

# Transportation and storage activities – Evidence from the European Survey of Enterprises on New and Emerging Risks (ESENER)

## Executive Summary

## Executive Summary

**The transportation and storage sector covers a wide range of different industries** such as the transport of cargo and passengers, tourism transport, postal and courier services, warehousing and goods storage. Due to the nature of this sector, there is a wide variety of jobs and tasks to be performed. Transportation and storage play a fundamental role within the European Union (EU) economy. In 2020, the sector contained over 1.28 million enterprises in the EU-27, where 99.71% of those were small and medium-sized enterprises (SMEs).<sup>1</sup>

**The transportation and storage sector is an important job generator in the EU economy.** In 2021, 10,488,000 persons were employed in the transportation and storage sector (NACE Rev. 2 Section H) in the EU, representing around 5.3% of the total number employed. Compared to 2020, the share slightly increased from 5.2% to 5.3%. More than half of the employees are employed in land transport and pipelines, followed by warehousing and support activities for transportation. There have been important labour shortages in the transportation and storage sector (which also has been exacerbated by the recent COVID-19 pandemic). The sector is highly male dominated, whereby only 22% of workers in the sector are women, compared to 46% of women among the total EU-27 employed workforce. The transportation and storage sector can be characterised by its ageing workforce, with a lower share of employees under 24, but a higher share of workers over 50. The transportation and storage sector has a lower percentage of workers in temporary employment and part-time work compared to the percentage of the total EU-27 economy.

**Due to the wide range of activities carried out across the various subsectors, the main occupational safety and health (OSH) risks in the transportation and storage sector are varied.** Workers in the transportation and storage sector are particularly affected by prolonged sitting, repetitive hand or arm movements, risk of accidents with machines, and lifting or moving heavy loads. Transportation and storage sector workers are also confronted with important psychosocial risks, such as the need to deal with difficult customers, time pressure and the presence of long/irregular working hours. Seventeen per cent of transportation and storage sector establishments suggest that psychosocial risks are more difficult to address than other risks, compared to 22% for the total EU economy. The transportation and storage sector can be characterised as a relatively dangerous sector with the third highest number of non-fatal accidents in the EU (14.3% of all fatal accidents), following the construction and manufacturing sectors. The most common health outcomes refer to musculoskeletal disorders, some of them as a result of accidents, such as dislocations, sprains and strains, and concussions, but also internal injuries, and other conditions such as cardiovascular disease and diabetes. Mental health-related issues linked to fatigue, work-related stress and isolation are also relatively present.

**Approximately 79% of transportation and storage sector establishments in the EU-27 regularly carry out workplace risk assessments**, which is slightly above the EU-27 average (75%). Larger establishments are far more likely to regularly carry out this type of assessment, and there are significant variations among Member States. Almost half of transportation and storage sector establishments suggest that risk assessments are contracted to external providers, with the most commonly evaluated topic being safety of machines. Additionally, 94% of transportation and storage sector establishments have documented their risk assessments in written form, which is slightly higher than for all EU-27 establishments (92%). **Risk assessments in the transportation and storage sector are more likely to cover workplaces outside the premises of the establishment when compared to the total economy.** The most common reason for not conducting risk assessments is that risks are already known.

**The most recurrent practices taken by transportation and storage sector establishments to deal with OSH risks are the provision of equipment to help with lifting or moving and the provision of ergonomic equipment.** The most prevalent measure taken in the sector to prevent psychosocial risks refers to allowing employees to take more decisions on how to do their job. **Establishments in the**

---

<sup>1</sup> See: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Transportation\\_and\\_storage\\_statistics\\_-\\_NACE\\_Rev.\\_2&oldid=567777#Sectoral\\_analysis](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Transportation_and_storage_statistics_-_NACE_Rev._2&oldid=567777#Sectoral_analysis)

**transportation and storage sector are less likely on average to have formal procedures to deal with and prevent psychosocial risks**, when compared to the total EU economy. Larger enterprises (250+ employees) are more likely to take such measures.

**Around 82% of transportation and storage sector establishments regularly arrange medical examinations**, which is a higher share than the EU-27 average, and in some sectors (such as the rail and air transport sectors), regular medical examinations are a fundamental component of an employee's ability to carry out the job. Regarding differences per establishment size, there is a positive relationship with the size of the enterprise, as expected, and significant differences can be seen across Member States. Enterprises in the transportation and storage sector also utilise several health and safety services (either in-house or contracted externally), and the use of these different health and safety services is similar to (or above) the EU-27 average for all establishments, although larger-sized establishments in the sector make a greater use of these services. Even though large establishments may have a well-established OSH department/expert/internal safety officer, they are also more likely to use services of an external provider to support them in their health and safety tasks. This differs quite significantly between Member States, with 86% of establishments in Slovakia and Italy using external providers, and only 16% in Cyprus. **Establishments in the transportation and storage sector are slightly more likely than establishments in other sectors to regularly discuss OSH issues at the top level of management and within staff or team meetings.** Health and safety issues are being discussed more frequently in larger establishments.

Data indicate that in **69% of establishments in the transportation and storage sector with 20 or more employees, team leaders and line managers receive training on how to manage health and safety in their teams**, which is slightly lower than the EU-27 average. Around 80% of establishments with 20 or more employees in the sector provide employees with training in relation to emergency procedures and how to lift and move heavy loads. Around three-quarters (74%) of establishments whose employees are exposed to 'chemical or biological substances' have offered training on the use of dangerous substances to their employees, and 69% of all establishments on proper use and adjustment of their working equipment. By way of contrast, only 35% of transportation and storage sector establishments provide training on psychosocial risks prevention. There are no important differences with the EU-27 average for all sectors, neither in the order nor in the importance of the different issues. The share of establishments in the sector that provide training to employees on different OSH issues is higher among larger establishments than among smaller ones. Approximately 41% of training to employees is provided in other languages, which is by far the largest percentage across the EU-27 sectors, whereby the EU average for all sectors is 21%. Transportation and storage sector establishments are more likely to train employees performing cognitive tasks than those performing physical tasks.

**Establishments in the transportation and storage sector report a variety of reasons to engage in OSH practices, including visits by the labour inspectorate.** The main drivers in the sector for addressing health and safety are fulfilling legal obligations (90%) and avoiding fines from the labour inspectorate authorities (86%). Around 44% of establishments in the sector have been visited by the labour inspectorate in the last three years, which is slightly above the EU-27 average and significantly more than in some other sectors. However, interviews noted a lack of effectiveness due to lack of available inspectors and comparing data from the Third European Survey of Enterprises on New and Emerging Risks (ESENER 2019) with ESENER 2014 shows that visits of labour inspectorates decreased throughout the period.

In this regard, **the most important difficulties in engaging in OSH management practices in the sector are considered to be the complexity of existing legal obligations followed by lack of time/staff to deal with these issues and existing paperwork.** As far as legal obligations are concerned, there are a number of differences at Member State level in regard to the levels of complexity reported by establishments. As an additional difficulty for engaging in OSH management practices not covered under the ESENER 2019 questionnaire, the use of unregulated/uncontrolled subcontracting should be noted. Other noted difficulties for engaging in OSH management practices mentioned in literature and interviews are the lack of reliable and comparable data on the exposure to occupational hazards of the workers and ensuring that OSH legislation takes into account the practicalities in regard to everyday OSH management practices.

**Additional elements influencing OSH management practices** include the impact of the COVID-19 pandemic, digitalisation and robotisation, the increasing presence of long-term subcontracting/outsourcing practices, the increasing presence of platform workers, the increasing presence of green practices, several improvements related to technical and organisational changes, and increasing difficulties in finding suitable personnel, exacerbated by the COVID-19 pandemic.

**In regard to ‘general employee representation’ forms, 25% of transportation and storage sector establishments report the presence of a works council, and in 18% there is a trade union representative**, which are both larger shares than the EU-27 averages. The presence of ‘health and safety representation’ forms is higher, as 61% of transportation and storage sector establishments count on a health and safety representative. Larger establishments are more likely to have some form of health and safety representation. One interviewee noted that in relation to works councils, this type of representation can be effective in ensuring good working conditions for employees. However, the effectiveness of these councils is highly dependent on the strength of national legislation (as in rules requiring works councils to be consulted).

**Around 55% of the transportation and storage sector establishments that have formal employee representation structures report regular discussions on OSH issues between employee representatives and the management.** This percentage is higher than the EU-27 average. Overall, employees in the transportation and storage sector establishments are slightly less likely to be involved in the implementation of OSH-related measures than other sectors (they are reported to be involved in 77% of establishments, compared to the EU-27 average of 80%).

**Around 53% of transportation and storage sector establishments that have introduced measures to prevent psychosocial risks have given a role to their employees in the design and set-up of these measures.** This share is slightly lower than the EU-27 average (56%). Employees in the sector are less likely to have been involved in identifying possible causes for work-related stress, such as time pressure or difficult clients, when compared to employees in the EU-27 in total.

Several key policy pointers emerge from this study:

- **Policy pointers related to the characteristics of the transportation and storage sector and employment**
  - The analysis show that specific actions need to be tailored towards SMEs. The analyses confirm the importance of introducing ad hoc measures to improve the existing knowledge and expertise among SMEs on OSH issues and their importance.
  - In order to face demographic challenges and labour shortages affecting the transportation and storage sector, the EU will need to deploy new policies regarding youth unemployment and mobility, education and lifelong learning, gender diversity, immigration and retirement.
  - It is highly important that measures are taken to attract young people and women to some of the activities within the sector.
  - Measures must be taken to ensure that employees have adequate OSH protection in the case of long-term subcontracting/outsourcing practices.
  - Certain subsectors within the transportation and storage sector are particularly affected by digital platform work. Existing discussions regarding the proposed EU directive on platform work<sup>2</sup> could have in mind the impact of digital platform work in OSH.
- **Policy pointers related to OSH risks and health outcomes in the transportation and storage sector**
  - The transportation and storage sector contains a number of subsectors that are involved in a wide variety of activities, which lead to different occupational risks and health outcomes based

---

<sup>2</sup> <https://ec.europa.eu/social/BlobServlet?docId=24992&langId=en>

on subsector and roles within it. It is therefore crucial that specific actions are taken to reduce or mitigate the risks that are specific to certain subsectors.

- More attention should be addressed towards psychosocial risks for workers in the sector, as this study has shown that there are a number of specific issues that are apparent in certain subsectors.
  - The transportation and storage sector can be considered a dangerous sector for workers, with a high risk of accidents and health outcomes (when compared to other sectors). Therefore, sufficient access to relevant safety equipment, personal protective equipment and monitoring tools should be available to reduce OSH risks for workers and to ensure they are able to carry out their jobs in a safe manner.
  - Diversity characteristics must be considered in the context of OSH policies to ensure that risks affecting certain groups are prevented/mitigated and addressed.
- 
- **Policy pointers related to risk assessments and preventive measures to cope with OSH risks**
    - It is highly important that enterprises ensure that risk assessments become a real instrument to both identify existing workplace-related risk factors that have the potential to cause harm to the workforce in general (and to specific vulnerable groups in particular) and also to prioritise remedial actions to eliminate or control these risks.
    - It is also important to collect relevant information on OSH in the workplace to allow for adapting the work environment to reduce potential risks.
- 
- **Policy pointers on use of health and safety services and other external providers, and access to external sources of OSH information**
    - Labour inspectorates can play a key role, not only in driving compliance and fulfilment of existing OSH legislation (legislation is perceived as sufficient but it is poorly implemented in many cases) but also in providing useful information and advice on how to successfully deal with and improve existing OSH management practices.
    - Actions of labour inspectorates to ensure effective and regular checks of workplaces (both stationary and mobile) will have benefits for the working conditions of workers.
    - Measures must be taken to ensure that workers' health and safety representatives remain accessible to workers in the sector. This is particularly the case for workers in precarious situations and those not working in a fixed physical place.
- 
- **Policy pointers on training on health and safety issues**
    - It is the responsibility of employers in the transportation and storage sector to ensure that everyone in a company (including those not working in a fixed place and part-time and temporary workers) has relevant information on existing and new OSH risks, measures in place to deal with these risks or instructions to follow any emergency procedures.
    - Some groups of workers have particular training needs, which should be considered in the development of training in the sector.
    - Managers and OSH representatives must keep themselves constantly updated with changes and new developments (legislative, operational, etc.) in the OSH field and affecting the daily activities of the company.
    - More awareness of psychosocial risks by managers is needed.
    - To avoid a lack of preparedness for the resulting shift in technologies due to the green transition, employees, enterprises and labour inspectorates must have access to relevant training to be able to work safely with and understand new technologies and their impacts on OSH.

- **Policy pointers on the participation of transportation and storage sector workers in OSH management practices**
  - It is important to ensure that employees participate in the management of OSH within establishments, whereby employees should be involved in the design and implementation of different OSH-related measures.
  - It is also relevant that trade unions, works councils and employers' organisations (continue to) support the implementation of good OSH management practices and encourage establishments and employees to prioritise OSH.

Authors: Jacqueline Snijders, Martin Clarke, Jan de Kok, Paul Vroonhof (Panteia), Iñigo Isusi, Jessica Durán (IKEI), Dr Kudász Ferenc (National Public Health Centre, Hungary).

Project management: Xabier Irastorza and Ioannis Anyfantis (EU-OSHA).

This report was commissioned by the European Agency for Safety and Health at Work (EU-OSHA). Its contents, including any opinions and/or conclusions expressed, are those of the authors alone and do not necessarily reflect the views of EU-OSHA.

© European Agency for Safety and Health at Work, 2023

Reproduction is authorised provided the source is acknowledged.

**The European Agency for Safety and Health at Work (EU-OSHA)** contributes

to making Europe a safer, healthier and more productive place to work. The Agency researches, develops, and distributes reliable, balanced, and impartial safety and health information and organises pan-European awareness raising campaigns. Set up by the European Union in 1994 and based in Bilbao, Spain, the Agency brings together representatives from the European Commission, Member State governments, employers' and workers' organisations, as well as leading experts in each of the EU Member States and beyond.

**European Agency for Safety and Health at Work**

Santiago de Compostela 12, 5th floor  
48003 - Bilbao, Spain

E-mail: [information@osha.europa.eu](mailto:information@osha.europa.eu)

<http://osha.europa.eu>

