

Accidents at work in the Health and Social Care sector

Summary

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Executive summary

Context and objectives

The health and social care (HeSCare) sector and its activities play a very important role in the overall health and wellbeing of society in the EU. This report provides an in-depth analysis on accidents at work in the HeSCare sector to:

- obtain a better understanding of why the prevalence of non-fatal accidents is so high in the HeSCare sector and why the accident rate remains high over the years;
- provide a comprehensive overview about accidents and accident prevention in the HeSCare sector;
- increase visibility and awareness about the impact of organisational or psychosocial risks on the occurrence of accidents at work in the HeSCare sector;
- provide a better understanding and a comprehensive, cross-national insight on the state of art in accident prevention in the sector; and
- **identify gaps in terms of research and knowledge** on the prevention of work-related accidents in the HeSCare sector.

In addition to the report, four standalone case studies have been developed that provide concrete examples of strategies, initiatives, approaches and practical tools to prevent accidents at work.¹

State of play of accidents at work in the HeSCare sector

To obtain insight into the prevalence of accidents in the HeSCare sector, the European Statistics on Accidents at Work (ESAW) have been analysed.

Non-fatal accidents

- In 2022, 2,973,646 non-fatal accidents at work (at least four full calendar days of absence from work) occurred in the EU, of which **469,685 accidents** were in the HeSCare sector. Of these accidents, 234,202 occurred in healthcare, 125,834 in residential care and 109,648 in social work.
- In 2012, non-fatal accidents in the HeSCare sector accounted for 9% of all non-fatal accidents in the EU (**sector positioned fourth overall**). This share almost doubled to 16% in 2022 (**sector positioned second overall**).
- The **incidence rate of non-fatal accidents** (accidents per 100,000 workers) increased in the HeSCare sector substantially from 1,462 in 2012 to 2,134 in 2022. From 2020 onwards the incidence rates are consequently higher than prior to 2020.
- The risk of non-fatal accidents in the sector is nearly equal for **male and female workers**, though men in social work have a slightly higher risk.
- In the HeSCare sector, the incidence rates in the first three age categories (18-24, 25-34, 35-44) are approximately the same, however these rates increase from 45 years of age onwards (45-54, 55-64). In 2022, almost a fifth (22.7%) of non-fatal accidents at work were associated with **the physical activity** of movement (movement by the victim: walking, getting into or out of a vehicle, moving (the legs or arms, etc.) on the spot, turning around, etc.) and around a tenth (9.2%) were linked to **carrying something by hand**.
- **Common injuries** in 2022, according to ESAW categorisations, include: dislocations, sprains and strains; poisonings and infections; concussions and internal injuries; wounds and superficial injuries; and shocks. Over the past 10 years, poisoning and infections have increased substantially.
- The most commonly affected **body parts** in 2022, according to ESAW categorisations, include: whole body and multiple sites; back, including spine and vertebra in the back; upper extremities; and head.

¹ The four cases are available at:

<https://osha.europa.eu/en/publications/home-and-residential-care-france-how-tutoprev-approach-prepares-new-hires-and-supports-teachers>

<https://osha.europa.eu/en/publications/raising-awareness-prevent-workplace-violence-against-healthcare-professionals>

<https://osha.europa.eu/en/publications/new-dutch-approach-investigating-and-learning-accidents>

<https://osha.europa.eu/en/publications/back-school-spanish-initiative-protect-back-health-among-workers-residential-care>

Fatal accidents

- In 2022, there were 79 **fatal accidents** leading to the death of a victim within one year of the accident in the HeSCare sector (29 in healthcare, 18 in residential care, 31 in social work).
- The fatal accident incidence rate in the HeSCare sector remained stable over 10 years (0.38 in 2012 to 0.36 in 2022), with a brief increase in 2020 due to the COVID-19 pandemic.
- Although the majority of workers are **females**, **males** account for more than half of all fatal accidents.
- Over the last 10 years, the most common types of **fatal injuries** are: wounds and superficial injuries; bone fractures; concussions and internal injuries; and multiple injuries. The effects of sound, vibration and pressure became less common, whereas poisoning and infections have become more common.

One of the specific objectives of this study was to assess the reasons for the high prevalence of non-fatal accidents over the years. Analysis of ESAW data alone – because of its limitations – does not allow us to provide an answer to this question. However, findings from EU-OSHA's 2024 study 'OSH in figures in the HeSCare sector' can help to address this question. Generally, in the HeSCare sector, all OSH risks are present, with MSK risks and PSRs having a particularly high prevalence. Moreover, these OSH risks interact with each other, which also contributes to making the HeSCare sector a high-risk sector in terms of work-related accidents. There are also additional factors that could help explain why the prevalence of accidents is high (such as digitalisation, the ageing population and the ageing workforce).

Main types of accidents at work in the HeSCare sector

Based on a triangulation of evidence (data, literature review and stakeholder consultations), the following types of accident can be distinguished in the study:

- slips, trips and falls (STFs),
- sharp and needlestick injuries,
- accidents due to workplace violence,
- accidents due to physical overload,
- accidents when operating machinery,
- accidents resulting in exposure to hazardous substances and biological agents, and
- accidents with vehicles in the course of work.

For each accident a description is prepared including: the causes and related risk factors; the groups of workers most affected; the health outcomes on workers; and practice and guidance on how accidents can be prevented (including examples of good practices).

Prevention measures

For this study, a cause-and-effect model has been developed based on the Swiss cheese model (SCM)². The SCM determines three categories of prevention measures: **technical** (relating to the physical environment and equipment as well as upkeep and necessary measures to ensure a safe working environment), **organisational** (relating more generally to how work is organised and what employers can do), and **human behaviour** (related to personnel and how they can behave to prevent accidents).

² The Swiss cheese model (SCM), as first introduced by James Reason in 1987-1988, was heavily relied on to develop the cause–effect model used in this study. Since its conception, the SCM has been applied in several different fields to evaluate accident causations and to develop risk analyses and risk management practices. According to the SCM, organisations/institutions have several layers of barriers to prevent accidents from occurring. Naturally, the types of barriers can depend on the field where the SCM is being applied, and in the context of this study, the barriers have been divided into three types: organisational, human behaviour and technical. While each of these barriers can prevent accidents, they can also have 'holes' that can increase the chances of an accident occurring. Accordingly, whenever a hole from one barrier aligns with a hole from another barrier, the chances of an accident occurring increases. Based on the SCM, accidents ultimately occur when all three types of barriers have been bypassed. As such, when one barrier fails, another has the potential of upholding safety and preventing accidents.

Based on the accident descriptions presented in the study, an overall summary of prevention measures is presented here.

Technical prevention measures

- Ensure that workspaces are ergonomic and safe by focusing on the proper layout and design of workspaces (including ambulances and laboratories) in light of the activities being conducted.
- Ensure regular maintenance and upkeep of medical equipment and vehicles.
- Implement technical solutions aimed at addressing specific risks such as the use of safety-engineered devices, appropriate disposal containers and decontamination areas.
- Check that different elements of the work environment meet appropriate standards for safe work, such as making sure floors are not slippery and do not have holes.

Organisational prevention measures

- Develop clear safety policies and protocols that implement standard operating procedures for activities that are identified to have a high risk of accident, based on risk assessments.
- Implement health surveillance and monitoring, which monitors, for example, workers' exposure to risks, and provides medical follow-up when necessary.
- Provide appropriate workforce planning and shift management to avoid fatigue, overwork and/or working alone.
- Establish easy-to-use systems for reporting accidents and near misses, ensuring they are followed by investigations and corrective action.
- Ensure cooperation among employers to ensure the appropriate implementation of health and safety standards as set out by EU law.
- Organise regular and up-to-date trainings for staff to adapt to their changing world of work and emerging risks.

Human behaviour prevention measures

- Ensure that workers have access to personal protective equipment and that they make proper use of gloves, masks, gowns and eye protection based on the risks identified for different activities.
- Reinforce adherence to rules, such as not recapping needles, careful handling of waste and safe patient-handling techniques.
- Promote a safety-first mindset through education, awareness-raising campaigns and peer support.
- Encourage clear and proactive communication among staff, especially in high-risk environments and/or activities.
- Discourage the normalisation of risky behaviours that may arise from familiarity or time pressure.
- Ensure staff are aware of risks and prevention measures so that they can better implement a safety culture in the workplace.

Impact on workers, organisations and societies

The SCM also demonstrates that accidents in workplaces can affect workers, organisations and society.

Impacts on workers

- Accidents at work in the HeSCare sector can lead to both physical and psychological health outcomes for workers. These include physical health outcomes such as bruises, cuts, fractures, back injuries, musculoskeletal injuries, burns, allergic reactions and infections like HIV and hepatitis, and psychological health outcomes such as emotional distress, anxiety, feelings of shame, anger, sadness and burnout.
- In the longer term, workers who experience an accident at work in the HeSCare sector may experience chronic conditions, absenteeism, presenteeism, permanent disability and lower work ability.
- For workers in the HeSCare sector, injuries resulting from accidents can also lead to lost wages or medical expenses.

Impacts on organisations

- Accidents at work in the HeSCare sector result in increased absenteeism and presenteeism, disrupting workflow and leading to operational inefficiencies. These inefficiencies often require remaining staff to take on additional tasks, potentially compromising the quality of patient care.
- Organisations must absorb costs related to medical treatment, compensation claims, preventive measures, additional staff training and return-to-work accommodations for vocational rehabilitation.

Impacts on society

- Workplace accidents create significant economic and social challenges across the EU.
- The time lost due to sick leave, combined with compensation payments, indicates a reduction in overall productivity, which can affect service delivery and increase strain on the healthcare system.
- Reduced quality of care and delays in services, especially in critical care, affect community health outcomes.
- The injuries sustained by healthcare workers not only affect individual employees but can also have wider societal repercussions, such as reduced healthcare availability.

Conclusions and policy pointers

EU-level policy pointers

- Improve data collection and reporting conducted on accidents at work in the EU for informed policy action.
- Promote the adoption of a multi-layered prevention strategy, such as the SCM of accident causation (or similar such models) to encourage the implementation of technical, organisational and human behaviour prevention measures.
- Encourage continuous training and skills development to build a safety culture throughout Member States.
- Encourage Member States to better address psychosocial and organisational risk factors when preventing or analysing accidents at work.
- Strengthen workforce sustainability by tackling staff shortages and demographic challenges.
- Provide guidance and set standards to enable a safe and supportive digital transition in HeSCare.
- Enable the exchange of knowledge and experiences between Member States.
- Implement EU-targeted initiatives such as research, funding and campaigns to protect workers' health and to safeguard the quality of care and public health.

National- and sectoral-level policy pointers

- Stimulate the implementation and updating of comprehensive risk assessments and accident analyses in HeSCare.
- Encourage and reinforce the behaviour of reporting accidents by workers to enable further analysis within HeSCare workplaces.
- Invest in safer equipment, infrastructure and technologies that can be supported by national programmes or funding.
- Provide regular safety training for all workers.
- Ensure that staffing levels and work schedules do not lead to excessive workloads and are reasonable.
- Explicitly implement psychosocial risks and violence prevention into workplace safety programmes. This can be done by employers as well as national authorities.
- Ensure that safety measures are tailored to the specific needs of healthcare, residential care and social work.
- Improve monitoring, enforcement and continuous improvement in safety management at both national and sectoral level.

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