



Foundation

World Risk Poll 2024 Report

Engineering
safer workplaces:
Global trends in
occupational
safety and health

 [@lr_foundation](#)

 [lloyd's-register-foundation](#)

 [wrp.lrfoundation.org.uk](#)

Powered by
GALLUP[®]

Foreword



Dr Ruth Bumphrey
Chief Executive
Lloyd's Register Foundation

The Lloyd's Register Foundation World Risk Poll, conducted every two years, provides a crucial platform for people around the world to voice concerns about their safety, systematically gathering data on everyday risks and harms. By amplifying the voices of those who are often marginalised or underrepresented, the Poll offers invaluable insights that can and should be used to guide interventions aimed at protecting the most vulnerable.

Aspects of workplace safety have been a core focus of every World Risk Poll to date. Together, the 2019 and 2021 polls highlighted that people in lower-income countries – and especially those working in industries with weak health and safety regulation and poor reporting structures – are more at risk of experiencing harm at work. However, both polls also revealed that even though experience of harm at work was high, people's concern about it was low relative to other everyday risks.

For the latest World Risk Poll, we have built on these insights by taking a closer look at workplace harm reporting and occupational safety and health (OSH) training – both critical components in safeguarding the wellbeing of workers across industries worldwide – and identifying a link between the two, as described in this report.

As global economies evolve, the nature of work for some is changing, exposing workers to new risks and challenges. And yet, for millions of people around the world, the threats their livelihoods pose to their own safety remain much as they have always been, and stubbornly unresolved.

Whatever the risks are old or new, Lloyd's Register Foundation remains deeply committed to improving workplace safety as part of its broader mission to engineer a safer world. By funding research, innovation, and education in high-risk sectors, the Foundation aims to reduce workplace accidents and fatalities. Through global partnerships and initiatives such as the World Risk Poll, we seek to understand and explain the safety challenges workers face, ensuring that advancements in technology and safety standards benefit those who need it most.

We hope that this report, along with the underlying data, will encourage meaningful change in industries and regions where the value of effective OSH training is not fully realised. Ultimately, effective OSH training not only has the potential to reduce workplace accidents, but also fosters a safety-first culture, ensuring that both employers and employees are better equipped to identify hazards, report incidents, and maintain productive, healthy working environments.



Acknowledgements

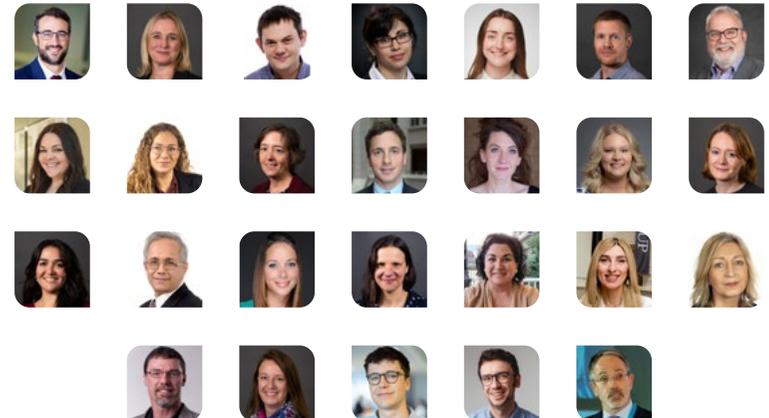
The World Risk Poll is a huge undertaking powered by multidisciplinary teams working across organisations. Lloyd's Register Foundation is grateful to everyone who has contributed to this and previous versions of the World Risk Poll, and the collaborative spirit in which they work.

We are continually inspired by the enthusiasm of our strategic impact partners who have invested time in developing the questionnaire and are now embedding the data in their work, inspiring and galvanising people to take action. You can follow their journeys, and the change created, through the Poll website at wrp.lrfoundation.org.uk.

The Technical Advisory Group for the World Risk Poll was first convened in early 2019, and we are indebted to the ongoing time and effort voluntarily invested by the members in the analysis, planning and reviewing of all our outputs.

We would like to thank our partners at the International Labour Organization for their invaluable support for their insight and support in the production of this report, and their ongoing engagement with our mission to understand perceptions and experiences of risk and harm in the workplace.

Finally, our thanks are extended to the team at Gallup for their efforts in constructing and testing the Poll, and to the local staff in countries across the globe who undertook the fieldwork, often under difficult circumstances. We are particularly grateful to the World Risk Poll delivery and analytical team at Gallup for their ongoing contributions and support.



Executive summary

The World Risk Poll is the first and only global, nationally representative study of worry about, and harm from, risks to people's safety. The poll is based on nearly 147,000 interviews conducted by Gallup in 142 countries and territories throughout 2023 and covers places with little to no official data on safety and risks. The 2023 World Risk Poll provides a unique insight into people's experiences with, and perceptions of, workplace risks and harms.

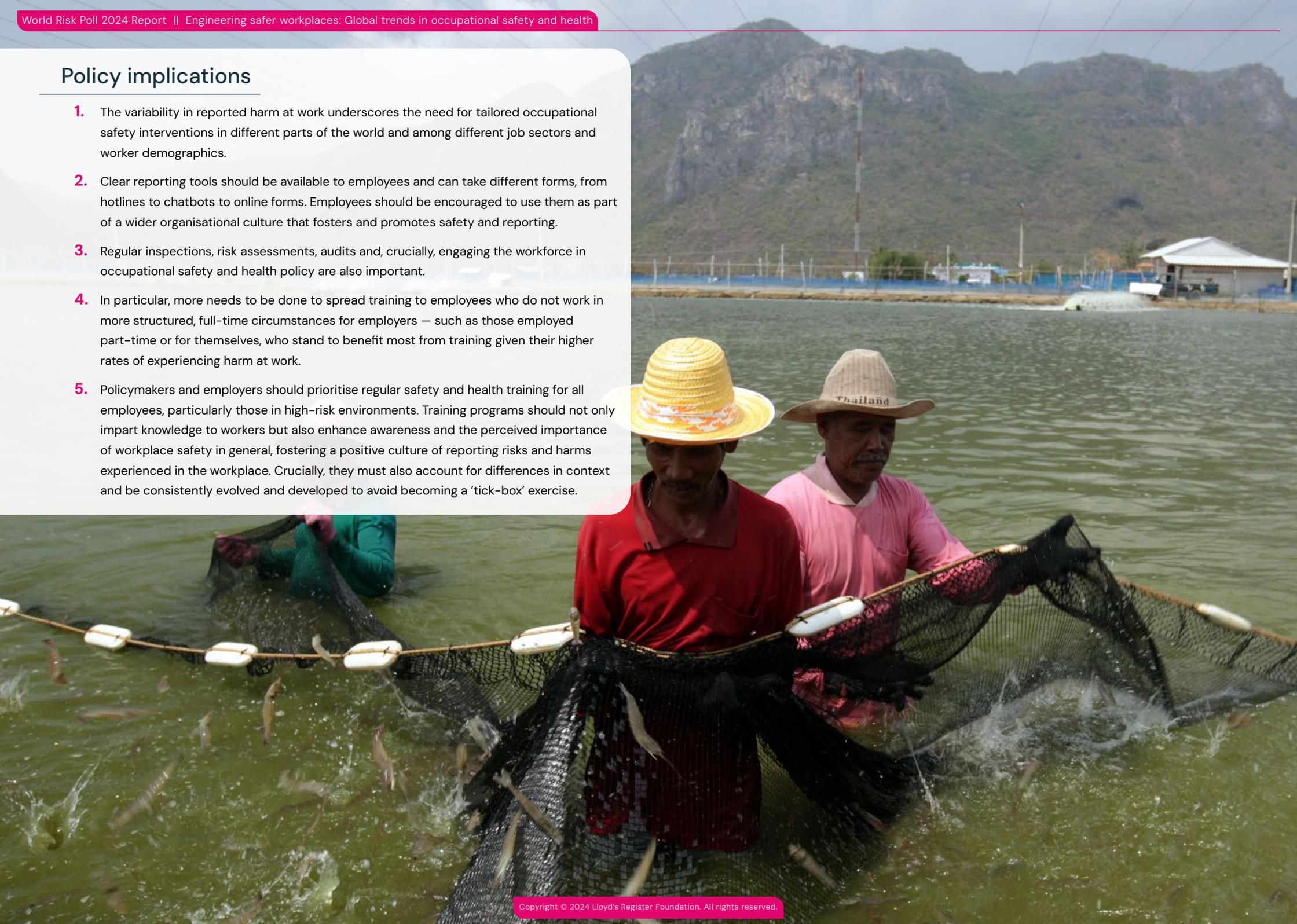
The Poll is a unique resource for defining the nature and scale of safety challenges across the world, as reported first-hand by those who experience them. Governments, regulators, businesses, NGOs and international bodies can use these freely available datasets and insights to inform and target policies and interventions that make people safer.

Key findings

- Eighteen percent of the current global workforce — equating to around 667 million adults — have personally experienced serious harm at work in the past two years.
 - Rates of workplace harm are highest in low- and lower-middle-income countries (19% and 22%, respectively).
 - Being male, less educated and under the age of 30 are all associated with a heightened risk of workplace harm, although this heightened risk is also linked to the types of work people do.
 - Compared to other sectors, workers in fishing, construction and mining jobs are most likely to be harmed at work, as are those in less stable forms of employment (e.g., part-time or self-employed workers).
- Workers are generally not worried about workplace harm until they experience it. Worry levels about workplace harm increase significantly as exposure to it — either by knowing someone harmed or personally experiencing harm — increases.
 - People who have never been harmed at work are less likely to be worried (40% are 'very' or 'somewhat' worried) about it than people who know someone who has been harmed (69%) or have been harmed themselves (77%).
 - However, people who have personally experienced harm at work have the same level of worry as those who both have personal experience and know someone who has experienced harm (77% and 78%, respectively). This suggests a form of risk habituation among those most exposed to occupational harm, which could undermine workplace safety initiatives.
 - People tend to worry less about work relative to their actual harm-experience levels than other risks, such as severe weather events or traffic accidents.
- Globally, only half (51%) of the current workforce who experienced harm at work in the past two years say they reported the incident by telling someone responsible for safety or health at work (such as a supervisor or manager) or health or social services about it.
 - Rates of reporting workplace harm to someone like a manager vary widely across the world and are highest in job sectors that also see the highest self-reported rates of personal workplace harm.
- Of those currently in the workforce around the world, 62% report having never received occupational safety and health training about risks associated with their work.
 - Four in five current workers in lower-middle- (79%) and low-income (78%) countries have never received safety and health training in their jobs.
 - People employed full-time by an employer are around twice as likely to have had recent workplace safety training (41%) as those employed part-time (23%).
 - Among people worldwide working in agriculture, 80% have never had workplace safety training, and just 15% have had some in the past two years. While training rates are slightly better in fishing than agriculture, seven in 10 (73%) people currently in the fishing industry have never been trained. These sectors see the lowest training rates of any main sectors measured in the World Risk Poll.
- Holding other factors equal, there is a significant relationship between safety training and the likelihood of reporting workplace harm. The more recently people have had training, the more likely they are to report workplace harm if they experience it.
 - The odds of individuals who have received OSH training in the past two years reporting harm are significantly higher, by around 3.3 times, than the odds of those who never received training reporting harm. These odds fall to 1.8 times higher among those who have received training but not in the last two years relative to the odds of those who have never been trained.

Policy implications

1. The variability in reported harm at work underscores the need for tailored occupational safety interventions in different parts of the world and among different job sectors and worker demographics.
2. Clear reporting tools should be available to employees and can take different forms, from hotlines to chatbots to online forms. Employees should be encouraged to use them as part of a wider organisational culture that fosters and promotes safety and reporting.
3. Regular inspections, risk assessments, audits and, crucially, engaging the workforce in occupational safety and health policy are also important.
4. In particular, more needs to be done to spread training to employees who do not work in more structured, full-time circumstances for employers – such as those employed part-time or for themselves, who stand to benefit most from training given their higher rates of experiencing harm at work.
5. Policymakers and employers should prioritise regular safety and health training for all employees, particularly those in high-risk environments. Training programs should not only impart knowledge to workers but also enhance awareness and the perceived importance of workplace safety in general, fostering a positive culture of reporting risks and harms experienced in the workplace. Crucially, they must also account for differences in context and be consistently evolved and developed to avoid becoming a ‘tick-box’ exercise.



Contents

Foreword	
Acknowledgements	
Executive summary	
Introduction	1
Workplace harm: Who, where and which industries experience it the most?	2
<i>Does the experience of harm at work influence worry about workplace harm?</i>	6
<i>Who is most likely to be harmed at work?</i>	8
<i>Insight to action</i>	13
Reporting workplace harm	14
<i>Insight to action</i>	16
Occupational safety and health training	17
<i>Majority of global workforce have never received occupational safety and health training</i>	17
<i>Is occupational safety and health training effective at reducing workplace harm?</i>	22
<i>Insight to action</i>	23
Conclusion	24
References	
Additional information	

List of Figures

Chart 2.1. Global experience of workplace harm among the current workforce (% Personally experienced)	2
Chart 2.2. Recent experience of harm at work among the current workforce, by region (% Personally experienced)	3
Chart 2.3. Recent experience of harm at work among the current workforce, by World Bank country income level (% Personally experienced)	4
Table 2.1. Countries with changes of 10 percentage points or more in recent harm at work among the current workforce, 2021–2023	4
Chart 2.4. Recent experience of harm at work among the current workforce in Africa (% Personally experienced)	5
Chart 2.5. Regional rates of workplace harm and worry about harm among the current workforce (%)	6
Chart 2.6. Percentage worried about being harmed at work, by personal experience of workplace harm among the current workforce	7
Chart 2.7. Percentage of the current workforce worried about harm from different risks and the percentage who have personally experienced harm from these risks in the past two years	7
Chart 2.8. Recent experience of harm at work among the current workforce, by demographics and financial resilience (% Personally experienced)	8
Chart 2.9. Experience of harm at work in the past two years among the current workforce, by employment type (% Personally experienced)	9
Chart 2.10. Recent experience of harm at work among the current workforce, by global industry (% Personally experienced)	10
Chart 2.11. Relationship between rates of self-reported harm and proportion of each industry that employs men, people with primary education only, and those who could only cover their basic needs for less than one week if they lost their income	11
Chart 2.12. Recent experience of harm at work among the current workforce, by global industry and gender (% Personally experienced)	12
Chart 2.13. Recent experience of harm at work among the current workforce, by industry and World Bank country income level (% Personally experienced)	12
Chart 3.1. Regional comparison of recent experience of harm at work and the percentage who told someone about it (% Personally experienced)	14
Chart 3.2. Global rates of workplace harm reporting among those in the current workforce, who experienced harm in the last two years, by employment status (% Yes)	15
Chart 3.3. Rates of workplace harm reporting among those in the current workforce who have experienced it in the past two years, by global industry (% Yes)	16
Chart 4.1. Global rates of occupational safety and health training among the current workforce (% Yes)	17
Chart 4.2. Occupational safety and health training rates among the current workforce, by World Bank country income level (% Yes)	18
Chart 4.3. Occupational safety and health training rates among the current workforce, by region (% Yes)	18
Table 4.1. Top and bottom 10 countries for occupational safety and health training among current workforce (% Yes)	19
Chart 4.4. Occupational safety and health training rates among the current workforce, by household income and education level (% Yes)	19
Chart 4.5. Occupational safety and health training among the current workforce, by global industry (% Yes)	20
Chart 4.6. Occupational safety and health training rates among the current construction workforce, by region (% Yes)	21
Chart 4.7. Odds ratios of reporting workplace harm among workers who have been harmed, by when they received OSH training	22

1. Introduction

Work is a core part of life for billions of people around the world. Paid work encompasses a broad range of activities and time commitments, from part-time to full-time, whether for organisations or self-employed, in the formal or informal sectors — or a mix of any of these — to earn an income. Work is also not static; people often move between different forms of work throughout their lives.

Because most people spend many hours of their lives working, it is important to understand how they experience the time they spend on the job. Being employed has a significant positive overall effect on wellbeing. Going to work can also be an activity filled with risks and safety hazards that may impact both their physical and mental health. These risks and others contribute to workplace harm, a broad phenomenon that can encompass everything from fatal injuries to illness and disease contracted in the workplace to musculoskeletal conditions caused by sitting at a desk for too long.

The International Labour Organization (ILO) has overseen global occupational safety and health (OSH) efforts since its foundation in 1919¹. The ILO seeks to promote safe and healthy work environments through its two 'fundamental Conventions', 155 and 187, as well as through other labour standards, a widespread ecosystem of international treaties, codes of practice and technical guidelines to protect workers from hazards.



Being seriously harmed at work — whether through preventable injury or illness — can have devastating effects on people, workplaces, communities and the economy at large. While many organisations are placing greater emphasis on OSH², much of the world's workforce continues to face risks and harm at work despite the myriad benefits of safe, healthy work environments for employees and employers alike. Reducing the prevalence of harmful accidents and work-related diseases has been proven to boost productivity, reduce costs by minimising days lost to illness or accidents, help companies build a reputation for being a good place to work, and enhance employee morale³. In turn, healthy workers generate income and economic productivity. Improving occupational safety and health, therefore, is a crucial step to creating thriving communities, workplaces and individuals.

In recent years, the field of occupational health has received growing attention from practitioners and scholars. While some argue that the most effective OSH policies should focus on supporting potential victims and workers, others highlight the value of regulation⁴, effective leadership⁵, social processes, incentives and cultures of continuous improvement⁶ in preventing occupational harm.

Although some countries, territories and organisations have taken action to place more emphasis on improving occupational safety and health, the global picture remains highly uneven. Lloyd's Register Foundation, with its focus on making the world a safer place, is interested in understanding people's experiences of the work they do and the risks and harm they are exposed to while working. The World Risk Poll is the first global study about worry and risk and provides a valuable dataset to understand how workers feel about the risks they experience at work. The latest edition of the Poll surveyed 147,000 people across 142 countries and territories using nationally representative samplesⁱ, asking about their experiences of harm at work, whether they have reported it, what sectors they work in, and whether they have received OSH training. Understanding how people think about the risks they face at work is a crucial step on the road to prioritising policy interventions that reduce harm, making the world of work — and the world more broadly — safer.

This report will focus on three main elements of OSH. Chapter 2 examines the extent of (self-reported) experiences of workplace harm: in which regions harm at work is most common, among which groups of people and in which industries. The third chapter focuses on reporting instances of workplace harm, and the final chapter considers OSH training, its links to harm at work and the extent of reporting.

ILO CONVENTIONS 155 AND 187

The core principles of Conventions 155 and 187 are complementary. Together, they represent an outline for how to improve the provision of safe, healthy work environments. In 1981, Convention 155 introduced the principle of national OSH policies and actions required to meet them, underlining the importance of OSH as a national concern. In 2006, Convention 187 built upon it by promoting a national preventative strategy and health culture, calling for continuous improvement in the field of OSH. Both fundamental Conventions have prevention at their core and set out a framework highlighting the complementary and cooperative roles of governments, employers and workers in improving workplace safety⁷.

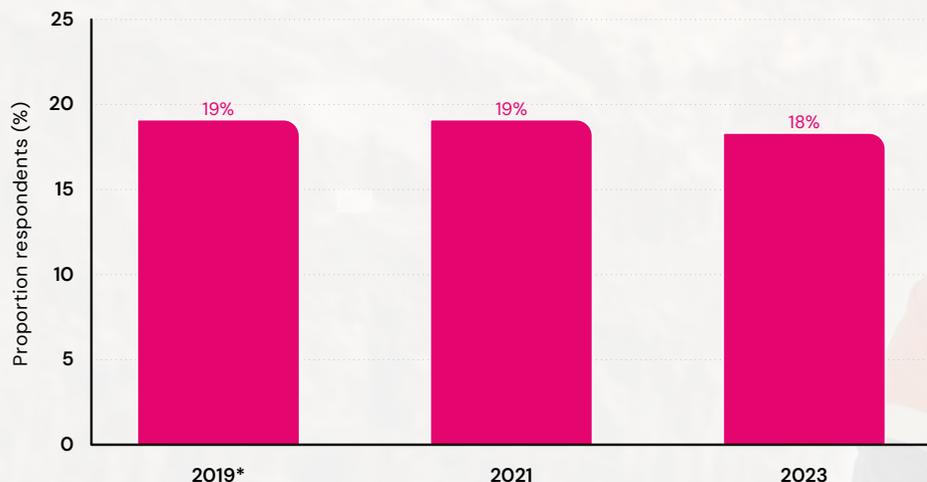
ⁱ Please refer to the World Risk Poll methodology document for full details.

2. Workplace harm: Who, where and which industries experience it the most?

In the 2021 World Risk Poll, 15% of adults (aged 15+) globally and 19% of those who were in the workforce at that timeⁱ said they had personally experienced serious harm at work in the past two years, based on a representative sample of 121 countries and territories. These rates aligned with 2019 figures, when 19% of workers said they had been seriously injured at some point while they were workingⁱⁱ.

In 2023, the World Risk Poll asked people in 142 countries and territories the same question as in 2021, and the figures remained stubbornly high: 15% of the world's adult population overall and 18% of the current global workforce had personally experienced serious harm at work in the past two years. This percentage equates to roughly 667 million workersⁱⁱⁱ.

Chart 2.1. Global experience of workplace harm among the current workforce (% Personally experienced)



Survey question 2021, 2023: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from the work you do in the past TWO years?

*Survey question 2019: Have you ever been seriously injured while working?

Note: 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

i - We define 'current workforce' as anyone employed full-time for an employer, self-employed, employed part-time or unemployed but looking for work while excluding anyone who is out of the workforce. In 2023, we also included a question about the last time people worked for an employer, their family or as a self-employed person. Including those out of the workforce but who have worked in one of these capacities in the past two years, the overall global rate of workplace harm is 17%. This question was not asked in 2021, so is not presented in the main analysis for comparison reasons.

ii - The first time this question was asked in the World Risk Poll, it was not time-bound to the past two years, unlike in 2021 and 2023: 'Have you ever been seriously injured while working?'

iii - These global figures of workplace harm only represent people who suffered non-fatal injuries. The ILO estimates the annual figure of global fatal workplace injuries is around 3 million. See: *Nearly 3 million people die of work-related accidents and diseases*. (2023, November 26). International Labour Organization. <https://www.ilo.org/resource/news/nearly-3-million-people-die-work-related-accidents-and-diseases>. The same report also estimated that in 2019, more than 395 million workers were injured while at work, a figure that tallies well with the 667 million estimate over the period covering 2022 and 2023.

HOW THE WORLD RISK POLL MEASURES AND REPORTS WORKPLACE HARM

The World Risk Poll asks the following questions to understand peoples experience of serious harm at work:

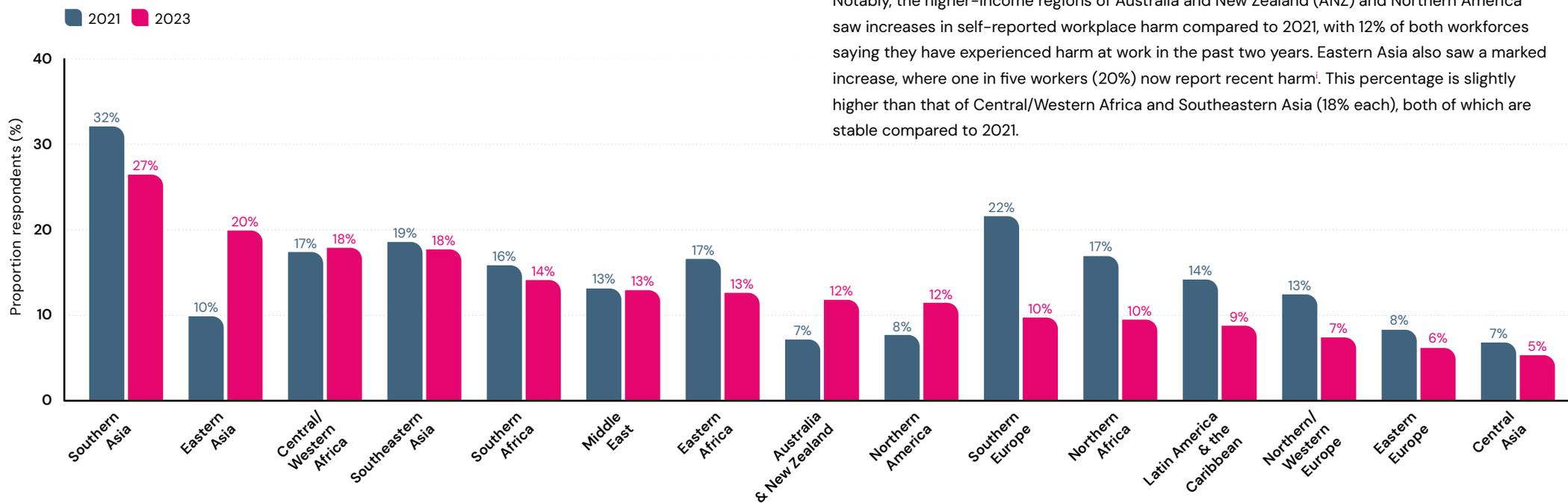
- Have you or someone you personally know, experienced serious harm from any of the following things in the past two years? The work you do
- If 'yes': Did this happen to you, someone you personally know or both in the past two years?
 - Yes, personally experienced
 - Yes, know someone who has experienced
 - Both
 - No
 - (Don't know/Refused)

This report calculates personal experience of workplace harm by combining the answers 'Yes, personally experienced' and 'Both'. The wording of the question defines workplace harm in a broad sense — one defined by the respondents themselves. The question was not framed solely in terms of physical harm and, therefore, does not distinguish between physical and psychological harm. As a result, when people reported personally experiencing harm at work, this could encompass a range of harms from their point of view, from occupational accidents and diseases to psychological harm related to work.

As the World Risk Poll collects nationally representative data about the adult (15+, non-institutionalised) population, this report is able to disaggregate the data by employment status and focus on the perceptions of the current (2023) global workforce. Of the global population surveyed, 34% are classified as 'out of the workforce', meaning the findings in this report are based on the roughly two-thirds of the world's adult population who are in the current workforce.

It is worth noting that the 2021 World Risk Poll took place when COVID-19 was still highly prevalent worldwide, at a time when many people remained unvaccinated, and the world of work continued to be heavily disrupted. Moreover, given the pandemic, the World Risk Poll had to switch mode of survey implementation in some countries from face-to-face to telephone interviewing. In the 27 countries where survey mode changed to face-to-face in 2023, the average change in rates of workplace harm among the current workforce was -3 percentage points, compared to -1 percentage point in the 92 countries where survey mode did not change (see the appendix for more details). The combination of the hugely disruptive nature of the pandemic, the differing number of countries surveyed each year and the related change in survey mode administration helps explain some of the regional differences measured between iterations of the World Risk Poll.

Chart 2.2. Recent experience of harm at work among the current workforce, by region (% Personally experienced)



Survey question 2021, 2023: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from the work you do in the past TWO years?
 Note: 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

As Chart 2.2 shows, several regions saw significant changes in the experience of workplace harm between 2021 and 2023 despite the overall global stability. These regional changes were mostly driven by extreme changes in certain countries, often with large populations. For example, workers in Southern Asia continue to report the highest rates of recent workplace harm – more than one in four (27%) say they experienced harm at work in the past two years – although the region has seen a decline in reported rates since 2021 (when 32% said the same), driven mostly by India because of its large population.

The largest regional decline has been across Southern Europe, where 10% report experiencing recent workplace harm, compared to 22% in 2021. This decrease is almost exclusively driven by workers in Italy, 7% of whom report experiencing recent workplace harm, down from 38% in 2021 but back in line with Italy's figure from 2019 (7%), when the World Risk Poll asked whether people had ever been harmed while working.

Northern Africa (driven by Morocco, which had a mode change), Latin America and the Caribbean (driven by Brazil, which also had a mode change) and Northern/Western Europe (driven by France, the U.K. and Germany, none of which had mode changes) also saw decreases of five points or more than compared to 2021.

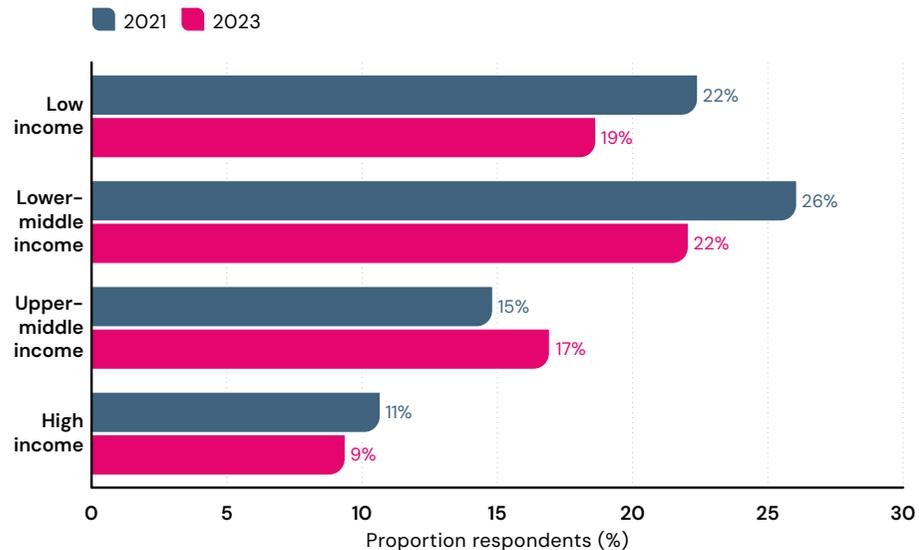
Notably, the higher-income regions of Australia and New Zealand (ANZ) and Northern America saw increases in self-reported workplace harm compared to 2021, with 12% of both workforces saying they have experienced harm at work in the past two years. Eastern Asia also saw a marked increase, where one in five workers (20%) now report recent harmⁱ. This percentage is slightly higher than that of Central/Western Africa and Southeastern Asia (18% each), both of which are stable compared to 2021.

ⁱ – The increase in Eastern Asia is mostly affected by workplace harm questions not being asked in China in 2021. China's large population significantly impacts the regional statistics for Eastern Asia. In 2023, the rate of harm in China (22%) was higher than that of other countries and territories in the region: Taiwan (Province of China) (7%), Japan (9%), Mongolia (6%), Hong Kong (S.A.R. of China) (8%) and South Korea (10%).

Although rates of self-reported workplace harm are highest in low- and lower-middle-income countries (19% and 22%, respectively), rates have fallen most — by four percentage points each — in these income groups since 2021. In general, workers in lower-income countries are more at risk of injuries. According to the ILO, higher-income countries are much more likely to have national OSH policies and programmes in place than lower-income countries⁸. In high-income countries that are ILO member states, 58% have a national OSH policy, and 47% have a national OSH programme. These rates fall to just 26% and 8% in low-income member countries.

Nine in 10 deaths related to injury occur in low- and middle-income countries⁹, primarily due to their large working-age populations. In terms of mortality rates relative to population size, Africa and Asia and the Pacific have the highest attributable fractions of workplace deaths compared to other global regions¹⁰.

Chart 2.3. Recent experience of harm at work among the current workforce, by World Bank country income level (% Personally experienced)



Survey question 2021, 2023: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work

Notes: Differences between 2021 and 2023 may not match between the chart and text due to rounding. 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

The list of countries that have seen the biggest increases and decreases in workplace harm is varied. Table 1.1 shows the seven countries that have seen changes of 10 percentage points or more in rates of workplace harm since 2021. Sierra Leone and the Philippines have both seen double-digit increases in harm in the past two years, while Vietnam, Brazil, Ghana, Morocco, Mali, and Italy have all seen double-digit declines.

Table 2.1. Countries with changes of 10 percentage points or more in recent harm at work among the current workforce, 2021–2023

Country	2021	2023	Percentage-point difference
Sierra Leone	27%	41%	15
Philippines*	23%	34%	11
Vietnam*	26%	16%	-10
Brazil*	17%	6%	-11
Ghana	29%	13%	-16
Morocco*	29%	10%	-19
Mali	36%	15%	-22
Italy	38%	7%	-31

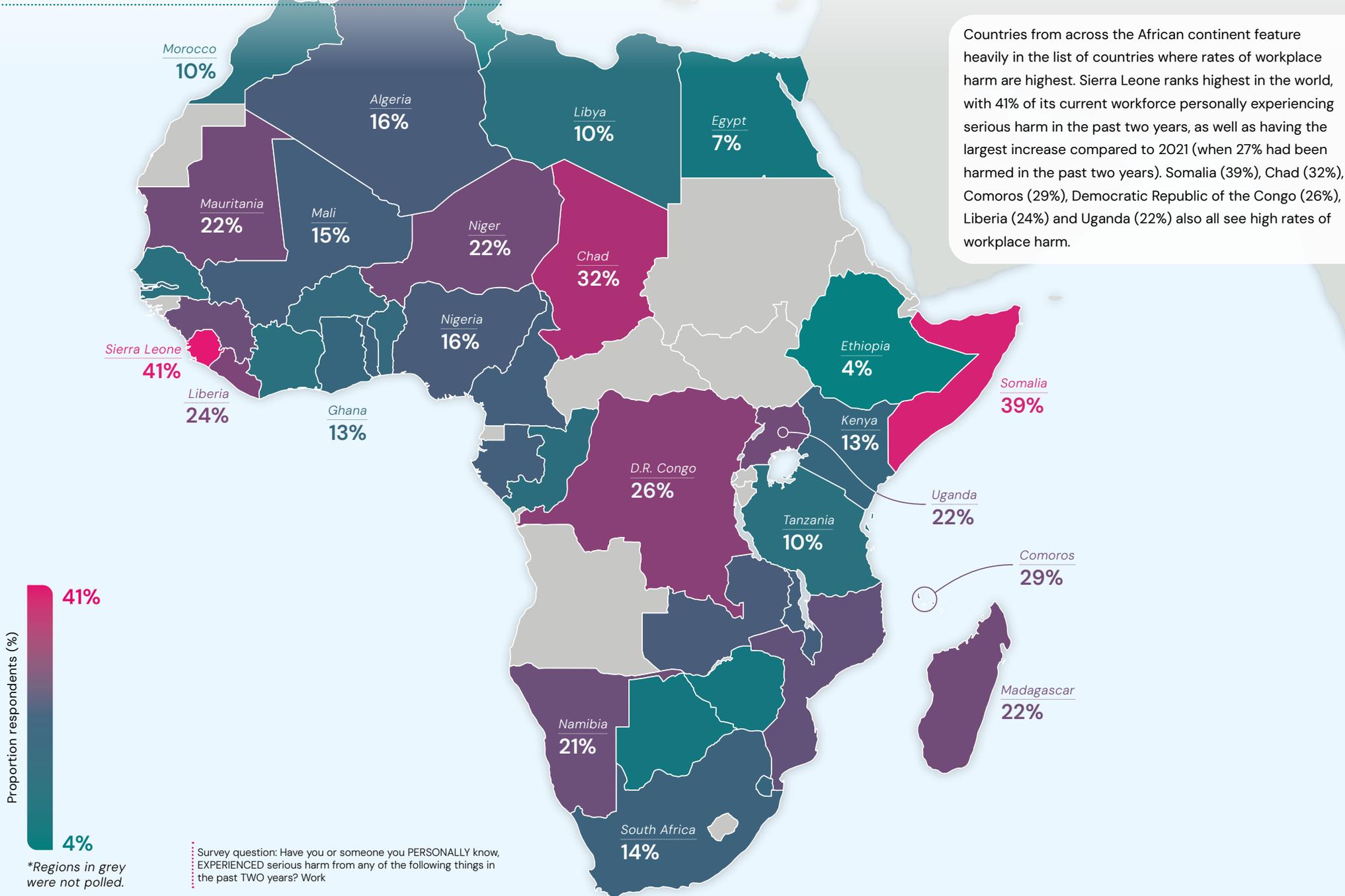
Survey question: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work

Notes: Percentage-point differences may differ from values in the table due to rounding. 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

*These countries saw changes in survey mode administration between 2021 and 2023. See appendix for more details.



Chart 2.4. Recent experience of harm at work among the current workforce in Africa (% Personally experienced)



Countries from across the African continent feature heavily in the list of countries where rates of workplace harm are highest. Sierra Leone ranks highest in the world, with 41% of its current workforce personally experiencing serious harm in the past two years, as well as having the largest increase compared to 2021 (when 27% had been harmed in the past two years). Somalia (39%), Chad (32%), Comoros (29%), Democratic Republic of the Congo (26%), Liberia (24%) and Uganda (22%) also all see high rates of workplace harm.



Does the experience of harm at work influence worry about workplace harm?

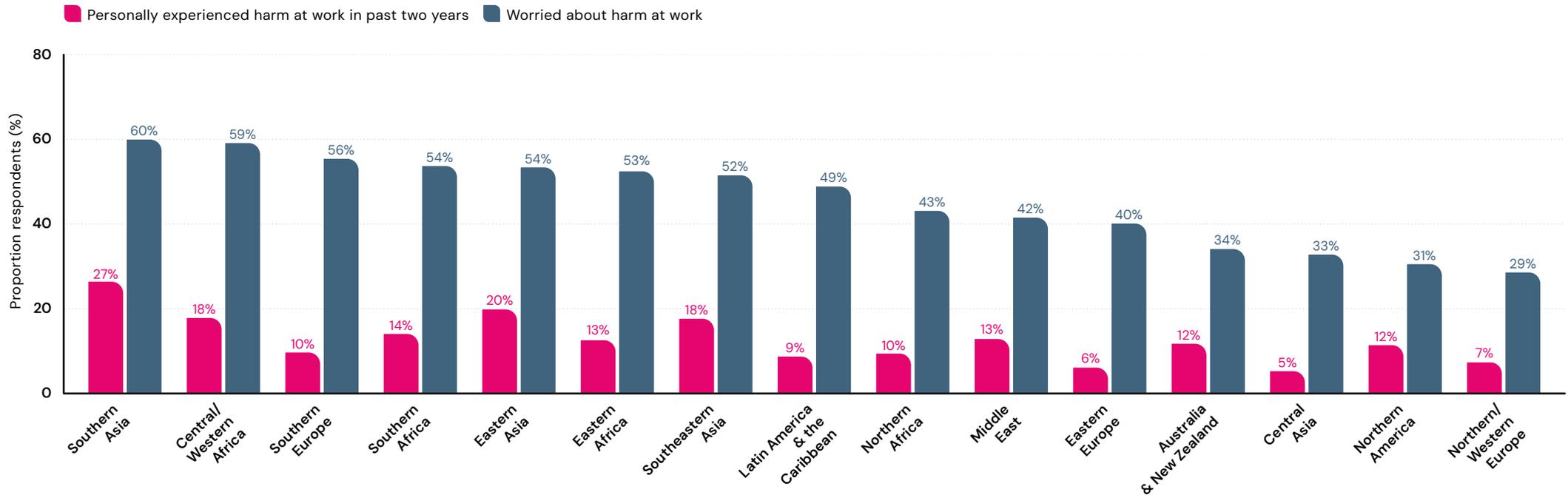
Beyond the experience of workplace harm, it is also necessary to look at people's worry about experiencing harm at work. Understanding how people worry about different risks is important, not only because it influences their behaviour but also because understanding worry helps policymakers communicate effectively with the public about risk. Overall, the world's workforce remains as worried about occupational harm as it was in 2021: just over half (51%) of the current workforce is either 'very' or 'somewhat' worried that the work they do could cause them serious harm, in line with the figure from 2021 (52%).

Regions with the highest rates of workplace harm also tend to be more worried about it. Southern Asia and Central/Western Africa rank among the top regions globally for personal experience of workplace harm and are also the two regions where most current workers worry about occupational harm (60% and 59%, respectively).

WORPLACE HARM IN INDIA

India ranks sixth in the world for rates of workplace harm, with slightly less than one-third (30%) of workers reporting having experienced harm at work in the past two years. While this is undoubtedly a large number, it is still a significant decline compared to 2021, when 38% of the workforce reported experiencing recent workplace harm. High rates of workplace harm are present across the country, although they are highest in the north at 38%, followed by the central region at 34% and the eastern region at 32%. Rates among the current workforce drop to 25% in the west and 20% in the south of India.

Chart 2.5. Regional rates of workplace harm and worry about harm among the current workforce (%)



Survey questions: In general, how WORRIED are you that the work you do could cause you serious harm?

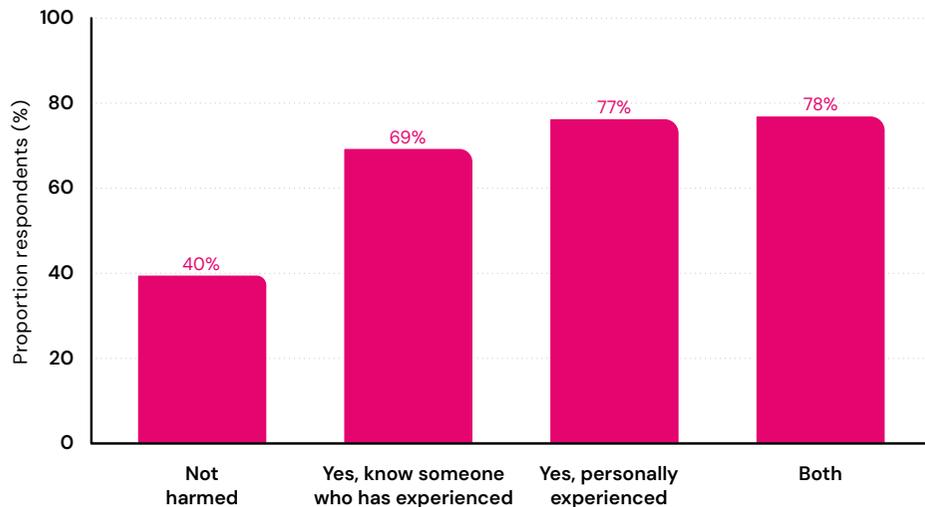
Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work

Note: 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

'Worried' includes respondents who answered 'very worried' or 'somewhat worried'.

This tallies with the general finding linking workplace harm and worry about harm. People who have never been harmed at work are less likely to be worried (40% are very or somewhat worried) about workplace harm than people who know someone who has been harmed (69%) or have been harmed themselves (77%). However, people who have personally experienced harm at work have the same level of worry as those who both have personal experience and know someone who has experienced harm (77% and 78%, respectively). This finding suggests a form of risk habituation among those most exposed to occupational harm, which could undermine workplace safety initiatives. Workers are generally not worried about workplace harm until they personally experience it.

Chart 2.6. Percentage worried about being harmed at work, by personal experience of workplace harm among the current workforce

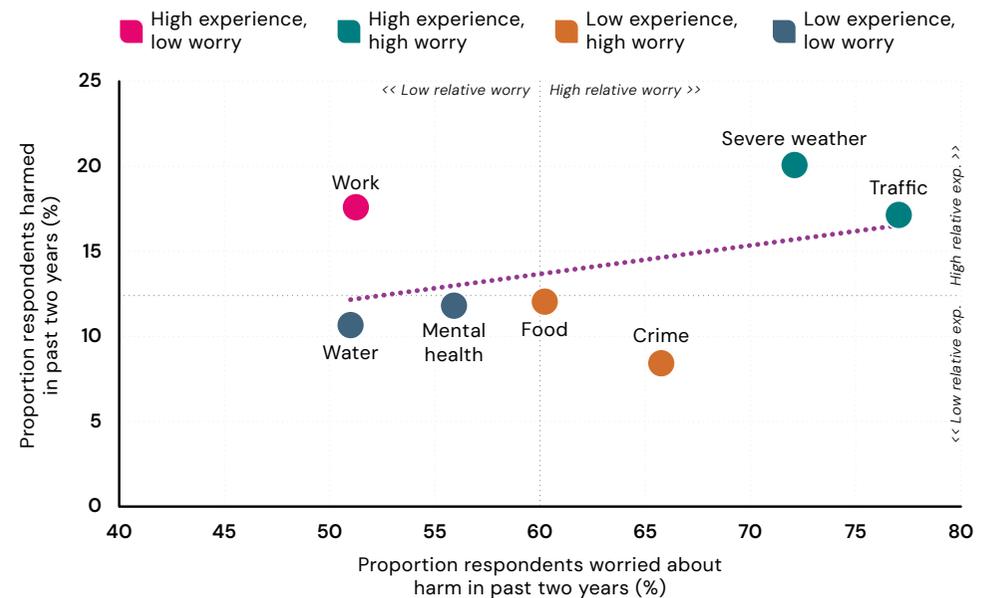


Survey questions: In general, how WORRIED are you that the work you do could cause you serious harm?
 Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work
 Note: 'Worried' includes respondents who answered 'very worried' or 'somewhat worried'.

That said, worry about – and exposure to – harm at work also differs from other forms of risk. In general, the prevalence of experiencing harm from things like traffic, mental health or crime correlates strongly with the prevalence of worry about these same harms. Work is an exception to this trend. Currently, workers globally are most worried about being harmed by traffic accidents (77%) and severe weather events (72%) and least worried about harm from work and unsafe water (51% each). This is despite the fact that rates of workplace harm among the current workforce are similar to harm rates from severe weather events and traffic accidents.

In other words, people tend to worry less about work relative to their actual harm-experience levels. This could be for several reasons, including differing levels of awareness of the nature of workplace risks. Understanding these differences is crucial for developing effective OSH policies and interventions that address both the reality and the perception of workplace risks.

Chart 2.7. Percentage of the current workforce worried about harm from different risks and the percentage who have personally experienced harm from these risks in the past two years



Survey questions: In general, how WORRIED are you that each of the following things could cause you serious harm?
 Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work
 Note: 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of harm.
 'Worried' includes respondents who answered 'very worried' or 'somewhat worried'.

Who is most likely to be harmed at work?

As the results above demonstrate, where in the world a person works plays an important role in how likely they are to be harmed while working. Broadly speaking, the likelihood of experiencing harm at work is lower in high-income countries than in low-income countries. Yet the role of country income level is just one part of a complex picture.

Men are more likely than women to experience harm in the workplace: 19% of the male global workforce report being harmed at work in the past two years, compared to 16% of women. This is partly related to the nature of the work men tend to do compared to women (see Chart 2.8).

Several other demographic variables are also related to harm at work. Younger workers between the ages of 15 and 29 are significantly more likely to experience workplace harm than those aged 50 and over. Additionally, the lower a person's education level, the more likely they are to experience workplace harm.

The same is true for financial resilience — i.e., how long a household could cover its basic needs if it lost all income. Of the least financially resilient people globally (those who could last less than a week without income), 26% say they have been harmed at work in the past two years, compared to 21% of those who could last between a week and a month and 15% of those who could last longer than a month.

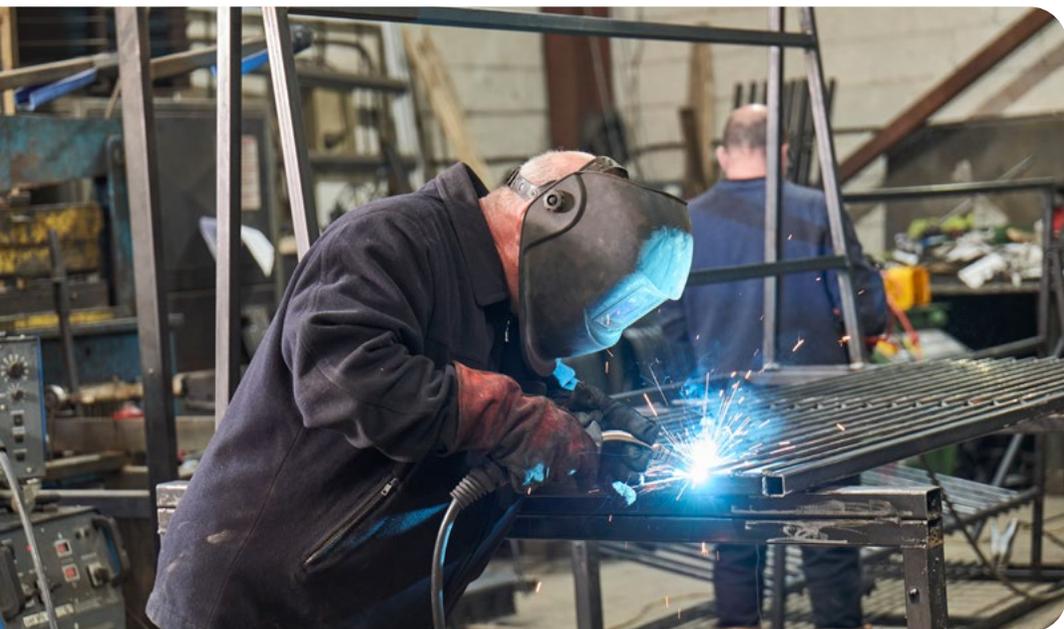
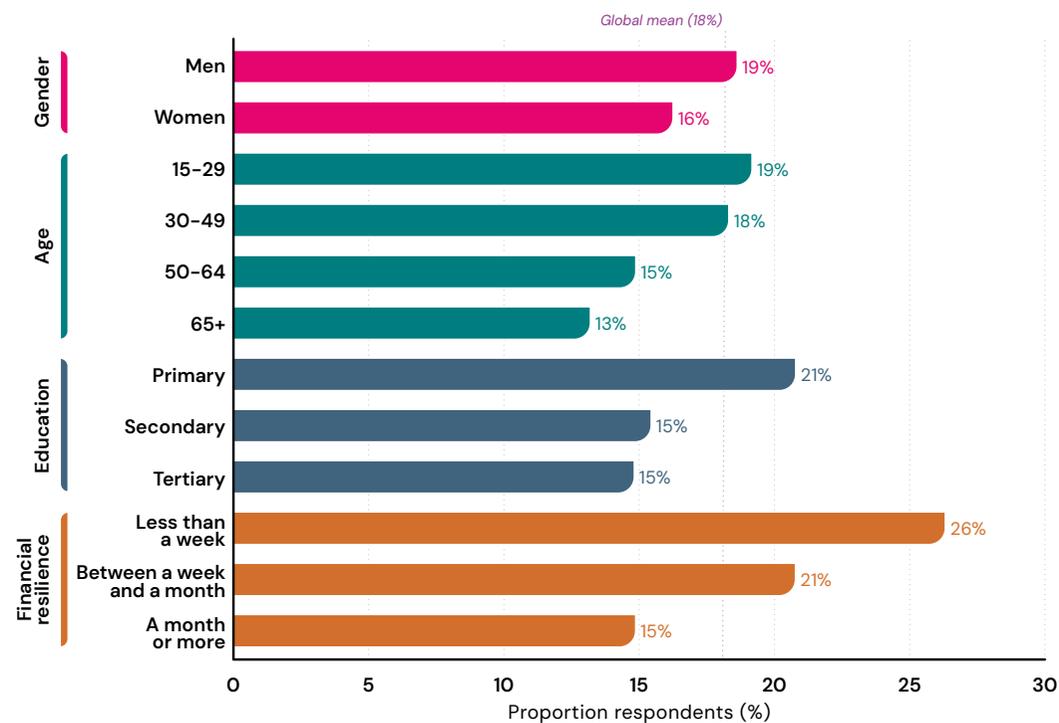


Chart 2.8. Recent experience of harm at work among the current workforce, by demographics and financial resilience (% Personally experienced)



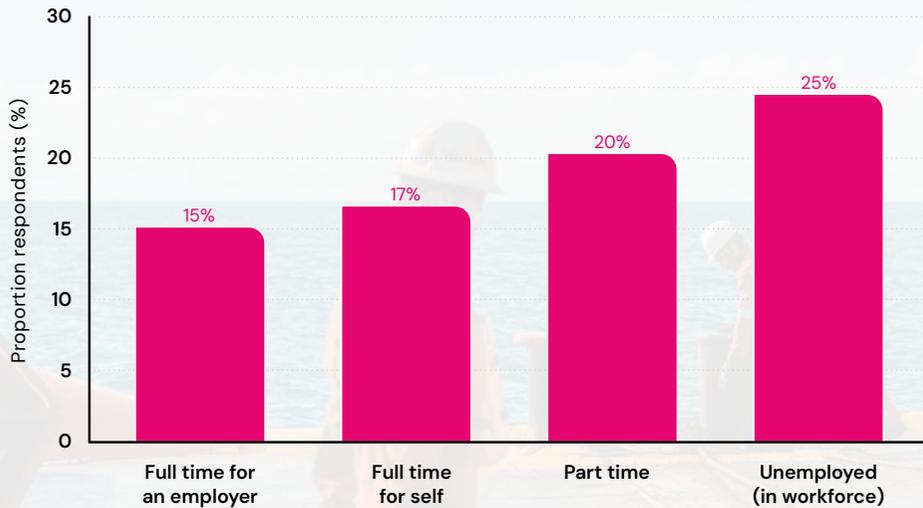
Survey questions: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work

Financial resilience: Suppose your household suddenly lost all income and had to survive only on savings and things that could be sold. How long would your household be able to cover all the basic needs, such as food, housing, and transportation?

Note: 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

The type of employment people engage in underlies many differences in the experience of workplace harm. 'Type of employment' can refer to the 'formality' of the work itself as well as the industry or sector a person works in. Those in more stable employment situations are less likely to be harmed at work. Globally, people who are employed full-time (for an employer) are least likely to experience workplace harm (15% in the past two years) compared to other types like self-employment (17%), part-time employment (20%) and being unemployed but still looking for work (25%).

Chart 2.9. Experience of harm at work in the past two years among the current workforce, by employment type (% Personally experienced)



Survey question: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work

Note: 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

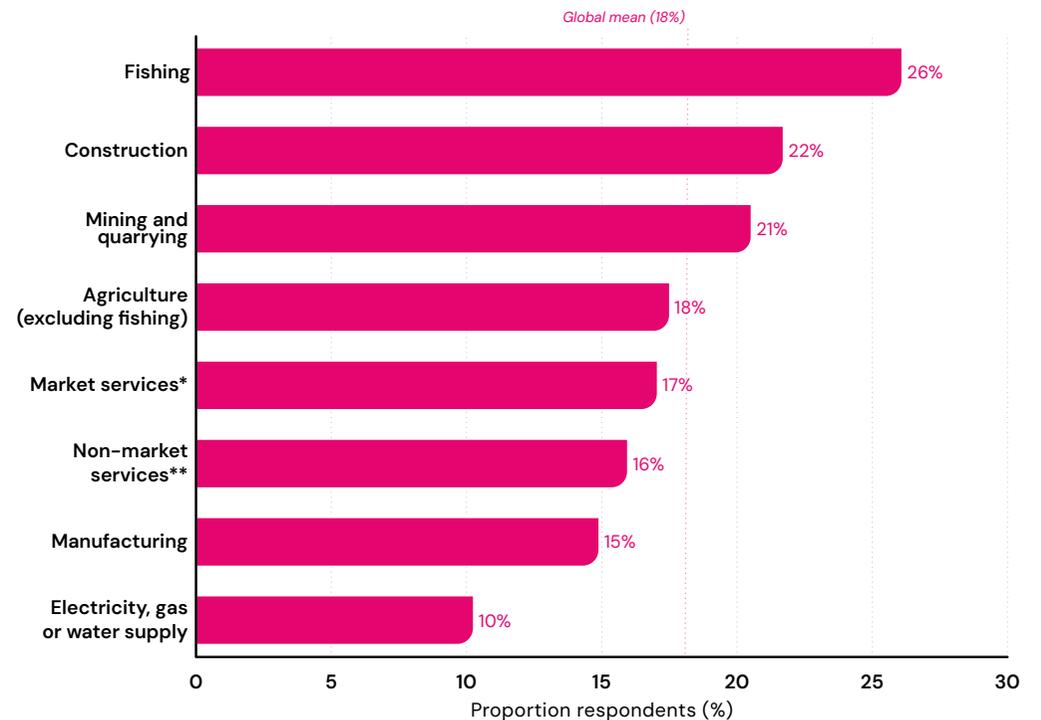


Looking at the workers who report experiencing harm by the sector they work in, the data show varying levels of harm at a global level. Fishing has the highest level of workplace harm of any single industry, with one in four fishers (26%) experiencing harm at work in the past two years. Fishers are regularly exposed to hazards and risks, often working long hours in harsh conditions at all hours of the day. They spend many hours in the sun, exposing themselves to cancers and eye disorders, and are at risk of injuries and musculoskeletal disorders as a result of dangerous equipment and conditions, in addition to the threat of drowning. The Food and Agricultural Organization of the United Nations (FAO) estimates that 80 fishers die every day, with hundreds more being injured¹¹. In smaller-scale enterprises, many fishers lack established, formalised work arrangements, meaning that when an injury occurs, they lack the requisite support structures needed to cope and recover¹². ILO Convention 188 commits to ensuring decent work in fishing, including requirements around conditions of service, accommodation and food, and medical care¹³.

Construction workers experience harm to a similar degree as fishers (22% in the past two years). They, too, regularly work with heavy machinery and spend many hours outdoors in the elements. However, they are also exposed to more hazardous substances and specific high-risk injuries associated with working on building sites, including back and upper-limb disorders, working at height and moving vehicles¹⁴. In 2022, the ILO adopted a revised code of practice on OSH in the construction sector that provides advice about eliminating risk in the sector¹⁵.

Around one in five people working in mining and quarrying (21%) say they have been harmed in the past two years. Similarly to fishing and construction, the ILO has several conventions and codes of practice for the field of mining¹⁶. Market services (e.g., trade, transportation, restaurant work, retail) and non-market services (e.g., education, health, social services or public administration) – the two most common occupations captured in the World Risk Poll – see slightly lower rates, at 17% and 16%, respectively.

Chart 2.10. Recent experience of harm at work among the current workforce, by global industry (% Personally experienced)



Survey question: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work

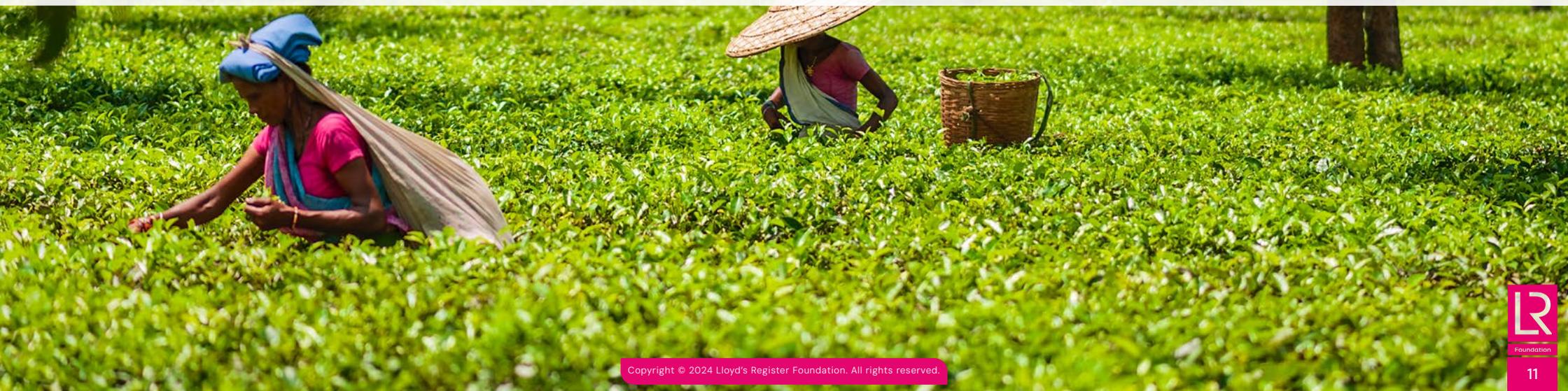
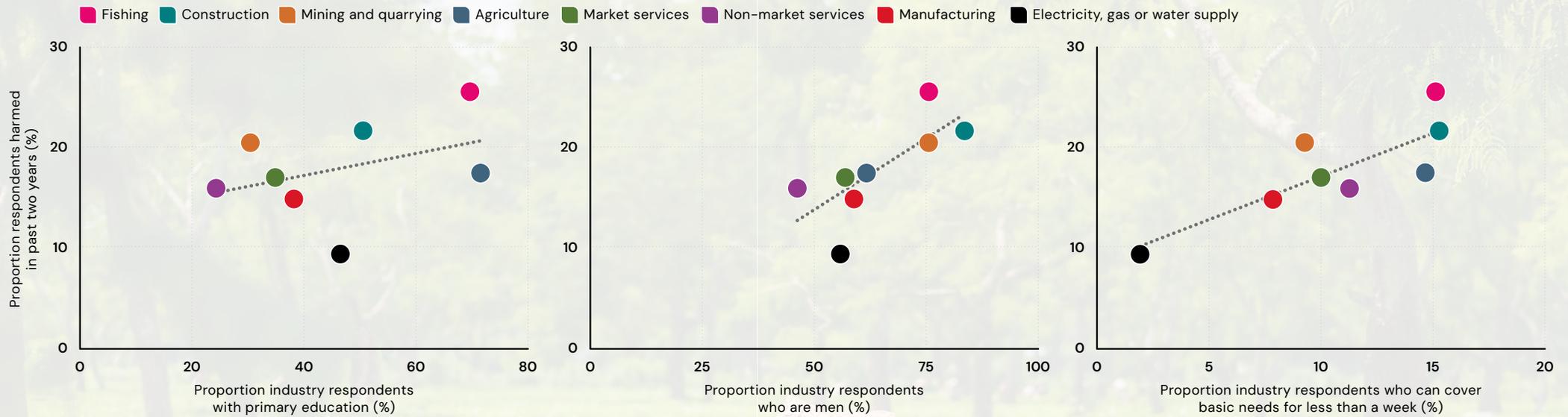
Note: 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

*Market services: e.g., trade, transportation, hotel/accommodation, restaurant work, food sales, retail, business and admin

**Non-market services: e.g., education, health, social services, public administration, government, military, security service

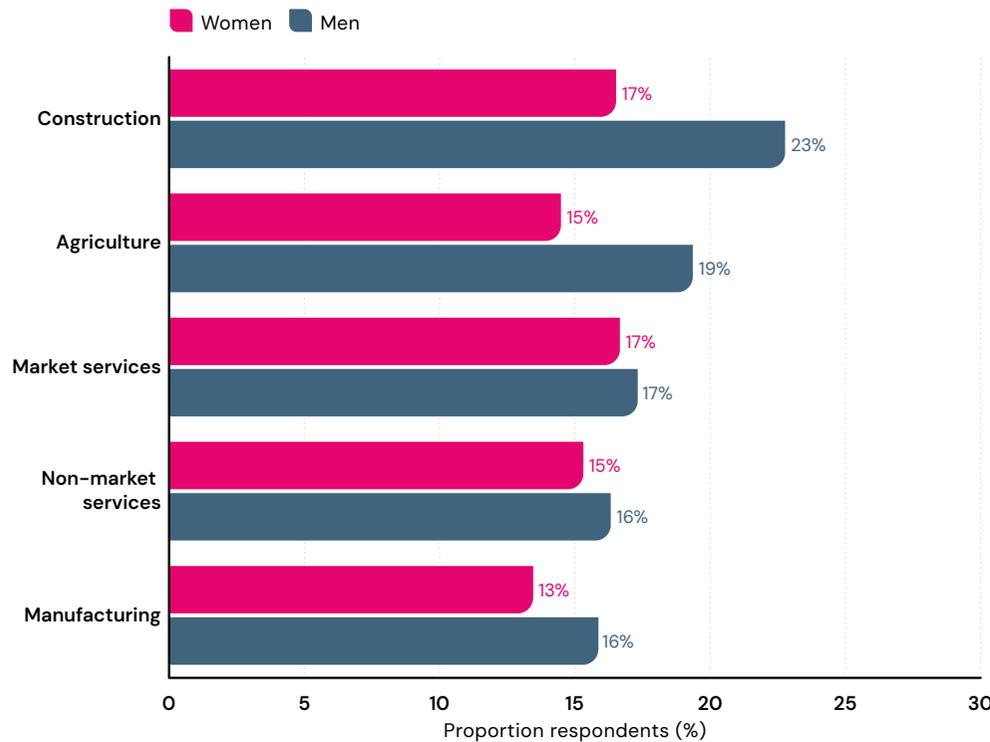
Many industries that see the highest rates of workplace harm (e.g., fishing, construction) also skew most towards demographics that report the highest rates of harm — e.g., men and people with lower education levels (see Chart 2.8). In part, the relationship between experience of harm and demographics is underpinned by the fact that some groups are more likely to work in certain sectors than others. As Chart 2.11 shows, there is a clear positive relationship between sectors that see the highest rates of harm and the proportion of people who work in those sectors that are men, have primary education only or have low levels of financial resilience.

Chart 2.11. Relationship between rates of self-reported harm and proportion of each industry that employs people with primary education only, men, and those who could only cover their basic needs for less than one week if they lost their income



Further differences emerge within these sectors when looking at workplace harm by gender. Across market (17% each) and non-market services (16% men; 15% women), men and women experience harm at essentially the same rate. But across construction, agriculture and manufacturing, a higher proportion of men experience harm than women. Beyond the established relationship between gender and industry of occupation (shown in Chart 2.8), this finding suggests that men and women in the same industries are not always exposed to the same levels of risk and harm. In riskier occupations, men are still more likely to be harmed than women.

Chart 2.12. Recent experience of harm at work among the current workforce, by global industry and gender (% Personally experienced)



Survey question: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work

Note: 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

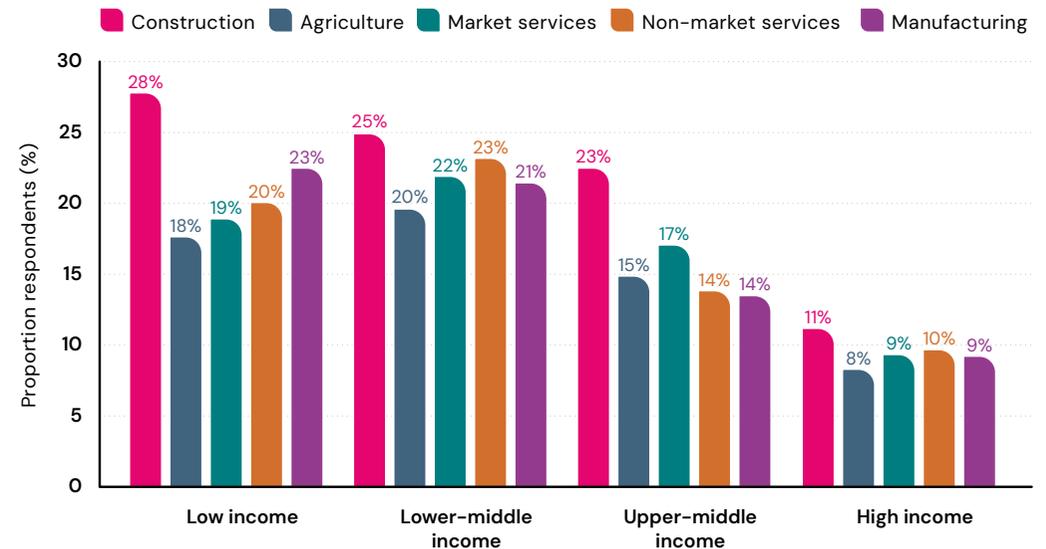
Market services: e.g., trade, transportation, hotel/accommodation, restaurant work, food sales, retail, business and admin

Non-market services: e.g., education, health, social services, public administration, government, military, security service

A similar picture emerges when analysing harm by age within these five sectors. The biggest gap in harm between 15- to 29-year-olds and those over 65 is in construction (25% and 8% harmed, respectively), while the agriculture sector has the narrowest gap (20% and 15%, respectively). These demographic differences in self-reported harm within the same job sectors globally are also linked to other factors, such as where in the world people work and how affluent these countries are (see Charts 2.2 and 2.3). However, taken together, they confirm that certain demographic groups are more vulnerable to workplace harm in general, particularly in specific high-risk job sectors.

Chart 2.13 shows the five industries with sufficient base sizes for reporting (i.e., more than 100 people) across each of the four country income classifications. Regardless of country income, people working in construction see higher rates of workplace harm than those in agriculture, market or non-market services and manufacturing. Aside from construction, workers in upper-middle-income countries see the highest rates of harm in market services, while harm in the manufacturing industry is more of an issue in low-income countries. In general, across all these job sectors, rates of workplace harm increase as country income level decreases.

Chart 2.13. Recent experience of harm at work among the current workforce, by industry and World Bank country income level (% Personally experienced)



Survey question: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work

Note: 'Personally experienced' includes respondents who answered 'Yes, personally experienced' or 'Both' to the question of workplace harm.

Market services: e.g., trade, transportation, hotel/accommodation, restaurant work, food sales, retail, business and admin

Non-market services: e.g., education, health, social services, public administration, government, military, security service

i - This report uses a minimum reporting threshold of 100 cases when analysing demographic or other data splits for the purposes of statistical reliability. In this case, it means that the World Risk Poll interviewed more than 100 people in each industry shown in Chart 2.10 across each of the four World Bank country income classifications.

Insight to action

This first chapter has established several key points about workplace harm, namely:

- Global rates of workplace harm in the past two years are mostly stable, at 18% of the current workforce, and are highest in low- and lower-middle-income countries.
- There is a link between being harmed at work and worrying about it, although there is also evidence of risk habituation among those most exposed to workplace harm.
- Men, younger people, those with primary education only and the least financially resilient are most likely to experience harm at work, partly because the types of work they do skew towards professions where harm is highest: fishing, construction, mining and agriculture.
- The type of employment people engage in – e.g., full-time for an employer, part-time or self-employed – is linked to their likelihood of being harmed at work; those in more secure, full-time employment situations are least likely to report being harmed.

The variability in reported harm at work underscores the need for tailored occupational safety interventions in different parts of the world, among different job sectors and between different worker demographics.

3. Reporting workplace harm

To tackle the endemic problem of workplace harm, it is necessary to have accurate reporting systems that build a profile of workplace hazards and monitor occupational safety and health¹⁷. The ILO recommends that reporting systems cover four main domains: occupational accidents, diseases, dangerous occurrences and commuting accidents¹⁸. Such systems enable decision-makers to understand the OSH landscape more comprehensively and identify the most needed interventions to reduce the risk of harm¹⁹. Accurate reporting also helps to encourage further research into the nature of OSH and workplace harm, design training and education packages to better inform workers of risks and hazards at work, and plan compensation strategies for those affected²⁰.

However, standard measures of workplace harm incidents sometimes underestimate the phenomenon they measure²¹. This 'under-reporting' of workplace harm is widely publicised and can refer to either employees not reporting injury or illness to their employer or employers who report inaccurate numbers themselves²². Under-reporting workplace harm can happen for many reasons²³, including:

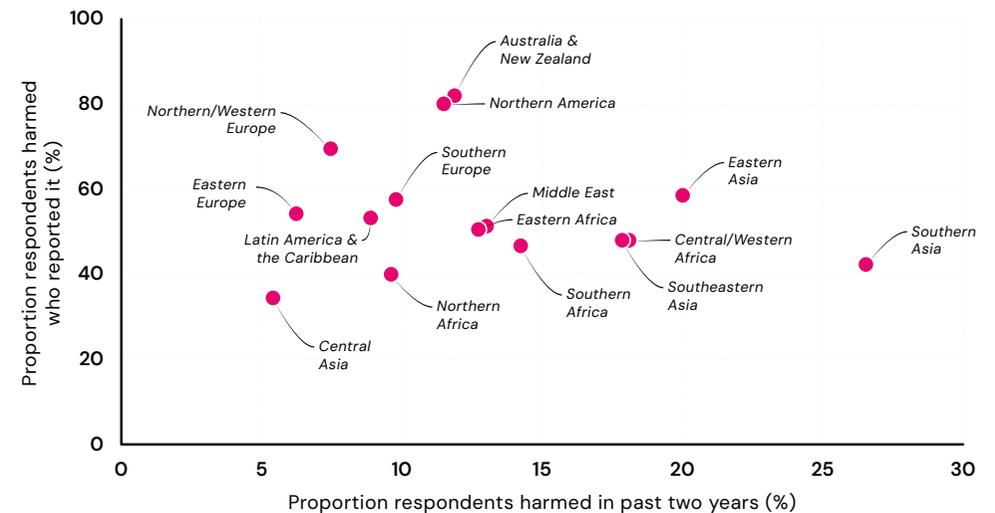
- fear of reprisals
- obstacles in record keeping
- belief that pain is an ordinary consequence of some jobs
- lack of management responsiveness
- pressure of production
- employer incentive programmes
- poor regulatory knowledge

There is also evidence that temporary (rather than full-time contracted) workers are less likely to report harm at work, as well as there being generally lower rates of reporting when unemployment is high²⁴.

Globally, only half (51%) of the current workforce who experienced harm at work in the past two years say they reported the incident by telling someone (such as a manager, supervisor or health/social services) about it. Rates of reporting workplace harm vary widely across world regions. Around four in five people (82%) who suffered recent harm at work in Australia and New Zealand and Northern America reported it to someone, with this figure falling to 69% in Northern and Western Europe. Minorities in Southeastern Asia (48%), Central/Western Africa (48%), Southern Africa (47%), Southern Asia (42%), Northern Africa (40%) and Central Asia (34%) who have suffered recent harm reported it to someone.

There is no meaningful relationship between the experience of workplace harm and reporting it at the regional level (see Chart 3.1). However, Southern Asia, Southeastern Asia and Central/Western Africa stand out for having some of the lowest rates of workplace harm reporting coupled with high rates of experiencing harm and should be priority regions for OSH interventions.

Chart 3.1. Regional comparison of recent experience of harm at work and the percentage who told someone about it (% Personally experienced)



Survey questions: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work
Please think about the serious harm you PERSONALLY experienced from working. Did you TELL SOMEONE who is responsible for safety or health at your work, such as your supervisor, manager, OR the health or social services, about your injury or illness?

Unlike the experience of workplace harm more generally, global rates of reporting harm are remarkably consistent across demographic groups. Very few meaningful differences exist at a global level between genders (men: 51%, women: 51%), levels of education (primary: 50%, secondary: 51%, tertiary: 52%) or income levels (all five income quintiles between 49% and 52%). Around half of each group harmed at work in the past two years reported it. The one exception is among people aged 50 to 64, who are the least likely to report workplace harm (46%, vs. 52% for those aged 15–29 and 30–49), which could be linked to greater fears of losing employment²⁵ towards the end of many working-age careers.

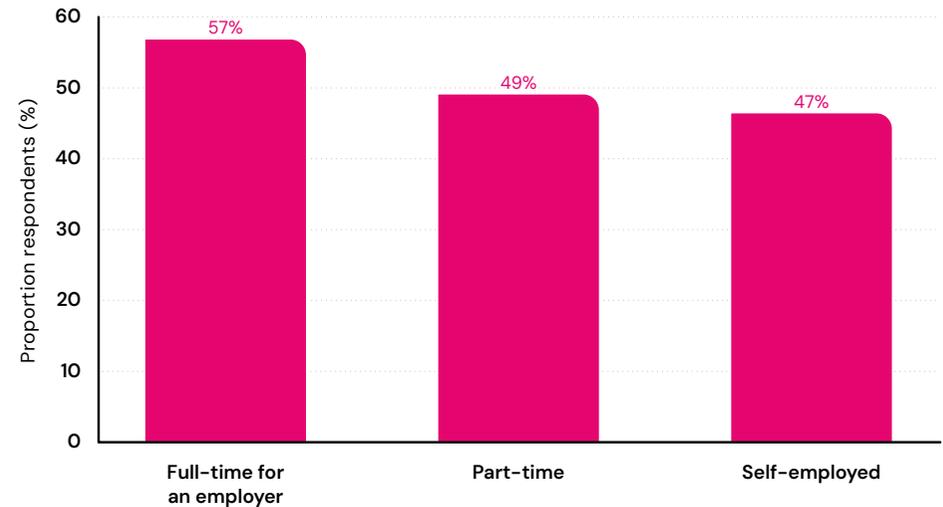
At a regional level, however, gender and age appear to make more of a difference. Among those who have experienced workplace harm in the past two years, women are more likely than men to report it in Northern/Western Europe (84% vs. 57%), while the opposite is true in the Middle East (43% of women vs. 54% of men) and Eastern Europe (48% vs. 59%). Reporting rates are significantly higher among those aged 15–29 than 30–49 in Northern/Western Europe (76% vs. 62%) and Southern Asia (48% vs. 37%), while the inverse is true in Southern Europe (49% vs. 64%) and Eastern Europe (49% vs. 59%).

Taken together, these findings suggest that in certain regions, communications strategies seeking to boost reporting rates need to be more tailored to specific groups who are less likely than others to report harm at work.



While personal characteristics like age and sex have little effect on reporting workplace harm at the global level, the type of employment makes a far greater difference. Globally, reporting workplace harm is more common among those harmed in full-time employment for an employer (57%) than for those employed part-time (49%) or self-employed (47%). This finding, in part, supports other research, which finds that temporary workers are more fearful of reprisals if they report instances of workplace harm²⁶.

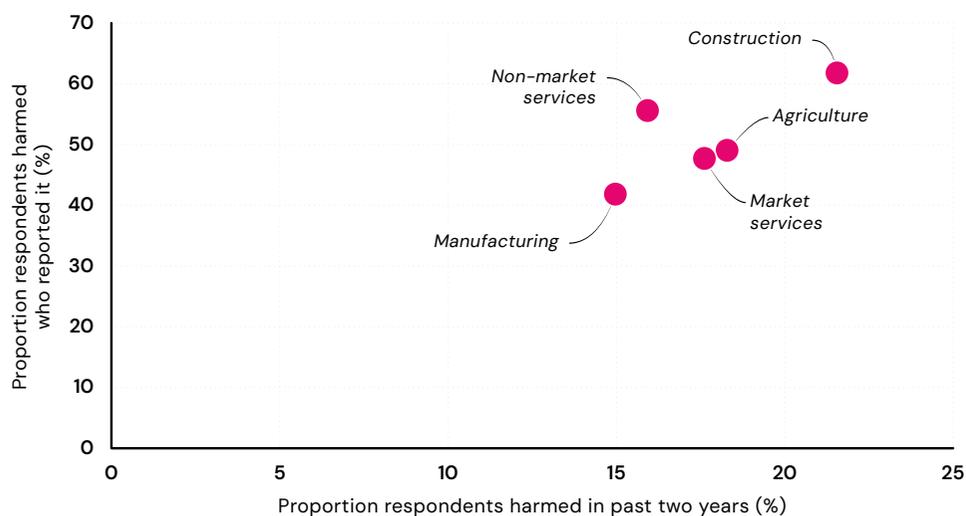
Chart 3.2. Global rates of workplace harm reporting among those in the current workforce, who experienced harm in the last two years, by employment status (% Yes)



Survey question: Please think about the serious harm you PERSONALLY experienced from working. Did you TELL SOMEONE who is responsible for safety or health at your work, such as your supervisor, manager, OR the health or social services, about your injury or illness?

Certain industries also stand out for their rates of workplace harm reporting. Three in five construction workers (61%) globally who were harmed in the past two years reported it to someone, higher than the rates in non-market services (56%), agriculture (49%) and market services (48%). Of the five industries with enough sample size globally to report on, manufacturing has by far the lowest reporting rate (42%). Unlike the relationship between global region and rates of reporting harm, comparing reporting against industry type shows a very strong positive correlation. Industries that are more at risk from harm also see the highest rates of reporting. This could be, in part, because of regulatory requirements around injury reporting for some sectors.

Chart 3.3. Rates of workplace harm reporting among those in the current workforce who have experienced it in the past two years, by global industry (% Yes)



Survey questions: Have you or someone you PERSONALLY know, EXPERIENCED serious harm from any of the following things in the past TWO years? Work

(3?)

i - We have not included fishing, mining/quarrying or electricity/gas/water supply due to low sample sizes among those harmed in the past two years.

Insight to action

Data from the World Risk Poll suggest that globally, around half of all cases of workplace harm go unreported. The problem is even more acute in some regions (e.g., Southern Asia) and across certain industries (e.g., market services, manufacturing). There are several steps policymakers and employers can take to increase reporting of workplace harm that will benefit employees by providing accurate data about the risks people face every day at work. This would help employers and regulators design more targeted policies and interventions to reduce risks and harms in the workplace.

Implementing near-miss reporting policies can help in this regard by promoting an open culture towards occupational safety. Near misses offer a useful source of data to identify hazards and risks to reduce future harm²⁷. Clear reporting tools should be available to employees and can come in different forms, from hotlines to chatbots to online forms. Employees should also be encouraged to use these tools as part of a wider organisational culture promoting safe and healthy work environments. Regular inspections, risk assessments, audits and, crucially, engaging the workforce in OSH policy²⁸ are also likely to help increase rates of reporting harm at work.

“Data from the World Risk Poll suggest that globally, around half of all cases of workplace harm go unreported.”

4. Occupational safety and health training

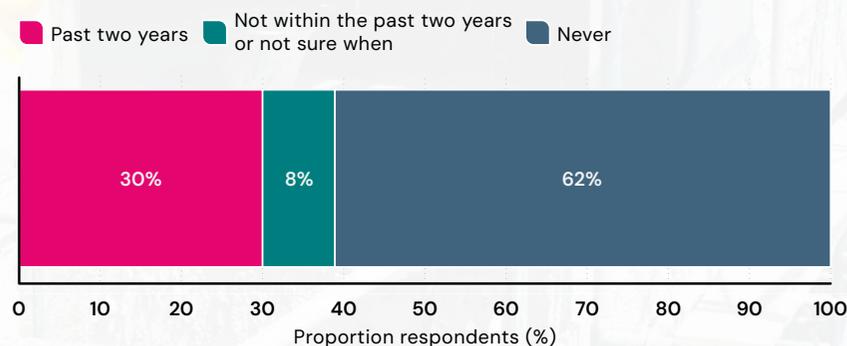
The final question the World Risk Poll asked about this topic was regarding occupational safety and health training, which links directly to the point made above about engaging the workforce around workplace safety. Occupational safety and health training is a key component of employers' efforts to make their workplaces safer for employees. The contents of OSH training can vary considerably in duration, frequency and documentation depending on the context. Some jobs require highly formalised and structured training programs, while others rely on more informal methods to teach workers on-the-job skills. Different meta-analyses into the effectiveness of OSH training have consistently found links between safety training increasing the reporting of injuries and generally positive outcomes for employee safety^{29,30}.

However, it is also important to account for the prior likelihood of certain companies being more safety conscious in the first place. An added complication to isolating the effectiveness of OSH training is the wider suite of policies that also affect levels of harm and risk at work. Organisations that provide OSH training could have other policies that play a role in managing safety and reducing harm over time³¹. Studies have found links between training and employee behaviours but not broader health outcomes like reductions in symptoms, injuries or illnesses³². Despite these challenges and uncertainties, the available literature finds that OSH training is an important part of controlling hazards and risks in the workplace³³.

Majority of global workforce have never received occupational safety and health training

Even though academic and policy communities consider OSH training an important part of management systems in reducing workplace harm, most of the global workforce has never received such training. Sixty-two percent have never received OSH training about risks associated with their work. Just over a third (38%) have ever received OSH training, with the majority taking place in the past two years (30%). In other words, those who have received training are overwhelmingly likely to have received it recently.

Chart 4.1. Global rates of occupational safety and health training among the current workforce (% Yes)



Survey question: Have you ever had any health and/or safety training about any risks associated with your work?

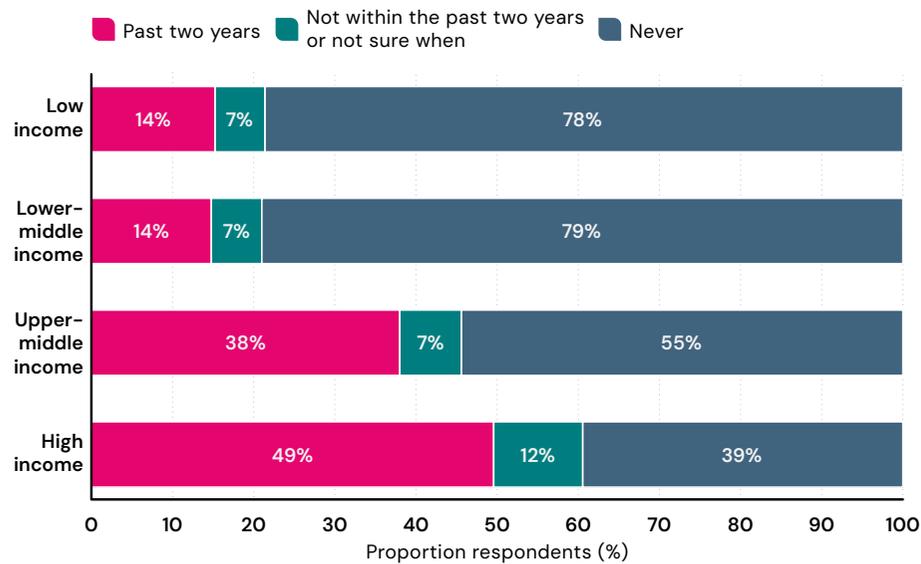
Did you receive health and/or safety training for work in the past TWO years?

Note: 'More than two years ago' also includes people who said they have had safety training but did not provide additional information about whether the training happened in the past two years.

It is worth noting that the World Risk Poll only asked people whether they had ever had OSH training about risks associated with their work and did not ask any more detailed questions about the nature, content or frequency of such training.

Rates of OSH training vary considerably by country income level. Only in high-income countries has most of the current workforce received OSH training (49% in the past two years, 12% not in the past two years). Training rates fall in upper-middle-income countries and are lower still in lower-middle-income and low-income countries. Four in five current workers in lower-middle- (79%) and low-income (78%) countries have never received OSH training in their jobs.

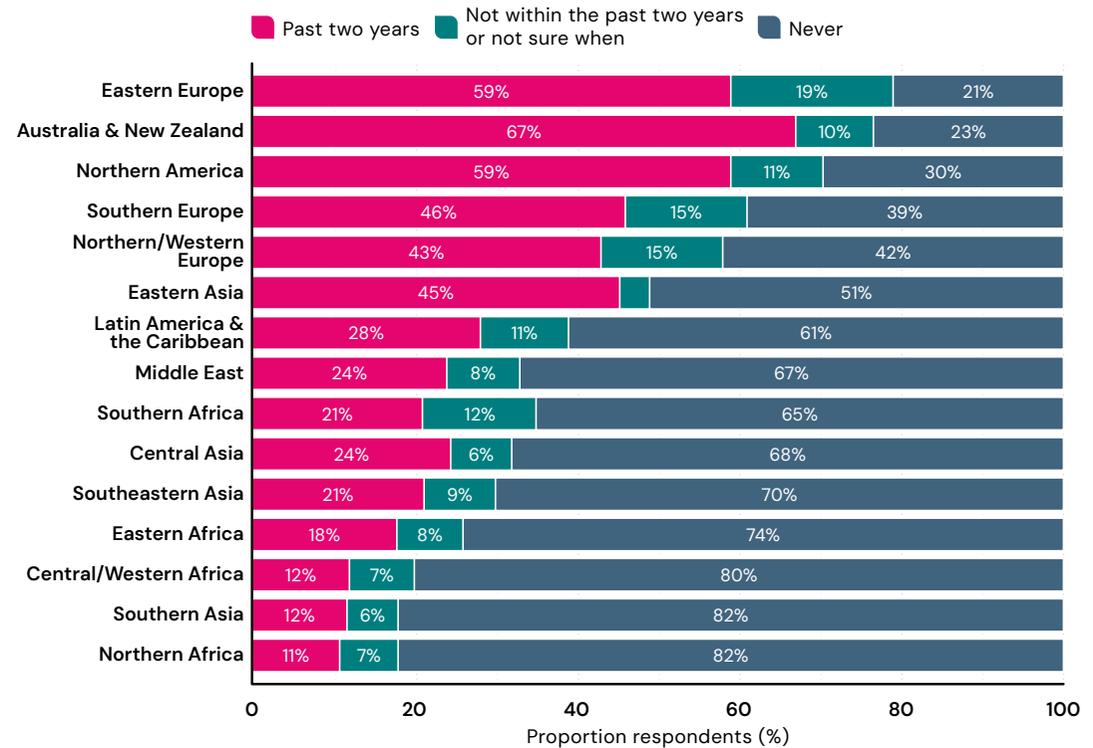
Chart 4.2. Occupational safety and health training rates among the current workforce, by World Bank country income level (% Yes)



Survey question: Have you ever had any health and/or safety training about any risks associated with your work?
 Did you receive health and/or safety training for work in the past TWO years?
 Note: Percentages may not sum to 100% due to rounding.

Training rates also vary significantly by region. Eastern Europe (78%) and Australia and New Zealand (77%) are tied at the top, with nearly four in five workers having ever had training (although workers in ANZ are more likely to have had recent training). Majorities in Northern America and Southern, Northern and Western Europe have also received OSH training. Rates of training decline sharply across other regions. In Eastern Africa, Central/Western Africa, Southern Asia and Northern Africa, fewer than one in five current workers have received training in the past two years. Across much of the world, OSH training at work remains a rare activity.

Chart 4.3. Occupational safety and health training rates among the current workforce, by region (% Yes)



Survey question: Have you ever had any health and/or safety training about any risks associated with your work?
 Did you receive health and/or safety training for work in the past TWO years?
 Notes: Percentages may not sum to 100% due to rounding. Values under 5% are not displayed.

Of the top 10 countries where recent workplace safety and health training is most common, five are in Eastern Europe, alongside Australia, South Korea, Norway, New Zealand and Canada. By contrast, in many African countries, more than four in five current workers have never been trained, with Senegal (89% of the workforce have never received OSH training), Morocco, Togo and Cote d'Ivoire (all 88%) tied for the lowest rates globally. Many of these national and regional differences (shown in Chart 4.3) can be explained, to some extent, by different regulatory environmentsⁱ.

Table 4.1. Top and bottom 10 countries for occupational safety and health training among current workforce (% Yes)

Top 10 countries	Proportion trained in last two years (%)	Bottom 10 countries	Proportion NOT trained in last two years (%)
Czech Republic	77%	Senegal	89%
Latvia	77%	Morocco	88%
Slovakia	74%	Togo	88%
Hungary	73%	Cote d'Ivoire	88%
Australia	68%	Yemen	87%
Norway	65%	Nepal	87%
South Korea	64%	Egypt	87%
Romania	62%	Tunisia	86%
New Zealand	61%	The Gambia	85%
Canada	60%	Lebanon	85%

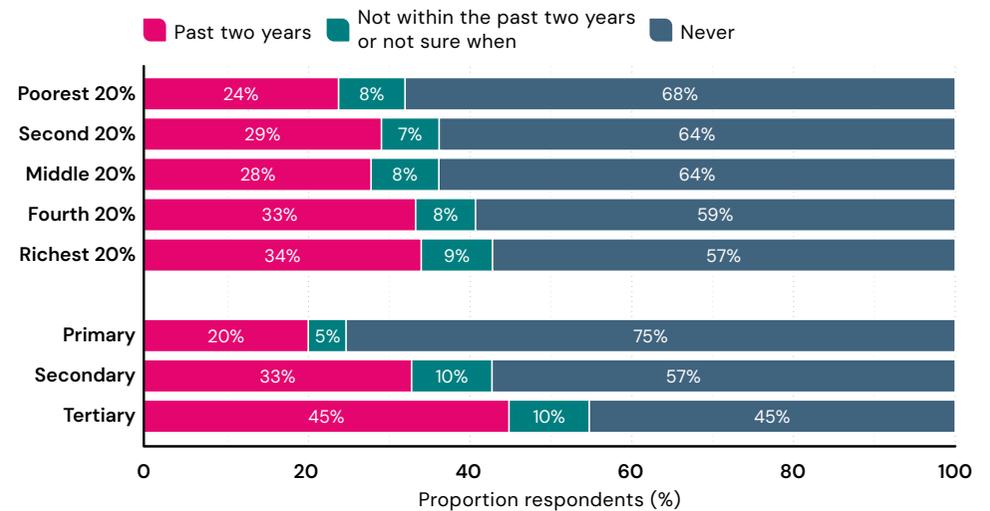
Survey question: Have you ever had any health and/or safety training about any risks associated with your work?
 Did you receive health and/or safety training for work in the past TWO years?

ⁱ - The ILO's Global Database on Occupational Safety and Health Legislation is a helpful resource in this regard. For example, it shows that countries in the bottom 10 globally for never receiving training have very little OSH legislation, compared to countries in the top 10 globally. See more here: <https://webapps.ilo.org/dyn/legosh/en/?p=141001>

As discussed in previous chapters, global occupational safety and health experiences and behaviours tend to be more closely related to the nature of people's jobs than their demographic characteristics. The same is true of workplace safety training. At a global level, there are few meaningful differences between men and women or across age groups in having received recent OSH training.

However, education and household income levels — factors often closely tied to occupation — have a much clearer relationship with OSH training. Chart 4.4 shows that the more educated and affluent someone is, the more likely they are to have had recent OSH training.

Chart 4.4. Occupational safety and health training rates among the current workforce, by household income and education level (% Yes)



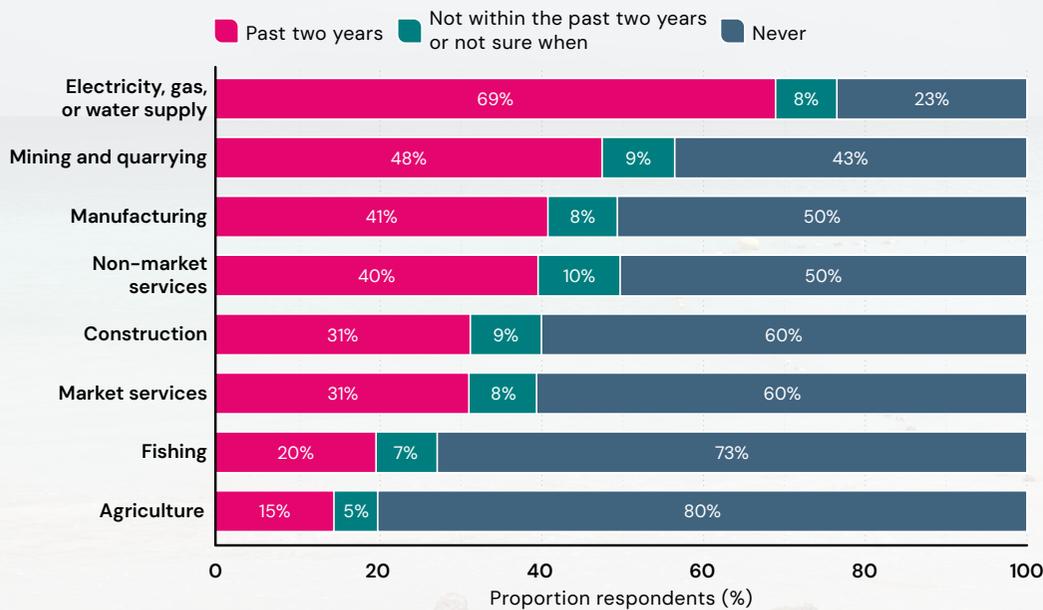
Survey question: Have you ever had any health and/or safety training about any risks associated with your work?
 Did you receive health and/or safety training for work in the past TWO years?
 Note: Percentages may not sum to 100% due to rounding.

People employed full-time by an employer are also around twice as likely to have had recent workplace safety training (41%) as those employed part-time (23%). This finding indicates that more is needed to spread training to employees who do not work in more structured, formal circumstances.

Certain job sectors also stand out for their low levels of OSH training. Among people worldwide working in agriculture, 80% have never had workplace safety training, and just 15% have had some in the past two years. While training rates are slightly better in fishing than agriculture, seven in 10 (73%) people currently in the fishing industry have never been trained.

Majorities of the global workforce in market services, construction, non-market services and manufacturing have also never had workplace safety training. People working in electricity/water/gas supply and mining and quarrying see the highest rates of recent training; these are the only two job sectors measured in the World Risk Poll in which a majority of current employees have ever been trained in occupational safety and health.

Chart 4.5. Occupational safety and health training among the current workforce, by global industry (% Yes)



Survey question: Have you ever had any health and/or safety training about any risks associated with your work?

Did you receive health and/or safety training for work in the past TWO years?

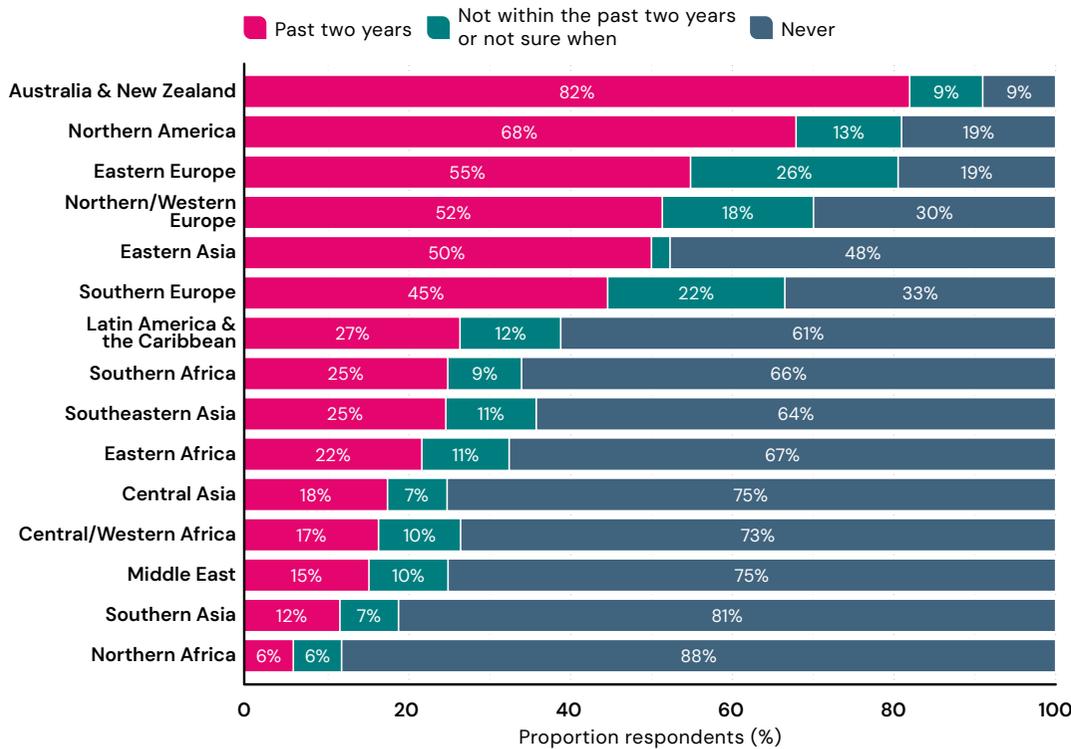
Note: Percentages may not sum to 100% due to rounding.

“ People employed full-time by an employer are also around twice as likely to have had recent workplace safety training as those employed part-time. ”



The likelihood of receiving OSH training is significantly impacted by the region where people live and are employed. Taking the construction industry as an example, rates of recent workplace safety training differ from nearly universal in Australia and New Zealand (82%) to almost non-existent in Northern Africa (6%).

Occupational safety and health training rates among the current construction workforce, by region (% Yes)



Survey question: Have you ever had any health and/or safety training about any risks associated with your work?
 Did you receive health and/or safety training for work in the past two years?
 Note: Percentages may not sum to 100% due to rounding.

The construction sector accounts for 7% of Australia's total economic output and is a major employer in the country³⁴. To work on a construction site in Australia, workers must first complete a training course called 'Prepare to Work Safely in the Construction Industry', otherwise known as 'white card' training, which is recognised across the entire country³⁵. This training must be conducted by a registered training organisation. White card training lasts several hours and covers the topics of hazards, emergencies, personal protective equipment and general responsibilities. Construction workers must be able to show their white card to the person conducting business or an inspector, should they ask to see it.

By contrast, the construction sector across Northern Africa and many other lower-income regions is more informal³⁶. Even though nearly all construction workers in Australia and New Zealand have received OSH training in the past two years, while almost no construction workers across Northern Africa have, rates of harm are remarkably similar across the two regions. Nine percent of construction workers in ANZ and Northern Africa have experienced harm at work in the past two years. This example raises a much bigger question, which will be discussed in the next section.



Is occupational safety and health training effective at reducing workplace harm?

While there is widespread evidence linking the effectiveness of OSH training with outcomes such as changing worker attitudes, evaluating the relationship with reducing rates of harm is more challenging. These challenges extend to the World Risk Poll results on several levels.

First, while the Poll measured workplace harm experiences consistently over two iterations (2021, 2023), it only asked about reporting and training once, in 2023. Although the Poll can indicate changes in experiences of harm over time, it is unable to identify corresponding changes in the rate of training over the same period, which could have given an indication of the role played by training ratesⁱ. Second, the World Risk Poll only asks three questions related to workplace harm: whether people have experienced it, whether they reported it to someone and whether they have had safety training. As training is only one of many interventions available to reduce risk from workplace harm, any inferences would have to ignore the myriad of other factors that could be responsible for increasing and decreasing rates of harm.

At the global level, having been trained (or not) seems to make little difference with respect to experiencing workplace harm. In fact, a slightly higher proportion of those trained within the last two years and longer ago have experienced harm at work (both 19%) than those who have never been trained (17%).

On first reading, these findings may seem surprising and indicate that OSH training may not directly reduce rates of workplace harm. Such a reading would neglect many other considerations, such as the wide range of other variables that contribute to causing harm at work and the fact that those who have had training may work in riskier circumstances and be better at identifying and reporting cases of harm than the untrained because of what they learn during training.

As a result, it is necessary to examine the link between workplace training and reporting harm beyond just experiencing it. Holding other factors equal, such as gender, age, education, job sector and GDP per capita, there is a significant relationship between having safety training and the likelihood of reporting workplace harm. The odds of individuals who have received OSH training in the past two years reporting harm are significantly more likely, by around 3.3 times, than the odds of those who never received training to report harm.

ⁱ - There is no correlation between changes in experience of harm in the past two years and overall rates of training in the past two years in 2023.

Although it is more diluted, the same pattern holds for less recent safety training. The odds of people who received OSH training, but not within the past two years, reporting harm are more likely by around 1.8 times than the odds of those who never received training to report harm. These findings suggest that regular training not only raises individual awareness but also fosters a culture of safety communication within the workplaceⁱⁱ.

Chart 4.7. Odds ratios of reporting workplace harm among workers who have been harmed, by when they received OSH training



Survey question: Have you ever had any health and/or safety training about any risks associated with your work?
Did you receive health and/or safety training for work in the past TWO years?

Note: Odds ratios are compared to the baseline for people who have been harmed at work in the past two years but never received OSH training.

ⁱⁱ - There is also a meaningful relationship between receiving OSH training and worry about harm at work. People trained in the past two years are generally more worried by workplace harm than the untrained, controlling for other factors, again suggesting a link between training and heightened awareness of workplace hazards.

Insight to action

Although there is no evidence from the World Risk Poll that going through OSH training in the past two years is always linked to decreasing rates of workplace harm, there is evidence of a link between training and increasing rates of reporting experienced harm. Training plays a crucial role in occupational safety and health by equipping workers with the necessary knowledge and skills to recognise and mitigate workplace hazards and build a workplace culture that explicitly recognises the importance of safety.

This is a valuable outcome for reasons mentioned at the beginning of Chapter 3. Employers and policymakers need accurate reporting data about whether and how occupational harm occurs to implement measures and policies to reduce it.

Occupational safety and health training is not about eliminating harm altogether but minimising the risk of it occurring in the future. As training plays a role in increasing the reporting of workplace harm, it is also indirectly linked to giving policymakers and employers better data about the safety of their workplaces. In turn, these same policymakers and employers should prioritise regular OSH training for all employees, particularly those in high-risk environments and less formal employment circumstances. Training programs should not only impart knowledge to workers but also enhance awareness and the perceived importance of workplace safety in general, fostering a positive culture of reporting risks and harms experienced in the workplace.

Other research commissioned by Lloyd's Register Foundation³⁷ highlights the importance of context when designing interventions such as safety and health training. The research recommends that policymakers and those responsible for OSH training should develop guidelines that indicate key success factors for evaluating training effectiveness, which would consider things like organisational characteristics, trainee demographics and specific features of each intervention. Online safety training can also be an effective tool when given proper contextualisation but regularly lacks job-specific context. As such, OSH practitioners should also design online safety materials that are immersive, interactive and properly account for context. Perhaps most importantly, OSH training should not become a box-ticking exercise but a practice that develops and is enhanced over time through frequent reviews.



7. Conclusion

With just a few short questions asked to a representative sample of the world's adult population, the World Risk Poll is able to glean a tremendous amount of insight into the world's workforce and their experiences of occupational risks and hazards. In this report, we have tried to highlight several statistics that demonstrate the scale of global workplace harm and the work that remains to be done to make the world of work safer.

Just under one in five (18%) of the world's workforce have been harmed at work in the past two years. Rates of harm are closely linked to certain personal demographics, as well as the types of employment and job sectors that people work in.

The World Risk Poll has also shed light on the scale of unreported workplace harm. Around half of workers who have experienced workplace harm in the past two years reported this harm to someone, such as a manager. The world is currently missing a significant opportunity for employers and policymakers to better understand the OSH landscape, with half of all cases of harm going unreported. This highlights the need to increase reporting rates and build wider cultures of workplace safety that encourage workers to report harm.

If the size of the opportunity to increase harm reporting is big, then the opportunity to increase OSH training globally is even bigger. A significant majority (62%) of current workers have never received any OSH training, a figure that rises significantly in many of the world's most risky job sectors, such as agriculture and fishing (80% and 73%, respectively). As well as highlighting the number of workers untrained in OSH, the World Risk Poll quantifies the link between receiving training and reporting, showing that the opportunities to increase both go hand-in-hand.

Workers who have had recent OSH training are significantly more likely to report instances of harm than those who had training less recently or have never been trained at all. As such, policymakers and organisations should prioritise regular OSH training to increase reporting, build a more detailed understanding of workplace harms and, ultimately, design better interventions to make the world of work safer for all.

“If the size of the opportunity to increase harm reporting is big, then the opportunity to increase OSH training globally is even bigger.”

References

1. Alli, B. O. (2008). *Fundamental principles of occupational health and safety* (2nd edition). International Labour Office, Geneva.
2. Tear, M. J., Reader, T. W., Shorrock, S., & Kirwan, B. (2020). Safety culture and power: Interactions between perceptions of safety culture, organisational hierarchy, and national culture. *Safety Science*, 121, 550–561. <https://www.sciencedirect.com/science/article/abs/pii/S0925753518303771>
3. Liu, R., Liu, H.-C., Shi, H., & Gu, X. (2023). Occupational health and safety risk assessment: A systematic literature review of models, methods, and applications. *Safety Science*, 160, 106050. <https://www.sciencedirect.com/science/article/abs/pii/S0925753522003897>
4. Hasle, P., Limborg, H. J., & Nielsen, K. T. (2014). Working environment interventions – bridging the gap between policy instruments and practice. *Safety Science*, 68, 73–80. <https://www.sciencedirect.com/science/article/abs/pii/S092575351400040X>
5. Yanar, B., Amick, B. C., Lambraki, I., D'Elia, T., Severin, C., & Van Eerd, D. (2019). How are leaders using benchmarking information in occupational health and safety decision-making? *Safety Science*, 116, 245–253. <https://www.sciencedirect.com/science/article/abs/pii/S0925753518310646>
6. Zuschlag, M., Ranney, J. M., & Coplen, M. (2016). Evaluation of a safety culture intervention for Union Pacific shows improved safety and safety culture. *Safety Science*, 83, 59–73. <https://www.sciencedirect.com/science/article/abs/pii/S0925753515002623>
7. The fundamental conventions on occupational health and safety. (2023, January 12). International Labour Organization. Retrieved 06 August 2024 from <https://www.ilo.org/publications/fundamental-conventions-occupational-safety-and-health>.
8. A call for safer and healthier working environments. (2023, November 26). International Labour Organization. <https://www.ilo.org/publications/call-safer-and-healthier-working-environments>
9. Injuries and violence. (2024, June 19). World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/injuries-and-violence>
10. A call for safer and healthier working environments. (2023, November 26). International Labour Organization. <https://www.ilo.org/publications/call-safer-and-healthier-working-environments>
11. Fishing safety. (n.d.). Food and Agricultural Organization. <https://www.fao.org/fishing-safety/en/>
12. Fishing safety: Occupational hazards. (n.d.). Food and Agriculture Organization of the United Nations. Retrieved 19 July 2024 from <https://www.fao.org/fishing-safety/risk-management/occupational-hazards/en/>
13. Maritime – Fisheries. (n.d.). International Labour Organization. <https://www.ilo.org/industries-and-sectors/shipping-ports-fisheries-and-inland-waterways-sector/maritime-fisheries>
14. Construction health risks: Key points. (n.d.). Health and Safety Executive. Retrieved 19 June 2024 from <https://www.hse.gov.uk/construction/healthrisks/key-points.htm>
15. Safety and health in construction (Revised edition). (2022). International Labour Organization. Retrieved 5 August 2024 from <https://www.ilo.org/resource/other/safety-and-health-construction-revised-edition>
16. Occupational safety and health in the mining (coal and other mining) sector. (2014). International Labour Organization. Retrieved 5 August 2024 from <https://www.ilo.org/resource/occupational-safety-and-health-mining-coal-and-other-mining-sector>
17. De Castro, A. B. (2003, August). Barriers to reporting a workplace injury: Recognizing the difficulties and encouraging a determined approach. *Journal of Nursing*, 103(8), 112. https://journals.lww.com/ajnonline/citation/2003/08000/barriers_to_reporting_a_workplace_injury_31.aspx
18. Good practices for the development and implementation of national notification and recording systems – Fact sheet. (2017). International Labour Organization. Retrieved 06 August 2024 from <https://www.ilo.org/publications/good-practices-development-and-implementation-national-notification-and>
19. Pransky, G., Snyder, T., Dembe, A., & Himmelstein, J. (1999). Under-reporting of work-related disorders in the workplace: A case study and review of the literature. *Ergonomics*, 42(1), 171–182. <https://www.tandfonline.com/doi/abs/10.1080/001401399185874>
20. Good practices for the development and implementation of national notification and recording systems – Fact sheet. (2017). International Labour Organization. Retrieved 06 August 2024 from <https://www.ilo.org/publications/good-practices-development-and-implementation-national-notification-and>
21. Geddert, K., Dekker, S., & Rae, A. (2021). How does selective reporting distort understanding of workplace injuries? *Safety*, 7(3), 58. <https://www.mdpi.com/2313-576X/7/3/58>
22. Fagan, K. M., & Hodgson, M. J. (2017). Under-recording of work-related injuries and illnesses: An OSHA priority. *Journal of Safety Research*, 60, 79–83. <https://www.sciencedirect.com/science/article/abs/pii/S0022437516305072>
23. Fagan, K. M., & Hodgson, M. J. (2017). Under-recording of work-related injuries and illnesses: An OSHA priority. *Journal of Safety Research*, 60, 79–83. <https://www.sciencedirect.com/science/article/abs/pii/S0022437516305072>
24. Palali, A., & Van Ours, J. C. (2017). Workplace accidents and workplace safety: On under-reporting and temporary jobs. *LABOUR*, 31(1), 1–14. <https://onlinelibrary.wiley.com/doi/abs/10.1111/labr.12088>
25. Fagan, K. M., & Hodgson, M. J. (2017). Under-recording of work-related injuries and illnesses: An OSHA priority. *Journal of Safety Research*, 60, 79–83. <https://www.sciencedirect.com/science/article/abs/pii/S0022437516305072>
26. Underhill E., & Quinlan, M. (2011). How precarious employment affects health and safety at work: The case of temporary agency workers. *Relat Indust*, 66(3), 397–421. <https://www.eudit.org/en/journals/ri/2011-v66-n3-ri5004266/1006345ar/abstract/>
27. Occupational Safety and Health Administration. (n.d.). Near miss reporting policy. U.S. Department of Labor. Retrieved 22 July 2024 from <https://www.osha.gov/sites/default/files/2021-07/Template%20for%20Near%20Miss%20Reporting%20Policy.pdf>
28. Zheng, L. (2020, October 8). Do your employees feel safe reporting abuse and discrimination? *Harvard Business Review*. <https://hbr.org/2020/10/do-your-employees-feel-safe-reporting-abuse-and-discrimination>
29. Waehrer, G. M., & Miller, T. R. (2009). Does safety training reduce work injury in the United States? *The Ergonomics Open Journal*, 2(1), 26–39. <https://benthamopen.com/ABSTRACT/TOERGJ-2-26>
30. Cohen, A., & Colligan, M. (1998, June). Assessing occupational safety and health training: A literature review. National Institute for Occupational Safety and Health. <https://stacks.cdc.gov/view/cdc/11254>
31. Waehrer, G. M., & Miller, T. R. (2009). Does safety training reduce work injury in the United States? *The Ergonomics Open Journal*, 2(1), 26–39. <https://benthamopen.com/ABSTRACT/TOERGJ-2-26>
32. Robson, L. S., Stephenson, C. M., Schulte, P. A., Amick, B. C., Irvin, E. L., Eggerth, D. E., Chan, S., Bielecky, A. R., Wang, A. M., Heidotting, T. L., Peters, R. H., Clarke, J. A., Cullen, K., Rotunda, C. J., & Grubb, P. L. (2012). A systematic review of the effectiveness of occupational health and safety training. *Scandinavian Journal of Work, Environment & Health*, 38(3), 193–208. <https://www.jstor.org/stable/41508885>
33. Cohen, A., & Colligan, M. (1998, June). Assessing occupational safety and health training: A literature review. National Institute for Occupational Safety and Health. <https://stacks.cdc.gov/view/cdc/11254>
34. Composition of the Australian economy: Snapshot. (2024, June 20). Reserve Bank of Australia <https://www.rba.gov.au/education/resources/snapshots/economy-composition-snapshot/>
35. Australia white card. (n.d.) Retrieved 21 July 2024 from <https://australiawhitecard.com.au/>
36. Construction sector employment in low-income countries: Nature of employment. (n.d.). ICED. Retrieved 22 July 2024 from <http://icedfacility.org/resource/construction-sector-employment-low-income-countries-nature-employment/>
37. Pilbeam, C. J., & Karanikas, N. (2022). Designing safety interventions for specific contexts. Lloyd's Register Foundation. http://www.cranfield.ac.uk/Home/Research_projects/Designing-safety-interventions-for-specific-contexts

Additional information

About Lloyd's Register Foundation

Lloyd's Register Foundation is an independent global safety charity that supports research, innovation, and education to make the world a safer place. Its mission is to use the best evidence and insight, such as the World Risk Poll, to help the global community focus on tackling the world's most pressing safety and risk challenges.

Lloyd's Register Foundation, 71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Foundation is a Registered Charity (Reg. no. 1145988) and limited company.

(Reg. no. 7905861) registered in England and Wales, and owner of Lloyd's Register Group Limited.

Copyright © Lloyd's Register Foundation, 2024.

For more information about Lloyd's Register Foundation, please visit lrfoundation.org.uk.

To learn more about the World Risk Poll, please visit wrp.lrfoundation.org.uk.

This work is licensed under [CC BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/)

doi.org/10.60743/X8MD-V972

About Gallup

Gallup delivers analytics and advice to help leaders and organisations solve their most pressing problems. Combining more than 80 years of experience with its global reach, Gallup knows more about the attitudes and behaviours of employees, customers, students and citizens than any other organisation in the world.

For more information about Gallup, please visit www.gallup.com.

Contact us at www.gallup.com/analytics.

—
Some of the information in this report has been obtained from other third-party data sources that are believed to be accurate and reliable. However, none of the data or information have been independently verified by the authors of this report and no representation or warranty is made as to any of the data's accuracy or reliability.

Imagery

Images can be obtained online through Shutterstock, editorial images accredited below:

Cover image: <https://www.shutterstock.com/g/shardar+tarikul+islam>

Image on spread 9: <https://www.shutterstock.com/g/Bas+Narongrit>

Image on spread 16: <https://www.shutterstock.com/g/dbhimrao>