ☐ Never
- ☐ Prefer not to say

Q47. When you were growing up, during the first 18 years of your life, did you experience the deliberate destruction of your home due to any of these events?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once **(QR)**
- ☐ Never
- ☐ Prefer not to say

Q48. When you were growing up, during the first 18 years of your life, were you beaten up by soldiers, police, militia or gangs?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once **(QR)**
- ☐ Never
- ☐ Prefer not to say

Q49. When you were growing up, during the first 18 years of your life, was a family member or friend killed or beaten up by soldiers, police, militia or gangs?

- ☐ Many times **(QR)**
- ☐ A few times **(QR)**
- ☐ Once **(QR)**
- ☐ Never
- ☐ Prefer not to say

Exposure to childhood bullying

Q50. When you were growing up, during the first 18 years of your life, how often were you bullied?
(This refers to when a young person or group of young people say or do bad and unpleasant things to another young person. It is also bullying when a young person is teased a lot in an unpleasant way or when a young person is left out of things on purpose. It is not bullying when two young people of about the same strength or power argue or fight or when teasing is done in a friendly and fun way.)

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Exposure to cyberbullying

Q51. How often did you experience cyberbullying during the first 18 years of your life?
(Examples include someone sending mean instant messages, email or text messages; wall postings; creating a website making fun of someone; posting unflattering or inappropriate pictures online without permission or shared them with others.)

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Exposure to harmful online content

Q52. How often did you see online content that felt harmful or hurtful (comments, images, videos and so on), containing violent, sexually explicit, defamatory, criminal or misinformative material – intentionally or unintentionally (such as via unwanted pop-ups) – during the first 18 years of your life?

- ☐ Many times **(QR)**
- ☐ A few times
- ☐ Once
- ☐ Never
- ☐ Prefer not to say

Childhood resilience

(QR response to one or more of Q53–Q55 were coded as childhood resilience.)

Q53. When you were growing up, before the age of 18 years, how often did your parents/guardians really know what you were doing with your free time when you were not at school or work?

- ☐ Always **(QR)**
- ☐ Most of the time **(QR)**
- ☐ Sometimes
- ☐ Rarely
- ☐ Never
- ☐ Prefer not to say

Q54. When you were growing up, before the age of 18 years, how often did your parents/guardians understand your problems and worries?

- ☐ Always **(QR)**
- ☐ Most of the time **(QR)**
- ☐ Sometimes
- ☐ Rarely
- ☐ Never
- ☐ Prefer not to say

Q55. While you were growing up, before the age of 18 years, how often was there an adult in your life who you could trust and talk to about any personal problems?

- ☐ Always **(QR)**
- ☐ Sometimes
- ☐ Never
- ☐ Prefer not to say

The WHO Regional Office for Europe

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