

Agricultural Safety Through Lifelong Learning

2019-1-SK01-KA202-060645

Module 6

EUROPEAN UNION AND NATIONAL LEGISLATIONS

Module 6: European Union and national legislations

1. Legislation about occupational health and safety in agriculture in the European Union

1.1 Introduction: accidents in the agriculture, forestry and fishing sectors

Agriculture, forestry and fishing is the sector with **the fourth highest number of accidents** after construction (21%), manufacturing (17%), and transportation and storage (16.5%). According to Eurostat data, at EU level, 13.2% of fatal accidents at work happen in the agriculture, forestry and fishing sectors.

The guide "Protecting health and safety of workers in agriculture, livestock farming, horticulture and forestry" (2017) outlined **the most common causes of death** in this sector (in order of importance): transportation accidents (being run over or overturning of vehicles), falls from height (from trees, roofs), being struck by falling or moving objects (machinery, buildings, bales, tree trunks), drowning (in water reservoirs, slurry tanks, grain silos), handling livestock (attacked or crushed by animals, zoonotic diseases), contact with machinery (unguarded moving parts), entrapments (under collapsed structures), electricity

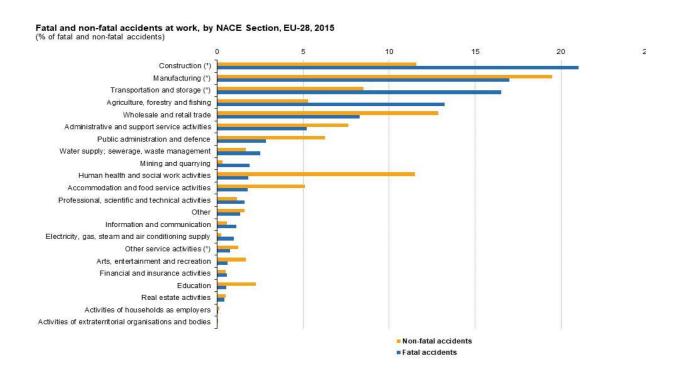


Figure 1 Fatal and non-fatal accidents at work, by NACE Section, EU-28, 2015, Eurostat

1.2. European legislation and initiatives on health and safety at work

I. Introduction

Safety and health at work (or occupational safety and health) are topics on the agenda of the European Union. The European Union does not have full competency on the topic: it sets-up minimum standards to ensure workers' rights and then Member States have to translate them into more specific national legislation. Since 1997, the EU framework on safety and health at work is designed by the Council and the Parliament in a co-decision configuration.

The topic of health and safety at work is part of the **Charter of Fundamental Rights of the European Union**, under article 31.

Article 31

Fair and just working conditions

1. Every worker has the rights to working conditions which respect his or her health, safety and dignity.

Figure 2 Charter of Fundamental Rights of the European Union, Official Journal of the European Union

Moreover, health and safety at work is included in the **European Pillar of Social Rights** (2017) under Chapter II.

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Health, safe and well-adapted work environment and data protection.

a. Workers have the right to a high level of protection of their health and safety at work.

Figure 3 European Pillar of Social Rights

II. The European Framework Directive on Safety and Health at Work, 1989

In 1989, the EU adopted **The European Framework Directive on Safety and Health at Work** (Directive 89/391 EEC, also known as "OSH Framework Directive"). It represented a substantial milestone in improving safety and health at work, introducing measures to promote the safety and health of workers through a strong focus on prevention. It has encouraged the development of preventive measures, information, consultation, balanced participation and training for both workers and their representatives.

On the basis of this framework, 25 individual and trans-sectorial directives have been passed over the years, including in the following areas:

o The use of work equipment (1989); o The exposure to carcinogens (1990 – reform in the process); o Protecting young people at work (1994).

III. The European Agency for Safety and Health at Work, 1994

Created in 1994 and based in Bilbao, the European Agency for Safety and Health at Work (EU-OSHA), aims to foster the sharing of knowledge and information and promote a culture of risk prevention. The agency has developed several e-tools to train workers and their representatives, such as the Online interactive Risk Assessment web-platform, specifically designed for Small and Medium-Sized Enterprises (SMEs), or the Dangerous Substances e-tool. Moreover, it is also involved in awareness-raising campaigns and specific projects, such as the campaign for the health and safety of older workers in 2016.



Figure 4 EU-OSHA The European Agency for Safety and Health at Work

IV. The EU Strategic Framework on Health and Safety at Work 2014-2020

The release of the EU Strategic Framework on Health and Safety at Work 2014-2020 was an important step in the evolution of EU occupational safety and health legislation. This Framework aims to (a) improve and simplify existing rules by enhancing the capacity of micro and small enterprises to put in place effective and efficient risk prevention strategies; (b) strengthen the prevention of work-related diseases, including new risks such as nanomaterials, green technology and biotechnologies; (c) consider the ageing of the workforce.

The Strategic Framework proposes to reach those objectives with a range of actions under **seven key strategic objectives**:

- 1. Further consolidating national health and safety strategies;
- 2. Providing practical support to small and micro enterprises to help them to better comply with health and safety rules. Businesses would benefit from technical assistance and practical tools, such as the <u>Online Interactive Risk Assessment</u> (OiRA);
- 3. Improving enforcement by Member States;
- 4. Simplifying existing legislation where appropriate to eliminate unnecessary administrative burdens;
- 5. Addressing the ageing of the European workforce and improving prevention of work-related diseases to tackle existing and new risks;
- 6. Improving statistical data collection to have better evidence and developing monitoring tools.
- 7. Reinforcing coordination with international organizations.

1.3 European initiatives on health and safety at work specifically for the agricultural sector

I. Protecting health and safety of workers in agriculture, livestock farming, horticulture and forestry, 2017

In 2017, the European Agency for Safety and Health at Work published the non-binding guide

"Protecting health and safety of workers in agriculture, livestock farming, horticulture and forestry". It provides information and examples of good practices in connection with the implementation of health and safety directives, together with other necessary elements such as explanations and practical examples of the hazards and risks during all stages of farming, horticulture and forestry work. The guide is designed to help all stakeholders, in particular farmers, supervisors (especially in SMEs), employers, workers and their representatives, and others, to implement directives and to properly manage the prevention of risks due to work. This guide also contains: a summary of the various EU directives, references and bibliography of information providers, a glossary, a list of key questions and a list by topic, a table of practical examples and a general table of the duties of the stakeholders.

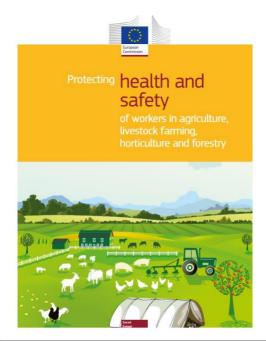


Figure 5 Protecting health and safety of workers in agriculture, livestock farming, horticulture and forestry, 2017

2. Legislations about occupational health and safety in agriculture in the AgriSafetyNet Consortium countries

2.1 Germany: Legislation about occupational health and safety in agriculture

I. Key trends about accidents in agricultural work in Germany

Structure of farms varies a lot in Germany. Depending on the field of activity, the size of the farm and the entrepreneurial objectives, there can be different approaches towards safety and security on farms. Implementation of safety measures can be initiated by:

- The farmer/ entrepreneur himself;
- The farmer's family members involved/ employed (with / without) responsibility for further workforce);
- Third party employees (with / without) responsibility for further workforce.

Variations in agricultural production, structure and scale of the farm lead to specific needs for farm workers in terms of safety and health. The larger the number of employees, the more urgent it is to design **official safety rules** on the farm. Setting official safety rules not only increases workflows efficiency but also contributes to ensuring safety at work.

Nowadays, ethic and economic questions related to the well-being of workers are of paramount importance. Guaranteeing long-term health to one's employees is considered a primary prerequisite to well-being of one's workforce and can result in improving the work experience.

According to the report on prevention published by Sozialversicherung für Landwirtschaft, Forsten und Gartenbau (SVLFG) there were in 2018:

- 74.186 cases registered
- 125 casualties

II. Legislation in Germany about occupational health and safety in agriculture

Legislation on echnical and social occupational safety and health protection were **introduced in Prussia in the nineteenth century** following claims stemming from the labour movement. The labour movement was outraged by child labour and the privileges enjoyed by the bourgeoisie. In 1839, King Frederick William III issued the progressive Prussian Regulative.

The Prussian Trade Regulations, which later became the basis of the German Empire's trade regulations, obliged employers to take measures to protect their workers. The term "protection of workers" came into being during this period of time. Factory inspectors played a central role in the laws implementation by ensuring that the set of rules from the Prussian State were enforced in the factories.

In 1884, under Bismarck, the **Accident Insurance Act** was passed. This Act led to the establishment of the employers' liability insurance associations. In 1924, the clinic for occupational diseases was established in Berlin and in 1933 the clinic was upgraded to a university institute.

In the 1920s, following the American "safety first" movement, accident prevention measures were set in Dortmund in different steel manufacturing factories including Hoesch. Organizational measures, including the appointment of two safety engineers, and accident prevention awareness-raising efforts by means of training courses, posters and signs were intended to reduce the number of accidents.

Towards the **end of the 19th century**, legal regulations were gradually introduced to protect employees and civil servants from work-related dangers. The "protection of workers" became an "occupational safety" matter.

In 1974, the law on **company physicians**, safety engineers and other specialists for occupational safety (Occupational Safety Act) came into force.

The employer's obligation to ensure occupational safety and health protection derives from the Reich Insurance Ordinance and is now laid down in Book Seven of the Social Security Code (SGB VII).

The main actor in safety and health in German farming today is **Sozialversicherung für Landwirtschaft, Forsten und Gartenbau** (SVLFG) (*directly translated as Social insurance for agriculture, forestry and horticulture*). The Landwirtschaftliche Berufsgenossenschaft (LBG) is a branch of the SVLFG. It is part of the statutory accident insurance in Germany.

Until 31 December 2012, the former independent agricultural employers' liability insurance associations, together with the former agricultural old-age insurance funds, agricultural health and nursing care insurance funds, formed the **Agricultural Social Insurance Scheme**. They were all members of the former umbrella organisation of agricultural social insurance based in Kassel.

SVLFG supports its policyholders across all social insurance schemes with a comprehensive range of preventive measures. It aims at ensuring safe technology, occupational safety and health protection in the farms and aligned enterprises along added value chain. The SVLFG offers a wide range of health services as well as preventive services. Its aim is to motivate the insured people to adopt a health-promoting lifestyle and to help them to stay healthy at work.

1.2 Poland: Legislation about occupational health and safety in agriculture

I. Key trends about accidents in agricultural work in Poland

In Poland, a country where the agriculture sector is prominent, there are many accidents related farming work. According to KRUS Prevention and Rehabilitation Office most commonly reported accidents include falls of persons, accidents involving machines and devices, as well as bites and strikes by animals. Polish farmers are increasingly aware of health and safety principles and strive to apply these on their farms. This increased attention to health and safety by Polish farmers led to a decreasing number of accidents as reported by KRUS (in last 5 years about 13% less). The number of fatal accidents has also fallen (in recent years by 20%).

In the first half of 2019, most accidents causing injuries were recorded as such:

- fall of persons 2,747 injured;
- other events 705 injured;
- striking, crushing, biting by animals 697 injured;
- capture and striking by moving parts of machinery equipment 689 injured.

II. Legislation in Poland about occupational health and safety in agriculture

Health and safety at work is regulated by "The Labour Code Act" (Labour Code, Article 237(5)).

The Law on Farmers' Social Insurance obliges The Agricultural Social Insurance Fund (KRUS) to undertake actions aimed at preventing accidents at work and farmers' occupational diseases. The preventive activity of the Fund involves examination of causes and circumstances of accidents at work as well as sharing knowledge about threats and safe work rules among the insured people.

The Polish State under the initiative of the Minister of Agriculture and Rural Development published ordinance on 16 May 2007 to determine the **amount of one-off compensation for an accident at work or an agricultural occupational disease as well as sickness benefit**.

The President of the Agricultural Social Insurance Fund (KRUS) established "The Principles of Health and Life Protection on a Farm" and KRUS employees try to encourage farmers to apply voluntarily these rules. "Principles of Health and Life Protection on a Farm" were updated in 2008 and adapted to the EU legal norms and good farming practices.

Farmers are constantly reminded about these principles through training courses, site inspections, media advertising and other preventive actions. Moreover, the Fund organises voluntary and free training courses for all farmers, village administrators, members of country housewives associations, farmers undergoing treatment at Farmers' Rehabilitation Centers, local self-governments, students of junior secondary schools and children living in rural areas.

Between 1993 and 2015, more than 72,000 training sessions which involved more than 2,3 million participants were held.

In order to raise the interest of farming machinery producers on occupational health issues and encourage farmers to buy equipment, the President of the Fund created the Safety Mark of the KRUS and a special distinction called "Product Increasing Labor Safety on a Farm". By the end of 2015, 31 producers had been entitled to use the KRUS Mark which was used as label for 219 products. The Product Increasing Labor Safety on a Farm distinction was awarded to 49 suppliers representing 60 types of farming products.

In order to further ensure the safety of farmers, the Regulation on safety and hygiene at work in the handling of livestock was issued on 4th August 2017.

2.3. Romania: Legislation about occupational health and safety in agriculture

I. Key trends about accidents in agricultural work in Romania

There are no data available about occupational accidents in agriculture neither on the website of the Ministry of Agriculture and Rural Development nor on the of the Ministry of Labour and Social Protection. However, some data (see table below) on occupational accidents across all areas of business are provided by the **Labour Inspection**, a specialised body of the central public administration operating under the **Ministry of Labour and Social Protection**.

Items	2014	2015	2016	2017	2018	2019
People injured	4277	4908	4961	4804	5212	5750
Temporarily incapacitated for work	3958	4585	4736	4632	5045	5580
Fatally injured	319	323	225	172	167	170
People injured frequency index*	0.87%	0.97%	0.99%	0.93%	0.98%	1.68%
Fatally injured frequency index*	0.06%	0.06%	0.04%	0/03%	0,03%	0.05%
Trail injured	512	645	647	641	694	761
Fatally trail injured	37	40	36	29	23	29
Collective accidents	32	39	28	27	22	15
Victims of collective accidents	131	202	131	111	134	66
Fatally injured in collective	16	25	16	15	4	2
accidents						
Gravity index	-	-	-	38.0%	43.1%	37.69%
Mean duration index	-	-	-	52.3	52.9	57.38
Temporarily incapacitated for	-	-	-	3662	4226	1735
work followed by resuming						
work						
Temporarily incapacitated for	-	-	-	60	80	40
work resulting in invalidity						
Temporarily incapacitated for work resulting in death	-	-	-	31	35	7

^{*}The frequency index is the number of injured people per 1000 employees

Figure 6 - EU-OSHA Occupational accidents over the period 2014-2019 (after https://www.inspectiamuncii.ro/statistici-accidente-demunca)

Some of the items above are represented graphically in the figure below.

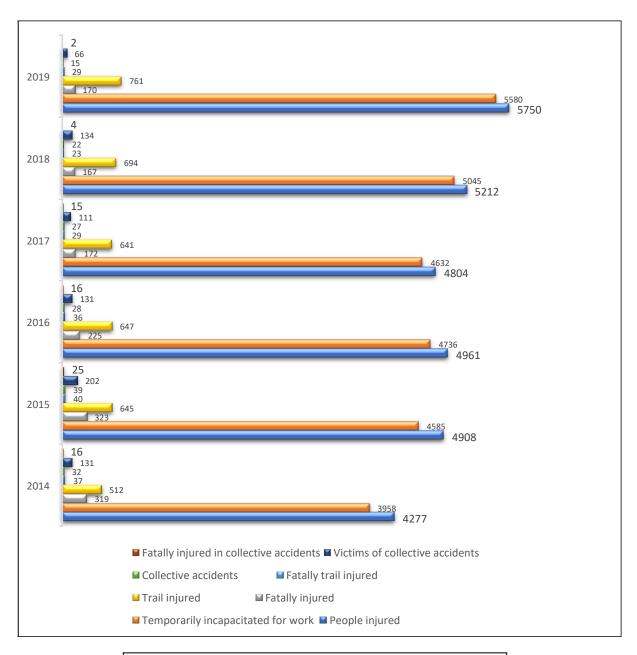


Figure 7 - Graphic representation of occupational hazards in Romania

II. Legislation in Romania about occupational health and safety in agriculture

The methodological rules for the application of Law no. 319 from 2006 (Law of labour safety and health), approved by Government's Decision no. 1425 from 2006 amended and supplemented by Government's Decision no. 955 from 2010 and by Government's Decision no. 1242 from 2011

define the accident causing temporary incapacity for work but say nothing about farmers / agricultural workers or about occupational hazards. However, the Labour Code (Legea nr. 53 din 24.01.2011) refers superficially to occupational hazards from the perspective of labour health and safety rules:

"Article. 175. – (1) The employer has an obligation to **ensure the safety and health of employees** in all aspects of work.

Article. 177. – (1) Within the framework of its own responsibilities, the employer shall take the **necessary measures to protect the safety and health of employees**, including for **activities to prevent occupational hazards**, information and training, as well as to implement the **organisation of labour protection** and the means necessary for it.

Article. 178. – (1) The employer shall be responsible for ensuring **health and safety at work**. (2) Rules on **safety and health at work** shall be laid down in the national regulations. (3) In drawing up **occupational safety and health measures**, the employer shall consult the trade union or, where appropriate, the employees' representatives and the occupational safety and health committee.

Article. 181. - (1) Workplaces must be organised in such a way as to guarantee the safety and health of employees. (2) The employer shall organise permanent control of the condition of the materials, machinery and substances used in the work process in order to ensure the health and safety of employees.

Article. 182. - (1) In order to ensure safety and health at work, the institution empowered by law may order the limitation or prohibition of the manufacture, marketing, import or use in any capacity of substances and preparations dangerous to employees."

2.4 Slovakia: Legislation about occupational health and safety in agriculture

I. Key trends about accidents in agricultural work in Slovakia

Agriculture is one of the **most dangerous sectors** in terms of occupational accidents - non-fatal accidents for agricultural workers are 1.7 times the average and fatal accidents are three times higher than the average. Family work and self-employment are largely predominated, as most farm work is carried out by the farm owner with his family.

Given the wide range of maintenance activities on farms, there are several **different hazards**, including:

- mechanical hazards associated with the maintenance of machinery, e.g. crushing, binding and high-pressure liquid injection;
- electrical hazards when working with damaged equipment or during maintenance of electrical equipment installations or repairing damaged electrical fences;
- thermal hazards associated with the use of welding or heating equipment for maintenance or maintenance of hot surface equipment or operating fluids;
- chemical hazards related to the use of hazardous substances in the maintenance or maintenance of equipment containing dangerous substances;
- the risk of fire or explosion during maintenance of accessories or equipment containing hazardous and explosive substances, e.g. tanks, reservoirs and silos or fuel tanks;
- Biological hazards in the maintenance of equipment contaminated with biological agents, manure tanks, canals and sewage infrastructure;
- ergonomic hazards, e.g. disadvantageous positions, poorly designed tools;
- work in confined spaces.

The most common factors contributing to agricultural maintenance accidents include:

- working alone;
- lack of protective equipment;
- financial constraints, time pressure and fatigue;
- lack of information / training;
- sub contracted operations.

II. Legislation in Slovakia country about occupational health and safety in agriculture

The main regulation related to the safety at work is the **Act No. 124/2006 Coll. on Occupational Health and Safety**. Additionally, amendments to other specific acts contain rules on safety at work, as amended in (§ 7, (5)).

The Ministry of Labor, Social Affairs and Family of the Slovak Republic according to § 30 par. 1 letter a) of Act no. 124/2006 Coll. on safety and health protection at work and on amendments to legal regulations (hereinafter referred to as the "Act"), which allows Decree 45/2010 Coll.:

- The content and manner of familiarization and the regularity of repeated familiarization must be adapted to the nature of the work carried out by the employee, his workplace and other circumstances relating to the performance of the work, in particular work equipment, working procedures, new or changed hazards and threats.
- The employer shall be obliged by internal regulations to regulate the manner of familiarization, to define the requirements for the professional competence of its own employees to be informed pursuant to paragraphs 1 and 2.
- § 1 par. 1 for the purposes of the Decree, agricultural work means activities aimed at the cultivation and care of plants and the breeding of livestock (hereinafter referred to as "animals") intended for economic recovery and activities related to it.
- § 2 The details for ensuring safety and health protection during agricultural work are:
 - the use of the work equipment in the cultivation and care of plants, which are listed in Annex no. 1 of Decree 45/2010 Coll.,
 - the use of work equipment for animal husbandry and for the performance of animal husbandry activities listed in Annex no. 2 of Decree 45/2010 Coll.,
 - for the performance of activities in animal husbandry, which are listed in Annex no. 3. Decree 45/2010 Coll.

Except this Decree several regulations are related to the maintenance activities in agriculture:

- maintenance and repair of machinery, equipment, and vehicles Decree 208/1991 Coll.,
- maintenance of farms and buildings Decree 59/1982 Coll., Decree 147/2013 Coll.,
- maintenance of silos, manure tanks and grain silos Decree 93/1985 Coll.,
- maintenance of electrical installations Decree 508/2009 Coll.,

- maintenance of drainage and irrigation systems Decree 508/2009 Coll., VTZ TZ, Decree 147/2013 Coll.,
- maintenance of paved and unpaved roads Decree 147/2013 Coll.,

Authorizations of employees to operate work equipment a to perform higher risk activities

- The employer is obliged, in accordance with legal regulations to ensure occupational health and safety, to provide its employees with professional competence to operate the specified work equipment and to perform the specified work activities.
- At the same time, however, it is also **obliged to entrust the relevant employee** with the operation of work equipment and the performance of activities with a higher risk in accordance with legal and other regulations to ensure health and safety.
- § 12 par. 2 letter d) of Act no. 124/2006 Coll. on safety and health at work, as amended, as follows:
 - The employee is obliged to operate work equipment and perform activities with a higher risk according to legal and other regulations to ensure safety and health at work only on the basis of a license, certificate or document according to § 16 par. 1 letter b) or letter c) and only if he is authorized by the employer to perform this service or to perform this activity.§ 6 NV SR č. 392/2006 Z.z.:
 - If the use of the work equipment may endanger the safety and health of the employee, the employer is obliged to take measures to:
 - the work equipment was used by an employee authorized by him,
 - care for work equipment, maintenance work, repair work and reconstruction work was performed by an authorized person.

Professional competence of machine operators

Education and training of staff is carried out by the organization for education and training according to **Decree no. 356/2007 Coll.**, According to Annex no. 10 Special requirements for the content of educational activities.

Group 09 Safety and health protection when working with **agricultural machinery and equipment.**

Subgroup 09.1 **Education and training of employees** to operate selected agricultural machinery and equipment with a focus on safety and health at work for at least 16 hours consists mainly of:

- I. General requirements according to Annex No. 1 concerning the operation of selected machines and equipment containing:
 - Act no. 311/2001 Coll. of the Labor Code as amended,
 - Act no. 124/2006 Coll. on safety and health protection at work and on the amendment of certain laws,
 - Act no. 125/2006 Coll. on Labor Inspection and on Amendments to Act No. 82/2005 Coll. on Illegal Employment and on Amendments to Certain Acts,
 - Act no. 355/2007 Coll. on the protection, promotion and development of public health and on the amendment of certain laws.

II. Special requirements focused on:

- health and safety issues necessary for the operation of selected agricultural machinery and equipment regulated by legal regulations and other regulations to ensure health and safety and general principles of safe work with agricultural machinery and equipment,
- operation, operation and maintenance of selected agricultural machinery and equipment,
- inspection, inspections and tests of selected agricultural machinery and equipment.

Education is especially focused on:

- self-propelled cutters,
- o grain harvesters,
- o special machines for harvesting agricultural crops.

2.5 Spain: Legislation about occupational health and safety in agriculture

I. Key trends about accidents in agricultural work in Spain

According to the European Agency for Safety & Health at Work, agriculture is the most dangerous sector in view of work accidents occurrence. Agricultural workers have an average rate 1.7 times higher of non-fatal workplace accidents and a 3 times higher rate of lethal workplace accidents. Most of the occupational accidents in which agricultural machinery is involved is due to human mistake. Potential dangerous machines may include tractors, harvesters, mowers, crushers, brush cutters or balers.

Risks	Machinery
Crushing due to overturning of tractors or	Abrasion
tools	
Cut	Entrapment by elements of machinery
Run over / self-run	Falls

Most fatal accidents are the result of tipping over by a tractor. In Spain there is an average of **70** casualties per year related to the overturning of agricultural machinery.

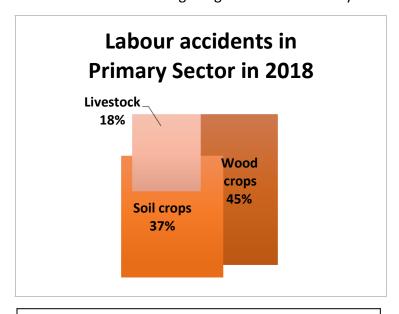


Figure 8 - Labour accidents in Primary Sector, in 2018, Spain

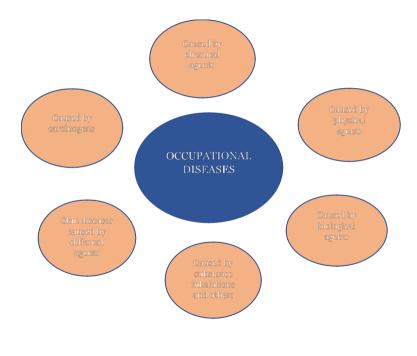


Figure 9 - Occupational diseases

Besides accidents, it is also crucial to take into account the **occupational diseases linked to the work place**. In 2017, there were in total 21.049 registered occupational diseases, 627 of which belonged to the primary sector (farming, forestry and fishing).

Despite what *a priori* can be interpreted as a low cypher, the last years evolution shows that the level diseases in the primary sector is growing, from 46,33% of cases in 2012 to 81,11% in 2017 (data obtained from a sample of 100.000 workers). This is an increase of 75,05%.

II. Legislation in Spain about occupational health and safety in agriculture

Law 31/1995 constitutes the legal basis of workers protection regarding health and safety at the workplace. The **law does not specifically mention farmers/agricultural workers** but still **lays the groundwork for every sector**, setting as the main aim "the guarantees and responsibilities in order to assure the health and safety of employees against the potential risks linked to the working conditions". Specific articles of the Law 31/1995 apply to the agricultural sector, namely:

Article 2 which defines the purpose of the law. The law is aimed at promoting the safety and health of workers through the application of various measures and the implementation of activities necessary for the prevention of risks that may be linked to work. The law stipulates such actions should be carried out by public administrations as well as by employers and employees.

Chapter III of the Law refers to the **rights and obligations** of the parties involved.

Article 14 establishes the right to protection against occupational hazards.

"Employees have the right to effective protection in terms of safety and health at the workplace." In this sense, "The employer must guarantee the safety and health of workers in all aspects related to the job". For these purposes, the employer will integrate a Risk Prevention Plan which must include a risks evaluation scheme as well as information, consultation, participation and training efforts involving workers. The Risk Prevention Plan must also include a pre-defined set

of actions in cases of emergency and serious and imminent risk as well as periodic medical check-ups. This Risk Prevention Plan must be accessible to all the staff members of the company. To increase risk prevention and ensure safe work performances, the employer must guarantee that employees receive specific training according to their position, taking into account the potential risks linked to it. Training content must be updated in the case new job positions are created and new technological equipment is adopted.

The principles of prevention that must be followed include, among others, risk avoidance, evaluation of existent risks and the adoption of technical advances which can help in this matter. Risk prevention also includes giving employees appropriate guidelines in order to perform their work without risk.

It is the responsibility of the employer to design measures related to **first aid, fire and evacuation** of the staff in case of emergency. In case of serious or imminent risk, the employer must immediately inform the employees, and these must immediately interrupt their activity.

All the employees must enjoy the same level of protection, prevention and training in terms of health and safety **regardless of the duration of their contract**. This applies also to agriculture the sector, a sector in which many seasonal workers are contracted.

The employees must contribute to a safe performance of their tasks by following the given instructions in terms of risk prevention and protection.

MACHINE SAFETY REGULATION

Regarding the safe use of machines at the workplace, one should mention the **R.D. 1495/1986**, of May 26, which establishes the safety rules for machines. The regulation defines the necessary requirements "to obtain a sufficient level of security [...] in order to preserve people and property from the risks derived from the installation, operation, maintenance and repair of machines". The text also includes a list of specific machines used in the agricultural sector.

Farming machinery

Walking tractor and motor-machine, plows, cultivators and harrows, rotary tiller and milling machine, seeder, fertilizer spreader, powdered and atomized, rotary mower, baler picker, cereal harvester, tying mower and lawn mower.

2.6 Czech Republic: Legislation about occupational health and safety in agriculture

I. Key trends about accidents in agricultural work in Czech Republic

Czech Republic has 10.4 million inhabitants and a surface of over 7.887 million hectares, of which 2.630 million hectares covered by forests and 4.281 million hectares by agricultural land. The share of **ploughed land** of agricultural surface (73.4%) is one of the highest in Europe.

There are different **types of employees** in agricultural production: crop workers, livestock workers, workers with machineries and mechanization and workers in plants and livestock production and mechanization.

The main risk factors for agricultural employees are: physical risks (such as noise, vibration), physical load (total physical load, local muscular load, working position and manual load handling), mechanical risks (machines used in agriculture), chemical factors (work with chemical products for soil or plant protection), biological agents (such as viruses, bacteria, fungal infections from animals, animal dust), psychological factors and unfavorable microclimatic conditions (such as extreme cold, heat and humidity). These risk factors related to working conditions can cause both accidents at work and health damages at work.

The main risks faced by farmers usually involve the usage of agricultural technologies and transport machines in plant production, weather extremes or livestock management.

Examples of hazards related to the use of agricultural technologies and transport machines include:

traffic accidents, overturning, risks of maintenance work and repair of machineries, skin diseases linked to the use of chemical products such as disinfection and cleaning detergents, and risk related to seasonal work (increased working hours, increased physical and mental activity).

Examples of hazards related to livestock management include:

attack by animals, risks related to technology used in livestock operations (various types of electrical and mechanical equipment, including bulk material containers, fecal vacuum trucks) risks of work with mechanization (animal production): tractors, motor trucks equipped with rollers, mechanical loaders).

Examples of risks of work with mechanization:

work risks during transport and transport of materials and agricultural production, Risks of maintenance work and repair of machinery, Work risks in workshops and fieldwork, Risks of working with machinery equipped with repair workshops, Risk of working with portable electrical equipment, Risk of working with oil products.

Speaking about occupational accidents in Czech Republic, agriculture is among the sectors with the highest rate of casualties related to unsafe work environments. Over the past years, several fatal and serious occupational accidents associated with animal husbandry, particularly with cattle, occurred. Therefore, the inspection activities of the Labour Inspectorate focused on the evaluation of risks in animal husbandry and on the procedure with animal husbandry, with an emphasis on the safe movement of animals from the stable to grazing and in handling animals. Accidents occur in most cases because of the low level of staff experience with animal behaviour, but also because of the underestimation of risks when following the work routine with more experienced staff.

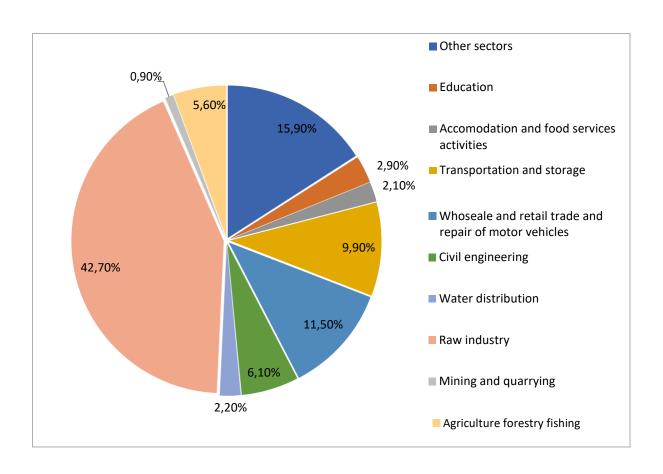


Figure 11 Share of occupational accidents for incapacity for work and inexperience by sector in Czech Republic, 2018

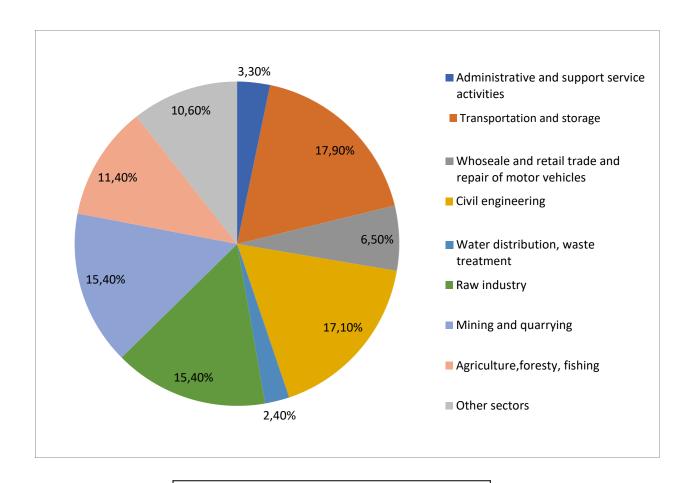


Figure 12 Fatalities by sector in Czech Republic, 2018

II. Legislation in Czech Republic about occupational health and safety in agriculture

The basic regulation for health and safety at work is outlined in **Act No. 262/2006 Coll., of the Labour Code**. This law, among other things, clearly mention health and safety at work and directs to: (1) prevent and evaluate the risks posed to employees' health and safety, (2) inform employees to reduce the risks to life at work, (3) and take measures to protect workers - training, protective equipment, work clothes, work shoes, cleaning products, etc.

Overview of other regulations for health and safety in agriculture

- Regulation No. 523/2002 to amend Government Regulation No. 178/2001 outlining conditions for the protection of employees' health at work;
- Regulation No. 378/2001 Coll., which determines detailed requirements for safe operations and use of machines, technical equipment, appliances, and tools;

- **Government Order No 27/2002 Coll.**, laying down methods of organisation of work and work procedures that the employer is obliged to follow when working with animal breeding.
- **Decree-Law No 168/2002 Coll.**, laying down methods of organisation of work and working practices, which the employer is obliged to follow during an operation with means of transport.

Annex: links to additional material

Chapter 1: Legislation about occupational health and safety in agriculture in the European Union

- Charter of the Fundamental Rights of the European Union, 2007. Available at https://fra.europa.eu/sites/default/files/charter-of-fundamental-rights-of-the-european-union-2007-c 303-01 en.pdf
- 2. European Pillar of Social Rights, 2017. Available at https://ec.europa.eu/commission/sites/beta-political/files/social-summit-european-pillar-social-rights-booklet_en.pdf
- 3. Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work, http://data.europa.eu/eli/dir/1989/391/2008-12-11.
- 4. The European Agency for Safety and Health at Work. Available at https://osha.europa.eu/en
- 5. EU Strategic framework on Health and Safety at Work 2014-2020. Available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015IP0411
- Protecting health and safety of workers in agriculture, livestock farming, horticulture and forestry, 2017. Available at https://osha.europa.eu/en/tools-and-publications/protecting-health-and-safety-workers-agriculture-livestock/view

Chapter 2.1 Germany: Legislation about occupational health and safety in agriculture

- 1. Gesetz zur Errichtung der Sozialversicherung für Landwirtschaft, Forsten und Gartenbau; 2012 https://www.gesetze-im-internet.de/svlfgg/BJNR057910012.html
- 2. Präventionsbericht 2018 with data on situation and accidents https://cdn.svlfg.de/fiona8-blobs/public/svlfgonpremiseproduction/8f9a30038d0cf905/51fefbc582f2/broschuere-praeventionsbericht-2018.pdf
- 3. Agrigultural Ministry Germany http://www.bmel.de
- 4. SVLFG https://www.svlfg.de

Chapter 2.2 Poland: Legislation about occupational health and safety in agriculture

1. State of Polish Agriculture 2018 https://stat.gov.pl/en/topics/agriculture-forestry/agriculture/agriculture-in-2018,4,15.html

- 2. Health and Safety in Agriculture in Poland http://www.ksckp.pl/attachments/article/8/BHP.pdf
- 3. AGRICULTURAL SOCIAL INSURANCE FUND (KRUS). BASIC INFORMATION https://www.krus.gov.pl/fileadmin/moje dokumenty/obrazki/broszury/KRUS-informator.2016-wers.ang.pdf
- 4. Report on accidents at work and occupational diseases of farmers in the first half of 2019 https://www.krus.gov.pl/fileadmin/moje dokumenty/dokumenty/prewencja/statystyki /2019/Komunikat o wypadkach w I polroczu 2019 roku.pdf
- 5. Data on accidents in agriculture in Poland https://www.krus.gov.pl/zadania-krus/prewencja/wypadki-przy-pracy-rolniczej/statystyka-wypadkow-w-rolnictwie/
- 6. Health and Safety in Agriculture video https://www.youtube.com/watch?v=k6zzWQ5w4rs
- 7. Threats to health and life at work in agriculture video https://www.youtube.com/watch?v=1KkVAdzEtlc

Chapter 2.3 Romania: Legislation about occupational health and safety in agriculture

- 1. Hotararea Guvernului nr. 1242 din 14 decembrie 2011 pentru modificarea Normelor metodologice de aplicare a prevederilor Legii nr. 319 din 14.07.2006 aprobate prin H.G. nr. 1425 din 11.10.2006. *Monitorul Oficial* nr. 925 din 27.12.2011.
- 2. Hotararea Guvernului nr. 1425 din 11.10.2006 (*actualizata*) pentru aprobarea Normelor metodologice de aplicare a prevederilor Legii nr. 319 din 14.07.2006. *Monitorul Oficial* nr. 882 din 30.10.2006.
- 3. Hotararea Guvernului nr. 955 din 8 septembrie 2010, pentru modificarea si completarea Normelor metodologice de aplicare a prevederilor Legii nr. 319 din 14.07.2006, aprobate prin H.G. nr. 1425 din 11.10.2006. *Monitorul Oficial* nr. 661 din 27.09.2010.
- 4. Legea nr. 319 din 14.07.2006 (Legea securitatii si sanatatii in munca). *Monitorul Oficial* nr. 646 din 26.07.2006.
- 5. Legea nr. 53 din 24.01.2011 (Codul muncii). Monitorul Oficial nr. 345 din 18.05.2011.
- Occupational accidents over the period 2014-2019. Available at: https://www.inspectiamuncii.ro/statistici-accidente-de-munca). Accessed on 12.05. 2020.

Chapter 2.4 Slovakia: Legislation about occupational health and safety in agriculture

1. National Labour Inspections - https://www.ip.gov.sk/home/

- 2. Selected legal regulations governing the area of safety and health at work https://www.minv.sk/?Vybrane pravne predpisy upravujuce oblast bezpecnosti a och rany zdravia pri praci
- 3. Protecting health and safety at work in Agriculture: https://osha.europa.eu/sk/publications/protecting-health-and-safety-workers-agriculture-livestock-farming-horticulture-and
- 4. Issues of state management of safety and health protection at working https://www.ia.gov.sk/data/files/np_csd_I/Statne/Statne_riadenie_BOZP_12.pdf

Chapter 2.5 Spain: Legislation about occupational health and safety in agriculture

- 1. https://www.boe.es/buscar/act.php?id=BOE-A-1995-24292
- 2. https://www.upa.es/upa/noticias-upa/2020/2821/
- 3. https://agri-preven.es/ap/
- 4.https://www.insst.es/documents/94886/568923/AN%C3%81LISIS+DE+LA+SINIES
 TRALIDAD+EN+EL+SECTOR+AGRARIO+final+3.pdf/1f4c13ce-1a66-4033-a0ac-7e6b1074f8db
- 5. http://www.mitramiss.gob.es/es/extras/buscador/resultados.htm?q=accidentes +agricultura&buscar.x=0&buscar.y=0&hl=es
- 6. https://www.ccoo.es/3ddd33743b76389e82bd5a787505996a000001.pdf
- 7. https://www.mapa.gob.es/es/agricultura/legislacion/Legislacion-produccion-integrada.aspx

Chapter 2.6 Czech Republic: Legislation about occupational health and safety in agriculture

- 1. https://zsbozp.vubp.cz/pracovni-prostredi/odvetvi/zemedelstvi/171-zasady-bezpecnost-prace-v-zemedelstvi
- 2. http://www.suip.cz/_files/suip-2a11cac8c20853b8882f5eca756a5846/zemedelstvi.pdf
- 3. http://www.suip.cz/_files/suip-2a11cac8c20853b8882f5eca756a5846/zemedelstvi.pdf
- 4. https://www.bozpinfo.cz/bezpecnost-prace-u-zemedelskych-stroju
- 5. https://www.odbory.info/obsah/5/bezpecnost-prace-v-zemedelstvi/16536
- 6. https://www.bozpprofi.cz/33/vzor-osnovy-skoleni-pro-zamestnance-kteri-vykonavaji-prace-v-zemedelstvi-uniqueidmRRWSbk196FNf8-jVUh4EvjXENE8AfO0sbOKwpcN1z4/
- 7. http://www.envipo.cz/bozp-v-zemedelstvi/
- 8. https://www.zscr.cz/media/upload/1536586250 nahrada-skody-a-bozp-2018.pdf

- 9. https://www.guard7.cz/lexikon/sektory-bozp/zemedelstvi
- 10. https://www.zemedelec.cz/kampan-pro-bezpecnost-prace-v-zemedelstvi/