

PROGRAM:	ERASMUS+
ACTION / SUBPROGRAM:	Key Action 2 / Strategic Partnerships
PROJECT TITLE:	“OSH+ for the European Agriculture sector - Stimulating growth in rural areas through capacity building for providers (and beneficiaries) of occupational medicine and OSH services”
Intellectual Output :	O5 “Course 2 Training Materials - Occupational Physicians”
Module:	Module 3: Risk management within agriculture’s economic subsectors

3 Module 3. Risk management within agriculture’s economic subsectors

Aoife Osborne, PhD (School of Agriculture and Food Science, University College Dublin)

Richard Wynne, PhD (Work Research Centre Dublin)

3.1 Introduction:

Aims of the Module:

- To provide an overview of occupational hazards including how to classify, manage and assess risk.
- To establish occupational hazards relevant to agriculture and the current prevention and protection measures within the agriculture sector.

Overview of contents:

The key areas of this module are hazard identification and risk management. This module has been organised in this sequence to allow the trainee to:

- Recognise what are occupational hazards and how these can be managed.
- Categorise the various occupational hazards within the agriculture sector.
- Understand current practise to prevent and protect those working in the agriculture sector.

Learning outcomes:

After studying this module the trainee should be able to:

- Define and classify occupational hazards and risks.
- Understand the process of risk management and risk assessment.
- Provide an overview on Occupational Safety and Health (OSH) legal requirements.
- Recognise occupational hazards relevant for agriculture workers.
- Be aware of the prevention and protection measures within the agriculture sector.

Background:

Risk assessment is the examination of all characteristics of a work system in order to identify hazards, the level of risk for each hazard and the controls needed to avoid or reduce the risk. Legally, all employers are required to have a risk assessment completed for their place of work and to keep documentation of that risk assessment. This will enable the employer to effectively take the measures necessary for the safety and health protection of workers. These measures include:

- Prevention of occupational risks
- Provision of information to workers
- Provision of training to workers
- Organisation and means to implement the necessary measures.

(European Commission, 1996)

3.1.1 Glossary

Term	Definition
Occupational Hazards	A hazard is any circumstance, substance, device, object or microorganism that can cause death, harm, injury, damage or loss. A hazard is any source of potential harm to a worker and therefore cannot be controlled. However exposure to hazards can be controlled by eliminating the hazard or reducing their associated risk through guards, personal protective equipment, protective devices or containment.
Occupational Risk	Risk refers to the likelihood or probability of harm to life, property or the environment if exposed to a hazard. Factors that influence the degree or likelihood of risk include how much a person is exposed to a hazard (e.g., several times a day or once a year), how the person is exposed (e.g., breathing in a vapour, skin contact), and the severity of the effect (e.g., one substance may cause skin cancer, while another may cause skin irritation).
Risk Assessment	The process of evaluating the risk to the health and safety of workers while at work arising from the circumstances of the occurrence of a hazard at the workplace (European Commission, 1996).
Acceptable risk	A risk which everyone impacted is prepared to accept. Action to further reduce such risk is usually not required unless reasonably practicable measures are available at low cost in terms of money, time and effort (ISSMGE, 2004).
Vulnerable workers	Young workers, older workers, migrants, new or expectant mothers (see module 15 for more information on this topic).

3.2 Occupational hazards

Workers represent half the world's population and are the major contributors to economic and social development (WHO, 2007). Their health is determined not only by workplace hazards but also by social and individual factors and access to health services (WHO, 2007). Occupational hazards are any hazards experienced in the workplace. Occupational hazards can include many types of hazards, including ergonomic, biological, psychosocial, physical and chemical hazards. These will be discussed in more detail in this module and in the modules to follow.

3.2.1 The concept of occupational hazard / the concept of occupational risk

Important concepts of risk management in the workplace are the concepts of hazard and risk. One of the most important aspects of risk assessment is accurately identifying the potential hazards in the workplace e.g. what is it about the activities, processes or substances used that could injure employees or harm their health (HSE, 2014). Tools that can help identify hazards include:

- Check manufacturers' instructions or data sheets for chemicals and equipment as they can be very helpful in explaining the hazards and putting them in their true perspective.
- Reflecting on accident and ill-health records – these often help to identify the less obvious hazards.

- Take account of non-routine operations (e.g. maintenance, cleaning operations or changes in production cycles).
- Remember to think about long-term hazards to health (e.g. high levels of noise or exposure to harmful substances).

(HSE, 2014).

For each hazard it is important to be clear on the occupational risk. Understanding who is at risk will help identify the best way of controlling the risk. It is important to not only think about how employees might be harmed but also about others who may be present, such as contractors or visitors. The following risk considerations need to also be accounted for:

- Some workers may have particular requirements, e.g. new and young workers, migrant workers, new or expectant mothers, people with disabilities, temporary workers, contractors, homeworkers and lone workers.
- Include people who might not be in the workplace all the time, such as visitors, contractors and maintenance workers.
- Take members of the public into account if they could be harmed by work activities.
- It is always important to consult with workers to check if there is anyone that may have been missed.

(HSE, 2014)

3.2.2 The classification of occupational hazards

A common way to classify hazards is by category:

- Ergonomic - repetitive movements, poor housekeeping, lifting incorrectly etc.
- Biological - bacteria, viruses, insects, plants, birds, animals, and humans, etc.
- Psychosocial - stress, tiredness, etc.
- Physical – climate, lighting, noise, etc.
- Chemical - depends on the physical, chemical and toxic properties of the chemical

These will be covered in detail in later modules.

3.2.3 Addressing risks

Addressing the risk to human health from exposure to hazards consists of three interrelated processes:

1. Risk assessment: a process of analysing and characterising information about a risk.
2. Risk management: the process of integrating the results of a risk assessment with social, economic, political, regulatory, and other information to make decisions about how to manage the risk.
3. Risk communication: the process of engaging in a dialogue with stakeholders to identify information that may improve the risk assessment, and to inform stakeholders about the implications of risk management decisions.

(Robson and Toscano, 2007)

These three risk areas are interconnected as they inform and influence one another (Figure 1).

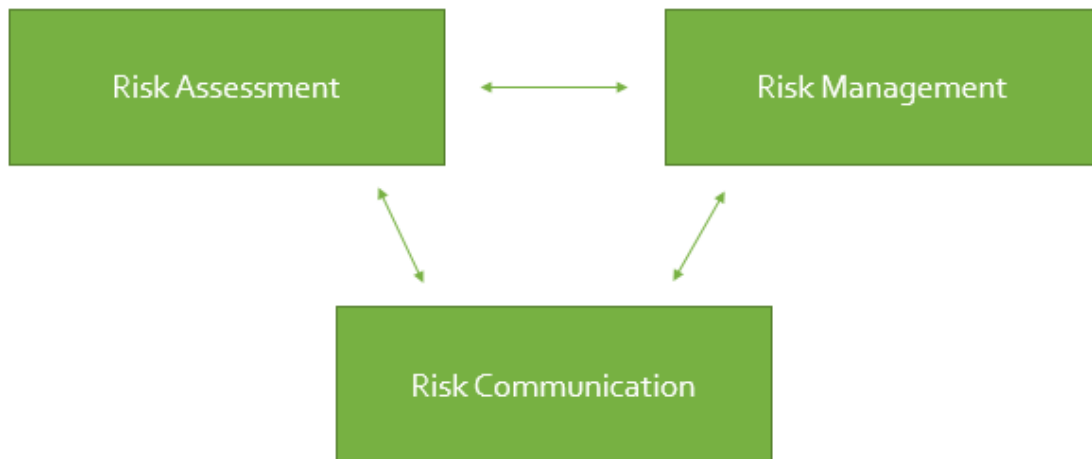


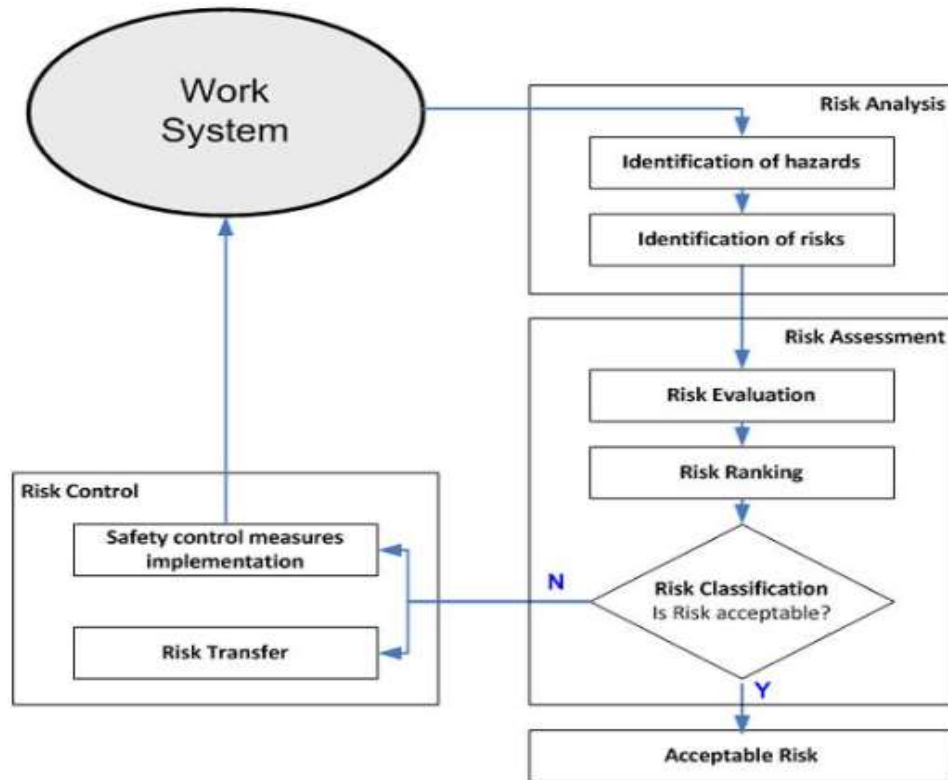
Figure 3-1 Interconnectedness of risk assessment, risk management and risk communication

Risk assessment:

Risk assessment is the process of identifying the hazard at hand and attempting in some manner to bound or to quantify its level of potential harm under a prescribed set of conditions (Robson and Toscano, 2007). It includes the examination of all characteristics of the work system where the worker operates, namely, the workplace, the equipment/machines, materials, work methods/practices and work environment. The aim of risk assessment is to identify what could go wrong, i.e. finding what can cause injury or harm to workers, and to decide on proper safety control measures to prevent work accidents and occupational diseases and implement them (e.g., risk control). The first step is the identification of all hazards. This is identifying anything which can potentially cause injury or harm. It includes all hazards to health and safety in the enterprise from buildings, to animal handling facilities down to the operation of each vehicle and machine. As this involves a detailed examination of every aspect of the workplace to identify potential hazards it is important to include and consult with all employees. Once all the hazards are identified it is then important to assess the risk, or risks, associated with each hazard.

Risk Management:

Risk management is the process by which ones decides what action to take in the face of risk estimates (Ruckelshaus, 1985). Managing risks can be done on many different levels, from the individual decision maker to the highest policy decision maker (Robson and Toscano, 2007). It is up to the decision maker to decide what constitutes "safety" or an acceptable level of risk (Rodricks and Taylor, 1983).



Source: Nunes, 2010

Figure 3-2 Risk Management Process

Having identified the hazards and carrying out the risk assessment to assign a risk rating the next step is to identify the risk control (Figure 3-2). Where the risk is deemed unacceptable it must be controlled to an acceptable level or eliminated. The **general principles of prevention** listed in Directive 89/391/EEC - OSH 'Framework Directive' are the following:

- avoiding risks
- evaluating the risks
- combating the risks at source
- adapting the work to the individual
- adapting to technical progress
- replacing the dangerous by the non- or the less dangerous
- developing a coherent overall prevention policy
- prioritizing collective protective measures (over individual protective measures)
- giving appropriate instructions to the workers

To help further identify what control measures, we can refer to the hierarchy of control measures (Figure 3).



Figure 3-3 Hierarchy of control measures (Source: NIOSH)

The control measures in order of precedence are:

a) Elimination and Substitution

Elimination and substitution, while most effective at reducing hazards, also tend to be the most difficult to implement in an existing process. If the process is still at the design or development stage, elimination and substitution of hazards may be inexpensive and simple to implement. For an existing process, major changes in equipment and procedures may be required to eliminate or substitute for a hazard.

b) Engineering Controls

Engineering controls are favoured over administrative and personal protective equipment (PPE) for controlling existing worker exposures in the workplace because they are designed to remove the hazard at the source, before it comes in contact with the worker. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The initial cost of engineering controls can be higher than the cost of administrative controls or PPE, but over the longer term, operating costs are frequently lower, and in some instances, can provide a cost savings in other areas of the process.

c) Administrative Controls and PPE

Administrative controls and PPE are frequently used with existing processes where hazards are not particularly well controlled. Administrative controls and PPE programs may be relatively inexpensive to establish but, over the long term, can be very costly to sustain. These methods for protecting workers have also proven to be less effective than other measures, requiring significant effort by the affected workers. (NIOSH and DART, 2016)

d) Risk Communication:

Risk communication is the process by which persons or institutions with information of the risk at hand choose to communicate the risk to others (Robson and Toscano, 2007). Risk communication has benefited from a vast body of literature in behavioural economics and judgment and decision making, which has shown that the manner in which risks are communicated can have important effects on how people react and respond to the risks. Since the goal is to inform others in a way that helps them to make optimal decisions for themselves, the field of risk communication focuses on finding communication methods that will enable others to make those optimal decisions (Robson and Toscano, 2007). Therefore, it allows people at risk to understand and adopt protective behaviours.

3.2.4 OSH legal requirements (concerning occupational risks) – overview

The European Union sets legislation in the form of directives. European directives are legally binding and have to be transposed into national laws by Member States. European Directives set out minimum requirements and fundamental principles, such as the principle of prevention and risk assessment, as well as the responsibilities of employers and employees. Thus these requirements and principles are applicable in all Member States of the European Union.

The most important legal act is the European Framework Directive (1989/391/EEC). This Framework Directive had to be transferred into national law by the end of 1992 by all Member states.

This Framework Directive brought about considerable improvement including the following:

- The term ‘working environment’ was set in accordance with International Labour Organization (ILO) Convention No. 155 and defined a modern approach taking into account technical safety as well as general prevention of ill-health.
- The Directive aimed to establish an equal level of safety and health for the benefit of all workers (the only exceptions are domestic workers and certain public and military services).
- The Directive obliges employers to take appropriate preventive measures to make work safer and healthier.
- The Directive introduced a key element the principle of risk assessment and defines its main elements (e.g. hazard identification, worker participation, introduction of adequate measures with the priority of eliminating risk at source, documentation and periodical re-assessment of workplace hazards).
- The new obligation to put in place prevention measures implicitly stressed the importance of new forms of safety and health management as part of general management processes.

(EU-OSHA, 2017)

3.2.5 OSH legislative requirements concerning Risk Assessment in Bulgaria, Greece, Ireland and Romania

Comparisons between OSH requirements concerning Risk Assessment for Bulgaria, Greece, Ireland and Romania are outlined in the tables below (1-2).

Table 3-1 Who is allowed to undertake risk assessment in each country and how is it employed?

Bulgaria	Owner of the working place (or directors, works manager) is responsible for the risk assessment to be done. The Occupational Health Services, or the other experts are allowed to undertake risk assessment. They are employed within the framework of the general agreement between Occupational Health Services and owner or director of working place
Greece	The employer should have at his/her disposal a written assessment of the occupational health and safety risks at work. This assessment should be carried out by the safety technician, the occupational physician, Internal or External Occupational Safety and Health Services, licensed by the Ministry of Labour. The employer should provide the necessary means and personnel to fulfil this purpose.
Ireland	Every employer is required to manage safety and health at work so as to prevent accidents and ill-health. Employers must: identify the hazards, carry out a Risk Assessment and prepare a written Safety Statement. The system must involve consultation between the employer and his/her employees, who are required by law to cooperate with the employer in the safety-management process.
Romania	Safety at work, including risk management is provided by the employer, through internal or external prevention and protection services, or by designated workers. This service ensures the assessment of professional risks and draws up the risk identification sheet for each worker.

Table 3-2 How is risk assessment undertaken in agriculture in each country?

Bulgaria	There is no differences between risk assessment in agriculture and the other working places. But in practice, the risk assessment in the field of agriculture is difficult to be done. This is because many of the agriculture producers do not have contracts with Occupational Health Services and the government control is not effective.
Greece	There is no specific law for the agricultural sector. Risk assessment as outlined in national legislation is conducted as follows: According to Law 3850/2010/84 A “Ratification of the code of laws for health and safety of workers”, risk assessment in agriculture can be conducted by specialized in safety technicians, yet when there are less than 50 employees and in the case the employer has one of the mentioned by the Law specialties then he/she can conduct risk assessment. In case there are less than 20 employees then the employer should have a 35 hours training, graduate of technical institute and his studies should be relevant to the activity of the company in order to conduct risk assessment.
Ireland	For farmers with three or less employers they complete the farm safety code of practice risk assessment document. (http://www.hsa.ie/eng/Your_Industry/Agriculture_Forestry/Overview/Agriculture_Code_of_Practice/) For others in the agricultural sector, they use standard employer’s tools.
Romania	No specific data for agriculture, in Romania. Risk assessment is done according to the OHS legislation.

3.3 Occupational hazards relevant for agriculture employees (part 1)

Many significant occupational hazards exist in the agriculture work sector, compared to other work sectors. Both the farmer and the farm worker are exposed to a wide variety of occupational hazards. Farmers interact more closely with the outside world. They are exposed to many air-borne hazards such as pollen, fungal, spores, grain dust and mites, that produce chronic health conditions such as asthma, allergic asthma and bronchitis (Gerard, 1998). Farmers work long hours, work in all types of weather conditions, use many different types of machinery and chemicals, work with unpredictable animals and carry out a wide range of mentally and physical demanding activities. Agriculture in every industrialised country is one of the most hazardous occupations, based on occupational fatality rates, nonfatal occupational injury rates, and occupational illness rates (Donham and Thelin, 2006).

The epidemiological triangle is an example of how occupational hazards related to work task/ production means, working environment and worker can interlink and result in individuals becoming ill or injured. Disease or injury occurs when an outside agent (i.e.: work task/production means) capable of causing disease or injury meets a host (i.e.: the worker) that is vulnerable to the agent. This happens in an environment that allows the agent and host to interact (Figure 3-4). Thus, it is important to fully understand each of these elements.

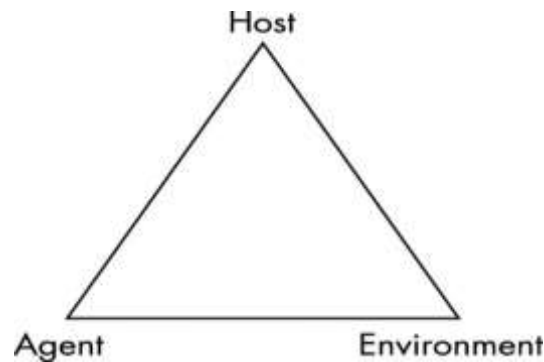


Figure 3-4 The Epidemiological Triangle

3.3.1 Occupational hazards related to work task

During the working day, farmers are exposed to a variety of physical hazards such as lifting and carrying heavy loads, working with the trunk in sustained flexion, risk of trips and falls on slippery and uneven walkways, unpredictable actions of livestock, and exposure to vibration from farm vehicles and power hand tools (Walker-Bone and Palmer, 2002).

Awkward postures: Working in awkward postures or in the same posture for a long period of time. Using positions that place stress on the body i.e.: working with small animals, driving a tractor while focusing on machine behind.

Excessive force. Exerting excessive force through pushing or pulling heavy loads, lifting heavy objects or animals or maintaining control of equipment or tools.

Vibration: In agriculture vibration can result from machinery and tool usage. The effects of vibration can damage the body. Whole body vibration is a significant physical risk factor associated with low back pain.

Repetitive motions. Performing the same motion or series of motions continually or frequently for an extended period of time i.e.: Milking cows.

Combined exposure to several risk factors: In agriculture workers are involved in a multitude of manual tasks which may place them at a higher risks to occupational hazards than exposure to one risk factor.

3.3.2 Occupational hazards related to production means

Production means refer to the technologies and machinery related to agriculture work. Farm vehicles and machinery are the most common and dangerous hazard to an agriculture worker. Depending on the type of production farm vehicles and machines vary. Pervious research have revealed that the majority of machinery-related accidents occur as the result of human carelessness for example: improper or lack of maintenance, not reading the operator's manual, ignoring a posted warning, improper or lack of instruction, failure to follow safety rules, ignoring warnings. Not only is the operator at risk but other workers near the machine are also at risk from being crushed or knocked down.

3.3.3 Occupational hazards related to working environment

Agriculture workers are often exposed to harsh climate conditions, excessive noise and vibration, chemicals, infectious agents, dust and other organic substances. In Ireland, many are self-employed, work alone, work long hours earning low and unstable incomes and often have to combine more than one activity to make a living. Also due to the remote nature of rural areas, agricultural workers often lack access to the necessary health, information and training services to adequately respond to occupational hazards. In many cases farms

are not only a place of business but the family home is usually located on or very near the worksite. Therefore vulnerable groups that are particularly affected include the elderly and children.

3.3.4 Occupational hazards related to workers

Agriculture workers are vulnerable to all work task, production means and working environment hazards. Occupational hazards related to worker can include personal factors (e.g.: age, gender, education, body mass, height), work factors (e.g.: system, size of operation, hours worked) and psychosocial factors (e.g.: stress, depression, fatigue). Other factors to consider are:

- Are users trained in safe operation?
- Are they risk averse?
- Are they wearing proper clothing?
- Are they properly supervised?

3.4 Occupational hazards relevant for agriculture employees (part 2)

The following sections on occupational hazards are covered in more detail in later modules. Below is an introduction to these components.

3.4.1 Ergonomic (occupational) hazards relevant for agriculture employees

“Ergonomics applies information about human behaviour, abilities and limitations and other characteristics to the design of tools, machines, tasks, jobs and environments for productive, safe, comfortable and effective human use.” (McCormick and Saunders 1993). Therefore, it is fitting the job to the person. Ergonomic risk factors include: force, repetition, awkward postures, static postures, vibration, extreme temperatures, pressure and stress at work, forceful or twisting movements.

Ergonomic occupational hazards are physical factors within an environment that can result in musculoskeletal disorders. Musculoskeletal disorders (MSDs) are defined as a group of disorders that affect the musculoskeletal system including the nerves, tendons, muscles, and supporting structures such as intervertebral discs (NIOSH, 1997). Musculoskeletal disorders affect millions of people around the world and are the most common cause of severe long-term pain and physical disability (Woolf and Pfleger, 2003). Although MSDs can occur as a consequence of intrinsic pathological processes or as a result of acute injuries from a one-time trauma, they are most commonly a result of cumulative trauma i.e., repetitive minor traumas and biomechanical stresses (Kolstrup, 2008).

Due to the nature of farm work, which involves strenuous physical activities and high levels of manual labour, farmers and farm workers are at particular risk of developing MSDs (Walker-Bone and Palmer, 2002; Health and Safety Executive, 2007; Rosecrance *et al.*, 2006). Examples of some of the work exposures that farmers face include lifting and carrying heavy loads, working with the trunk frequently flexed, risk of accidents caused by the unpredictable actions of livestock and exposure to vibration from farm vehicles and powered hand tools (Walker-Bone and Palmer, 2002). Farmers are vulnerable to a range of MSDs including: osteoarthritis of the hip and knee, low back pain, upper limb disorders and hand/arm vibration syndrome, as well as to the consequences of trauma such as sprains, fractures and dislocations (Walker-Bone and Palmer, 2002).

Musculoskeletal disorders can result in severe long term pain and suffering for individuals. In addition to their physical effects, they can also lead to further negative consequences such as reduced work ability, lower farm income, poor quality of life, and the onset of other health problems such as stress or depression.

More information about ergonomic (occupational) hazards relevant for agriculture employees are to be found in Module 11-Musculoskeletal diseases for employees working in Agriculture.

3.4.2 Biological (occupational) hazards relevant for agriculture employees

There are two main groups of biological agents regarded as occupational hazards:

1) Allergenic and/or toxic agents forming bioaerosols (bacteria, endotoxin, fungi, mycotoxins, β -glucans, particles of plant and animal origin) causing occupational diseases of the respiratory tract, conjunctiva and skin.

2) Agents causing zoonosis and other infectious diseases that could be spread by tick or insect vectors, by the airborne route, by the alimentary route, or immediately by contact with skin (Dutkiewicz et al., 2011).

There are a number routes of infection for a biological agent. These are: ingestion of the agent, inhalation of the agent, entry via mucosal membranes, entry via damaged skin, subcutaneous entry, physical contamination, transplacental, etc.

Common Zoonosis are outlined in figure 3-5 and 3-6.

Disease	Animals affected	Contracting routes	Repercussions
<i>Escherichia coli</i> O157	Cattle, sheep, deer, goats	Mouth	Diarrhoea Kidney failure Death
Cryptosporidiosis	Calves, lambs, deer, goats	Contact with animal dung Water contaminated with dung Hand-to-mouth contact	Diarrhoea Abdominal pain Flu-like symptoms
Leptospirosis	Rats, cattle	Cuts and grazes Contact of infected urine with eyes, nose or mouth Placental products entered through broken skin Inhalation of droplets of urine	Fever Headache Vomiting Muscle pain Jaundice Meningitis Kidney failure Death
Bovine tuberculosis	Cattle, badgers, deer	Inhalation Hand-to-mouth contact	Chest pain Coughing up blood Fever Chills Night sweats Appetite loss Weight loss Pallor
<i>Salmonella</i>	Farm animals	Contaminated food Contact with animal dung Hand-to-mouth and hand-to-hand contact	Diarrhoea Fever Abdominal pain
<i>Streptococcus suis</i>	Pigs	Cuts and grazes Inhalation	Meningitis Death
Orf	Sheep, goats, lambs	Contact with lesions on animals or infected wool Fencing or hedges	Ulcers on face, hands and arms
Ovine chlamydiosis (<i>Chlamydia psittaci</i>)	Sheep, goats	Handling or contact with infected afterbirth	Flu-like symptoms Abortion risk to pregnant women

Figure 3-5 Zoonotic diseases (Source European Commission, 2012)

Disease	Animals affected	Contracting routes	Repercussions
Psittacosis	Ducks, poultry	Inhalation of dust from dung	Flu-like symptoms Pneumonia Endocarditis Hepatitis Death
Q fever	Sheep, cattle	Inhalation of dust contaminated with urine, faeces or birth products Drinking unpasteurised milk Tick bites Skin abrasions	Flu-like symptoms Pneumonia Liver and heart valve damage Death
Ringworm	Cattle, pigs, sheep, horses, dogs	Entering the skin through cuts and abrasions	Inflammation and swelling Crusty skin Skin lesions on hands, forearms, head and neck
Cryptosporidiosis	Poultry, cattle, sheep, small mammals	Ingestion of animal faeces (water or food contamination)	Diarrhoea Stomach pain and cramps Low fever
Campylobacter	Poultry, cattle	Ingestion of contaminated food, water, milk	Bloody Diarrhoea Periodontitis or dysentery syndrome Cramps Fever and pain
Brucellosis (undulant or Maltese fever)	Cattle, swine, goats, sheep	Contact with placenta and other contaminated tissues; consumption of unpasteurised milk and soft cheeses made from the milk of infected animals	Intermittent fevers Sweating Weakness Anaemia Headaches Depression and muscular and body pain Septicaemia
Rabies	Wild carnivores, dogs, cats, livestock	Exposure of virus-laden saliva to breaks in the skin, bite from an infected animal	Flu-like symptoms Anxiety Insomnia Confusion Agitation Abnormal behaviour Paranoia Hydrophobia Death

Figure 3-6 Zoonotic diseases continued (Source European Commission, 2012)

More information about biological (occupational) hazards relevant for agriculture employees are to be found in Module 10-Infectious diseases for employees working in Agriculture.

3.4.3 Psychosocial (occupational) hazards relevant for agriculture employees

Psychosocial hazards are defined by the International Labour Organization (ILO, 1986) in terms of the interactions among job content, work organisation and management, and other environmental and organisational conditions, on the one hand, and the employees' competencies and needs on the other. As such, they refer to those interactions that prove to have a hazardous influence over employees' health through their perceptions and experience (ILO, 1986). Psychosocial risks go hand in hand with the experience of work-related stress (WHO, 2010). Work-related stress is the response people may have when presented

with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope (WHO, 2003).

Agriculture work can be very physically and mentally demanding which can result in agriculture workers experiencing a number of psychosocial hazards. Psychosocial hazards faced by agriculture workers include: long working hours, isolation, financial uncertainty, planning difficulties, administrative demands, and the interaction between stress and exposure to multiple physical risks.

More information about psychosocial (occupational) hazards relevant for agriculture employees are to be found in Module 12-Mental Health disorders for employees working in Agriculture.

3.4.4 Physical (occupational) hazards relevant for agriculture employees

Physical hazards are environmental hazards that can cause harm to agriculture employees with or without contact. Examples of physical hazards include: noise and vibration, electricity, heat and cold stress, death and injuries from machinery and animals, falls from height and solar radiation.

- **Noise and vibration:** A variety of significant health effects are associated with occupational exposures to noise and vibration. Vibrating surfaces represent one of the primary sources of noise, therefore, exposures to both types of physical stressors are commonly encountered. The effects of noise and vibration exposures may be intensified among farm workers because they tend to be more isolated than workers in other types of industry. As a consequence, access to health and safety information, medical care, and hazard control technology may be more restricted (Crutchfield and Sparks, 1991).
- **Electricity:** In agriculture electrical accidents occur mainly for the following reasons: plug contains a loose (floating) earth, equipment is connected without using a plug top and/or socket, unsuitable domestic-type plugs and other accessories are used, ‘Temporary’ joints, both taped and un-taped, are used on extension cables, portable equipment, including infra-red lamps, is connected to lighting circuits. For more information check out http://www.hsa.ie/eng/Publications_and_Forms/Publications/Agriculture_and_Forestry/Agriculture_Code_of_Practice.html
- **Machinery:** A review published by the European Union in 2016 found that the industry where the risk of accidents due to the use of machines or hand tools was deemed to be the most frequently reported risk factor was agriculture. Previous research have developed a safety hierarchy to eliminate an injury hazard that included the following elements: (1) design and manufacture equipment according to standards; (2) guard moving parts by using shields, casings or interlocks; (3) train operators with respect to machinery operation and safety; and (4) prescribe personal protective equipment (Murphy, 1992). Although design and provision of safety features for farm machinery are ‘built-in’ and are the responsibility of the manufacturer, the farm owner or employer is responsible for operator training and ensuring compliance with standard safety practices. Many machinery in agriculture can become outdated and do not have up-to-date safety features. Additionally, machinery may not be serviced regularly by mechanical experts and therefore can pose risks for example due to faulty breaks or untested hydraulic lifts.
- **Animals:** Some agriculture workers will work closely or come in contact with a range of animals as part of their work. The most common farm animals include: bovine animals, pigs, sheep, goats and poultry. Due to the size and unpredictable nature many fatal and non-fatal injuries are caused by bovine animals. Bulls cause an alarming number of all farm livestock deaths. They must always be treated with caution. Even placid bulls are unpredictable, so care is essential at all times. Attacks by recently calved cows have increased in recent years and this calls for particular vigilance while attending cows at calving time. Livestock farmers should be alert to factors likely to cause stress to animals that in turn will lead to unpredictable behaviour. The following situations are likely to lead to aggressive behaviour in livestock:
 - Animals react unpredictably when they are handled by an unfamiliar person, are in unfamiliar surroundings, and when they are separated from a familiar group.

- Animals respond to the way they are treated and draw upon past experiences when reacting to a situation. Animals that, when young, are chased, slapped, kicked, hit or frightened often fear being approached when they are older.
 - As cattle are colour-blind and have poor depth perception, shadows, rapid changes in lighting and shouting excite them. This makes their behaviour unpredictable. Handling facilities play a major role in preventing injury. Well-designed facilities allow the farmer to control animals, giving easy and safe access to stock for veterinary and other tasks. See link for more information
http://www.hsa.ie/eng/Publications_and_Forms/Publications/Agriculture_and_Forestry/Agriculture_Code_of_Practice.html
- **Falls from height:** The principal risk when working at height is falls, either from ladders, through fragile roofing materials or from unprotected edges of roofs or other structures. In many cases, simple straightforward physical protection measures can prevent falls occurring. Lack of planning results in the necessary protection being neglected during this high-risk work. Deaths and serious injuries can be caused from ladders slipping sideways or kicking out at the base or someone simply falling from the ladder. Ladders should only be used as a means of access or for work of very short duration when there is no other safer way of doing a job. It is much safer to use a mobile elevating work platform or a tower scaffold.

Climate: Climate conditions can amplify existing health and safety issues and can lead to occupational hazards.

Examples include:

- Occupational exposure to hot and cold environments e.g.: heat related stress, cold related problems, etc.
- Air pollution can be linked with both acute and chronic health effects.
- Climate conditions can affect the prevalence and distribution of vectors, pathogens, hosts and allergens.
- Extreme weather events can lead to occupational deaths, injuries, diseases and mental stress e.g.: floods, wildfires, storms etc.

More information about climate conditions relevant for agriculture employees are to be found in Module 9- Extreme temperatures in Agriculture - health challenges.

3.4.5 Chemical (occupational) hazards relevant for agriculture employees

Chemical hazards are a type of occupational hazard caused by exposure to chemicals in the workplace. Examples of chemical hazard in agriculture include: pesticides, herbicides, rodenticides, sheep dips, oils and fuels.

For a chemical agent to cause harm it must come into contact with or enter the body. The main ways for this to happen are:

- Inhalation
- Skin Contact
- Through Damaged Skin
- Ingestion
- Trans Placental
- Eye contact

The adverse effect that a chemical can have on a person exposed to that chemical depends on a number of factors. These include:

- Nature and physical form of the chemical
- The route of entry into the body
- Mix of substances
- Acute poisoning

- Amount absorbed – dose : response relationship
- The individual concerned
- Target organ
- Frequency, duration and intensity of exposure

The hazards associated with a chemical can be obtained from the chemical's classification and its Safety Data Sheet (SDS). There is a statutory requirement for a supplier of a hazardous material to provide a Safety Data Sheet. The steps that need to be taken to protect oneself from a chemical can be obtained from the SDS.

Agriculture chemical examples include:

- Pesticides
- Herbicides
- Rodenticides
- Sheep dips
- Oils
- Fuels

More information about chemical (occupational) hazards relevant for agriculture employees are to be found in Module 14- Chemical substances & Poisoning & Toxicology in Agriculture.

3.5 Prevention and protection measures within the agriculture economic sector

World Health Assembly resolution WHA60.26, "Workers' Health: Global Plan of Action", urged Member States "to work towards full coverage of all workers, particularly those in the informal sector, agriculture, small enterprises and migrant workers with essential interventions and basic occupational health services for primary prevention of occupational and work-related diseases and injuries" (WHO, 2014).

The World Health Organisation (WHO, 2014) has proposed a strategy to improve health coverage of workers to help address this 'Workers health global plan of action'. This recommends:

- Increasing skills of primary care providers, general practitioners, nurses, environmental and public health technicians, and community health workers to provide basic occupational health services such as advice on improving working conditions, monitoring the health status of workers and detecting the most common occupational diseases among workers in small companies, rural areas, farms, the informal sector and among migrants.
 - Expanding the coverage and improving quality of specialized occupational health services in big and medium-sized companies and industrial zones, with a focus on assessing and reducing occupational risks; surveillance and improvement of the work environment, work organization, machinery and equipment; early detection and rehabilitation of occupational diseases; promotion of health; and the provision of first aid at the workplace.
 - Establishing connections between occupational health services and primary care centres to facilitate the care of workers suffering from chronic diseases and their return to work after long-term absence due to sickness.
 - Developing workplace health initiatives, tools and methods for empowering companies and other work settings to take better care of health, without unduly relying on professional health services.
 - Including occupational health in the pre- and in-service training of all frontline health providers and certain medical specialists dealing with cancer, skin, respiratory and neurological diseases, and musculoskeletal disorders.
 - Developing roadmaps for scaling up access of workers to essential interventions and services, as defined nationally, for prevention and control of occupational and work-related diseases. These include monitoring coverage and setting realistic targets in line with available human and financial resources for health and local traditions.
- (WHO, 2014)

Occupational Health Physicians can help assess agriculture risks and develop recommendations for prevention of occupational and work-related diseases. Workers at risk need regular medical check-ups to detect any health problem at an early stage, when treatment and modification of the workplace can help avoid permanent damage (WHO, 2014).

3.6 Main causes of workplace accidents in agriculture

One of the problems in dealing with OSH in agriculture in an EU context is the glaring lack of detailed statistical information on the extent, route cause and nature of workplace deaths, injury and ill-health across all EU –28 member states. In many countries, statistics on fatal accidents in agriculture are well recorded however non-fatal accidents go under reported each year. Module 4 will explore workplace accidents in more detail.

The most common causes of deaths in agriculture are:

- Transportation accidents (being run over or overturning of vehicles)
 - Falls from height (from trees, through 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 (electrocutions)
- (European Commission, 2012)

In Ireland, statistics on fatal accidents are well documented for all sectors including agriculture and will therefore be used as a primary example to explain workplace accidents in agriculture in more detail. The Health and Safety Authority (HSA) was established in 1989 under the Safety, Health and Welfare at Work Act, 1989 and has overall responsibility for the administration and enforcement of health and safety at work in Ireland. This includes investigating all serious work place accidents. All findings are well documented in reports released by the Authority and also through their website (www.hsa.ie).

In Ireland, tractors/farm vehicles (27%) are the main cause of deaths in Ireland for the period 2007-2016, closely followed by machinery (21%) which make up nearly 50% of all agriculture related deaths (Figure 5).

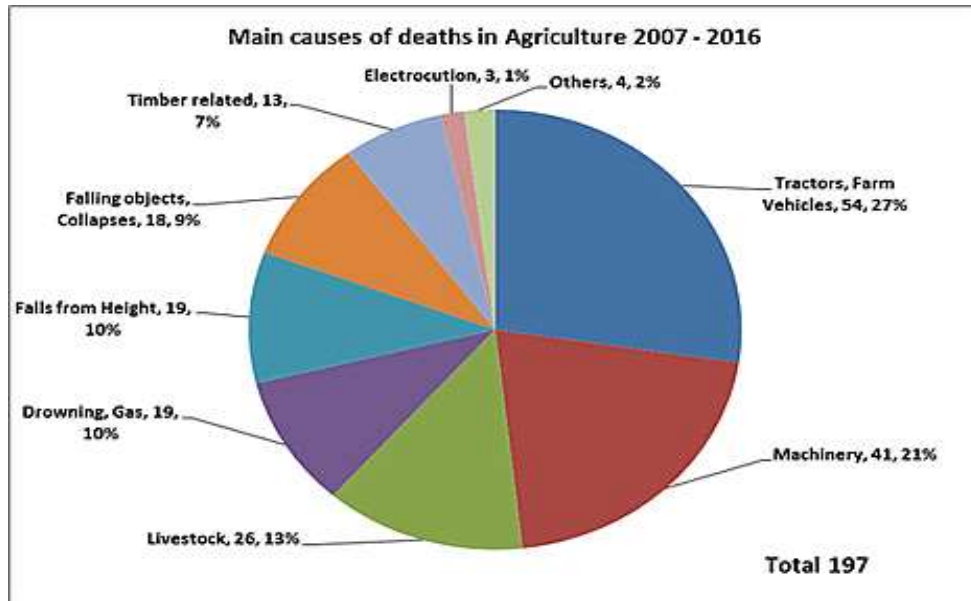


Figure 3-5 Main causes of deaths in agriculture in Ireland 2007-2016 (Source:HSA)

3.6.1 Overview on the most often needs of preventive actions

Figure 6 and 7 illustrate the various causes of deaths due to tractors/farm vehicles and farm machinery. Being ‘crushed’ was the main factor for both tractors/farm vehicles and farm machinery.

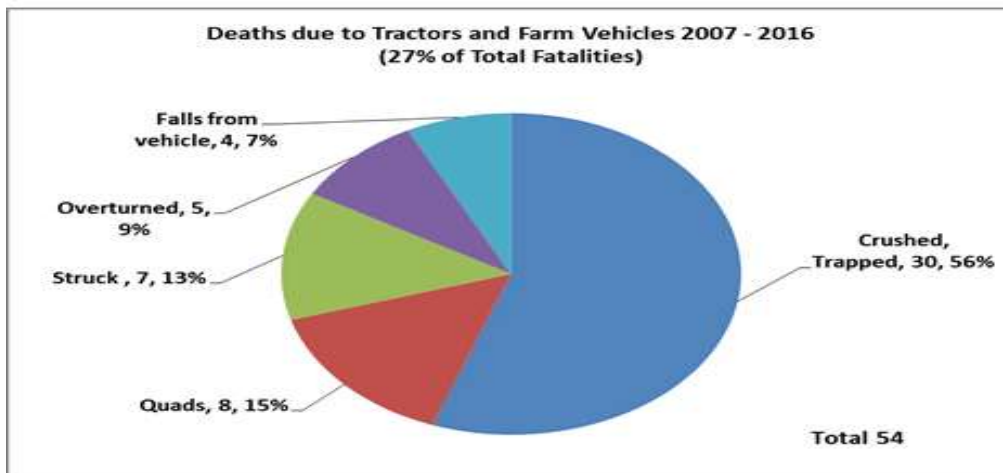


Figure 3-6 Deaths due to tractors/farm vehicles in Ireland for the period 2007-2016 (Source: HSA)

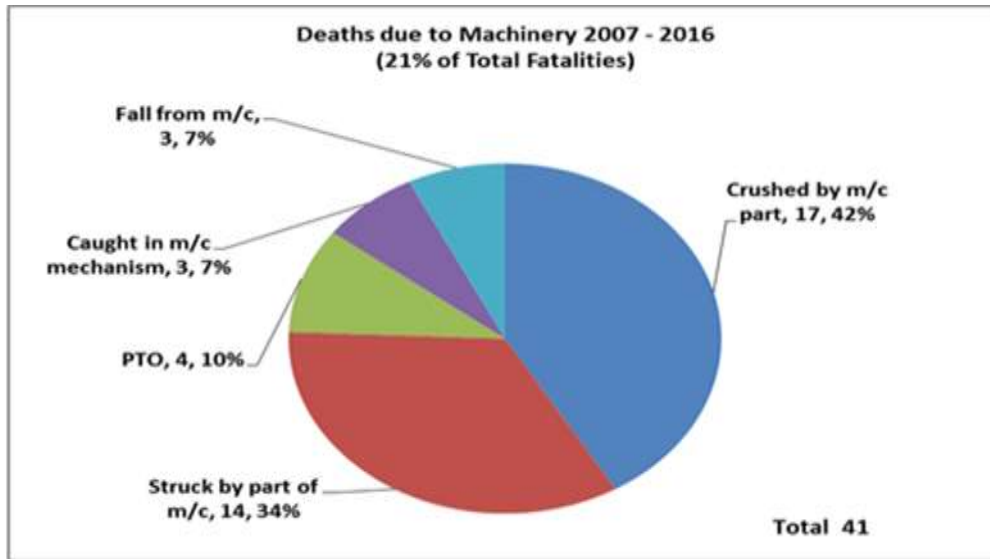


Figure 3-7 Deaths due to farm machinery in Ireland for the period 2007-2016 (Source: HSA)

Another major concern in Ireland is that 46% of all deaths in agriculture account for children and older farmers. These are seen as a vulnerable group as in many other work sectors they would not be present in the workplace (Figure 8 and 9).

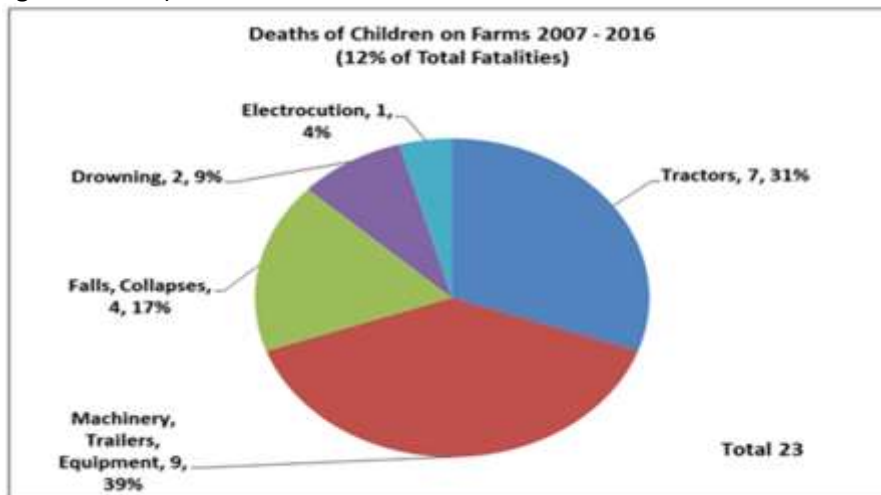


Figure 3-8 Deaths of children on farms in Ireland for the period 2007-2016 (Source: HSA)

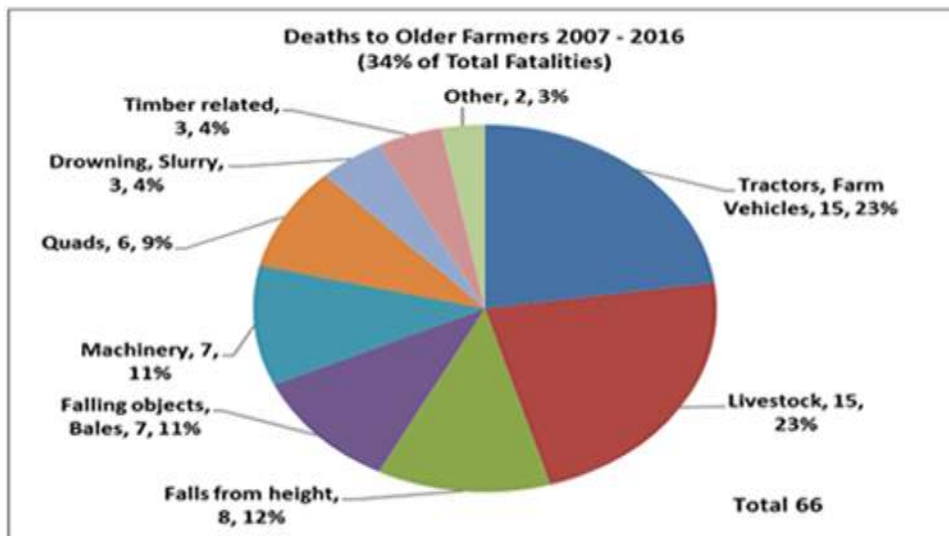


Figure 3-9 Deaths to older farmers in Ireland for the period 2007-2016 (Source: HSA)

3.6.2 Technical and organizational actions as part of preventive programs

Improving health and safety at work is a major part of the European social model and this was set out in the Community Strategy on health and safety at work—Improving the Quality of Work and Productivity for 2007-2012. However, due to the characteristics of the Agriculture sector with its persistently high and disproportionate levels of fatal and non-fatal injuries and ill-health improvement is significantly less compared to other sectors. Each country has their own responsibility in improving OSH in agriculture and in implementing preventative programmes to assist this.

Technical and organizational actions as part of preventive programs –Greece:

Development of Public Health Indicators for Reporting Environmental/Occupational Risks Related To Agriculture and Fishery – DIRERAF

The project aimed at developing a tool for reporting and assessing the impact of policies and practices with regards to occupational and environmental health risks for the agricultural and fishery sector in the EU.

The DIRERAF project was implemented between November 2004 and January 2008 by a partnership of reputable research institutions in 10 EU countries. The coordinator of the project is the Medical School of the National and Kapodistrian University of Athens. The project was implemented with the support of the European Commission in the framework of the 2003-2008 Health Program of the Health and Consumer Protection Directorate- General. The project was also supported by a grant received from the Stavros S. Niarchos Foundation.

The project focused on the development of public health indicators for the reporting of occupational and environmental risks related to agriculture and fishery aiming to provide a useful tool for policy makers to monitor these risks in time and across different backgrounds, assessing the impact of related policies and practices.

To successfully address the environmental and occupational health hazards related to agriculture and fishery and to safeguard the health of persons working in the sector as well as the health of consumers, action is required at both the national and European level. Effective planning, monitoring and evaluation of policies are impeded by the knowledge gap and the lack of comparable, reliable, longitudinal data in European Member States. Health information on the risks, status and trends in farming and fishery in the E.U., however, is the basis for informed decision making in health and environmental policies on the regional, national and

European level. There is a clear need for systematic, reliable and comparable information and for enhanced monitoring of the occupational and environmental health risks in agriculture and fishery.

The project has therefore developed and proposes a set of indicators to collect information on demographics of the workforce, occupational risks, occupational health outcomes, implemented policies, and environmental hazards related to agriculture and fishery. This set of indicators should be part of a European monitoring system that will routinely collect data on the health of farmers and fishermen and on environmental hazards related to agriculture and fishery.

The indicators as well as related recommendations are presented in a set of documents which are accessible from the project website - <http://euprojects.org/direraf.com/>

The project consortium comprised:

- National Kapodistrian University of Athens (Project Coordinator) Country: Greece
- Medical University of Sofia Country: Bulgaria
- Nofer Institute of Occupational Health Country: Poland
- Charles University of Prague Country: Czech Republic
- Institut Municipal d' Investigacio Medical (IMIM) Country: Spain
- Dresden University of Technology Country: Germany
- Institute of Preventive Medicine, Environmental and Occupational Health (Prolepsis) Country: Greece
- International Centre for Pesticides and Health Risk Prevention (ICPS) Country: Italy
- Finnish Institute of Occupational Health Country: Finland
- Erasmus University Country: Netherlands
- Institute of Rural Health Country: Slovakia

Technical and organizational actions as part of preventive programs – Ireland:

The Farm Safety Action Plan (2013–2015) was developed by the Farm Safety Partnership Advisory Committee, an advisory committee of the Board of the Health and Safety Authority, and sets out the goals and associated actions in relation to improving occupational safety and health in agriculture. The new Plan (2016–2018) builds on the achievements and actions of the previous plans. The agricultural sector has entered a positive expansion phase and provides an important contribution to Ireland's economy. However, this sector faces significant challenges in the achievement of the necessary improvements in occupational safety and health standards. Tractors and machinery and incidents involving livestock are the areas of greatest concern and will be a central focus in this new plan.

The Farm Safety Partnership Advisory Committee consists of the following members:

- The Health and Safety Authority- national statutory body
- FBD Insurance- offers car, home, business and farm Insurance cover
- Farm Relief Services Network- farmer owned co-operative providing skilled, experienced, fully equipped locally-based operators
- Macra na Feirme- rural youth organisation
- Teagasc- national body providing integrated research, advisory and training services to the agriculture and food industry and rural communities
- Department of Agriculture, Food and the Marine-Irish government agency
- Professional Agricultural Contractors of Ireland- Professional Independent Representation for Agricultural Contractors in Ireland
- Irish Rural Link- represents the interests of community groups in disadvantaged and marginalised rural areas by highlighting problems, advocating appropriate policies and sharing experiences and examples of good practice
- Irish Creamery Milk Suppliers Association- farm organisation

- Irish Farmers Association-farm organisation
- Coillte-semi state forestry company
- Irish Cattle and Sheep Association-farming organisation
- Institute of Technology Carlow- Education and research
- University College Dublin- Education and research
- IOSH Rural Industries Section- The Institution of Occupational Safety and Health
- Veterinary Ireland-representative body for veterinary surgeons in Ireland
- Veterinary Council of Ireland-statutory body
- Agri Aware- to improve the image and understanding of agriculture, farming and the food industry among the general public

The following are the six goals for the Farm Safety Action Plan (2016–2018):

1. To achieve cultural behavioural change in health and safety of persons working in the agricultural sector through research, education and training.
2. To develop programmes that will foster innovative approaches and deliver engineering solutions to reduce the risks to persons working in agriculture.
3. To reduce the level of death and injury arising from tractor and machinery use.
4. To establish initiatives to reduce the level of death and injuries arising from working with livestock.
5. To ensure high standards of health and safety are adopted in forestry and timber work on farms.
6. To implement programmes for the protection of health and wellbeing of persons, including vulnerable groups, working in agriculture.

More information including the actions for each goal can be found at:

www.hsa.ie/eng/Publications_and.../Farm_Safety_Action_Plan_2016-2018.pdf

3.6.3 Individual and other actions as part of preventive programs

Department of Agriculture, Food and Marine- TAMS II (Targeted Agricultural Modernisation Scheme)

TAMS II commenced in June 2015 and will continue until December 2020. This scheme is co-funded by the EU and the national exchequer under the Rural Development Programme (2014-2020) with a total allocation of over €395m over its duration. TAMS II aims to provide farmers with grant aid to improve and/or build a specific range of farm buildings or purchase equipment that may benefit their farm businesses including the provision of important safety elements and equipment. Farmers considering entering TAMS II need to make an investment of at least €2,000 to be eligible for grant aid under this scheme. Individual farmers can apply for grant aid of 40% on investments up to a ceiling of €80,000. More information can be found at: <http://www.agriculture.gov.ie/farmerschemespayments/tams/>

Department of Agriculture, Food and Marine – Knowledge Transfer Programme

The Knowledge Transfer Programme is funded under the Rural Development Programme 2014-2020 and involves group interaction complemented by one to one advice across a range of sectors. Funding of €100m is allocated under the Rural Development Programme for Knowledge Transfer Groups across the beef, dairy, sheep, tillage, equine and poultry sectors. The programme focus is the general principles of farm management including: animal health & management, profitability & financial management, grassland management, sustainability, farm health & safety, farm progression, and breeding plan. More information can be found at:

<https://www.agriculture.gov.ie/farmerschemespayments/knowledgetransferprogramme/>

Health and Safety Authority – E Learning

The Health and Safety Authority have developed an online course to help farmers plan and prepare for slurry spreading. It provides an opportunity for farmers to increase their awareness of the dangers associated with slurry and how to prevent accidents occurring to themselves and to others (<https://hsalearning.ie/mod/page/view.php?id=31>)

Macra na Feirme – Safe Agri Skills Card

Macra is encouraging young people working in Agriculture to complete a suite of short training courses in relevant areas around farm safety. Modules include tractor safety / machinery maintenance, livestock handling, manual handling and first aid & health for farming. There are also optional extras including chainsaw use and ATV quad Bike Safety Awareness Training. More information can be found at: <http://www.macra.ie/safeagriskills>

3.7 Conclusions and recommendations

Conclusions:

- Workers health can be protected by controlling hazards in the workplace and risk assessment is an important tool to help identify anything in the work place that can potentially cause occupational ill health or injury.
- Employers must take appropriate preventative measures to make work safer and healthier and this is also the case for the agriculture sector.
- Many significant occupational hazards exist in the agriculture work sector compared to other work sectors, therefore it is important to know the types of hazards they must encounter depending on the sector in their area of influence.
- Important to ask or listen to the workers in order to suspect work-related harm.
- Prevention and protection measures that are agriculture specific are important in tackling workplace accidents in agriculture.

Recommendations:

- Understanding the occupational hazards and risks that exist in the agriculture sector will help improve your advice to agriculture workers.
- Where possible, encourage agriculture employers to have an up-to-date risk assessment document.
- Advise agriculture employers and workers on health promotion activities and how to improve working conditions.
- Collaboration is important to help reduce workplace accidents in agriculture. Try and get involved in prevention and protection measures in your community.

References

- 1) Donham, K. J. and Thelin, A. (2006) *Agricultural Medicine: Rural Occupational and Environmental Health for the Health Professions*. Blackwell Publishing.
- 2) Dutkiewicz, J., Cisek, E., Sroka, J., Wójcik-Fatla, A., and Zajac, V. (2011) 'Biological agents as occupational hazards – selected issues'. *Annals of Agricultural and Environmental Medicine*, 18(2): 286-293.
- 3) European Agency for Safety and Health at Work (EU-OSHA), (2017) 'The OSH Framework Directive' available at <https://osha.europa.eu/en/legislation/directives/the-osh-framework-directive/the-osh-framework-directive-introduction>, accessed 28/04/17.
- 4) European Commission (2012) 'A non-binding guide to best practice with a view to improving the application of related directives on protecting health and safety of workers in agriculture, livestock farming, horticulture and forestry'. Luxembourg: Publications Office of the European Union.
- 5) European Commission (1996) 'Guidance on risk assessment at work'. Luxembourg: Office for Official Publications of the European Communities.
- 6) European Union (2016) *Second European Survey of Enterprises on New and Emerging Risks (ESENER-2) Overview Report: Managing Safety and Health at Work*.
- 7) Gerard, C. (1998) 'Farmers' Occupational Health: Cause For Concern, Cause For Action'. *J Adv Nurs*, 28: 155-163.
- 8) Health and Safety Authority (2017) 'Legislation and Enforcement' http://www.hsa.ie/eng/Your_Industry/Agriculture_Forestry/Overview/Legislation_Enforcement/, accessed 28/04/17.
- 9) Health and Safety Executive (2014) 'Risk assessment a brief guide to controlling risks in the workplace' available at <http://www.hse.gov.uk/pubns/indg163.htm>, accessed 8/9/17.
- 10) Health and Safety Executive, (2007) 'Self-Reported Work-Related Illness and Workplace Injuries in 2005/06'. Results from the labour Force Survey 2007.
- 11) ILO (1986). *Psychosocial factors at work: Recognition and control* (Vol. 56). Geneva: International Labour Office.
- 12) International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) (2004) 'TC32 - Technical Committee on Risk Assessment and Management Glossary of Risk Assessment Terms – Version 1' available at file:///C:/Users/Aoife/AppData/Local/Microsoft/Windows/INetCache/IE/4PGN7ZMR/2004Glossary_Draft1.pdf, assessed 1/9/17.
- 13) Kolstrup, C. (2008) *Work Environment and Health among Swedish Livestock Workers*. Doctoral Thesis. Swedish University of Agricultural Sciences.
- 14) Murphy, D., *Safety and Health for Production Agriculture*. 1st ed. 1992: American Society of Agricultural & Biological Engineering (ASABE).
- 15) National Institute for Occupational Safety (NIOSH) and Health Division of Applied Research and Technology (DART) (2016), 'Hierarchy of Controls' <https://www.cdc.gov/niosh/topics/hierarchy/>, accessed 27/04/17.
- 16) NIOSH (1997) '*Musculoskeletal Disorders and Workplace Factors. A Critical Review of Epidemiologic Evidence for Work-related Musculoskeletal Disorders of the Neck, Upper Extremity, and Low Back*'. U.S. Department of Health and Human services. Publication No. 97-141
- 17) Nunes, I. L., 'Risk Analysis for Work Accidents based on a Fuzzy Logics Model', 5th International Conference of Working on Safety - On the road to vision zero? Roros. Norway, 2010
- 18) Robson, M.G. and Toscano, W.A. (2007) 'Risk assessment for environmental health'. John Wiley & Sons.
- 19) Rodricks, J., and Taylor, M. R. (1983) "Application of Risk Assessment to Food Safety Decision Making." *Regulatory Toxicology and Pharmacology*, 3, 275-307.

- 20) Rosecrance, J. Rodgers, G. and Merlino, L. (2006) 'Low back pain and musculoskeletal symptoms among Kansas farmers'. *Am J Ind Med*, 49: 547-56.
- 21) Ruckelshaus, W. D. (1985) "Risk, Science, and Democracy." *Issues in Science and Technology*, 13, 19-38.
- 22) Teagasc. (2008) 'Safety on the Farm'. Teagasc Modular Training Programmes. Teagasc Curriculum and Quality Assurance Unit.
- 23) Walker-Bone, K. and Palmer, K. T. (2002) 'Musculoskeletal disorders in farmers and farm workers'. *Occup Med (Lond)*, 52: 441-50.
- 24) Woolf, A. D. and Pflieger, B. (2003) 'Burden of major musculoskeletal conditions'. *Bull World Health Organ*, 81: 646-56.
- 25) World Health Organisation (WHO) (2014) 'Protecting workers' health' available at <http://www.who.int/mediacentre/factsheets/fs389/en/>, accessed on 8/9/17.
- 26) World Health Organisation (WHO). (2010) 'Health Impact of Psychosocial Hazards at Work: An Overview'. Geneva: World Health Organization.
- 27) World Health Organisation (WHO). (2007) 'Workers' health: global plan of action-sixtieth world health assembly' available at http://www.who.int/occupational_health/publications/global_plan/en/, accessed on 8/9/17.
- 28) World Health Organisation (WHO). (2003) 'Work Organization and Stress. Protecting Workers' Health Series, No. 3'. Geneva: World Health Organization.

Annex 1

What are the most important legislation relevant for agriculture in your country?

Bulgaria	Do not have special legislation relevant only for agriculture.
Greece	<p>Agricultural equipment</p> <ul style="list-style-type: none"> • Υ.Α. Γ6 4103/112034/2016 (ΦΕΚ 3456/Β`/26.10.2016) Κυκλοφορία αγροτικών μηχανημάτων • Υ.Α. Ε8 2010/50687/2016 (ΦΕΚ 1323/Β`/11.5.2016) Τροποποίηση της αριθμ. Ε8 1831/39763/7-4-2015 απόφασης του Αναπληρωτή Υπουργού Παραγωγικής Ανασυγκρότησης, Περιβάλλοντος και Ενέργειας «Σύστημα επιθεώρησης εξοπλισμού εφαρμογής γεωργικών φαρμάκων και διαδικασία χορήγησης πιστοποιητικού επιθεώρησης» (Β` 671) • Υ.Α. Γ3Β 695/18368/2016 (ΦΕΚ 445/Β`/24.2.2016) Τροποποίηση της υπ` αριθμ. οικ. 11337/Γ3Β/2365/27.5.2009 (ΦΕΚ Β` 1146/12.6.2009) απόφασης του Υπουργού Αγροτικής Ανάπτυξης και Τροφίμων «Απογραφή αγροτικών μηχανημάτων» • Υ.Α. 435/13104/2016 (ΦΕΚ 378/Β`/18.2.2016) Ισχύς και ανανέωση άδειας οδήγησης και χειρισμού αγροτικού μηχανήματος και ιατρική εξέταση υποψηφίου οδηγού και χειριστού αγροτικού μηχανήματος, καθώς και κατόχου άδειας οδήγησης και χειρισμού αγροτικού μηχανήματος που υποχρεούται σε ανανέωση αυτής • Υ.Α. Ε8 1831/39763/2015 (ΦΕΚ 671/Β`/21.4.2015) Σύστημα επιθεώρησης εξοπλισμού εφαρμογής γεωργικών φαρμάκων και διαδικασία χορήγησης πιστοποιητικού επιθεώρησης • Υ.Α. Γ3Α.1442/152521/2014 (ΦΕΚ 3355/Β`/15.12.2014) Ταξινόμηση αγροτικών μηχανημάτων με κινητήρες πετρελαίου κάτω των 19 Kw • Υ.Α. Γ3Β 2/119/2014 (ΦΕΚ 85/Β`/21.1.2014) Τροποποίηση της υπ` αριθμ. οικ. 11337/Γ3Β/2365/27.05.2009 (ΦΕΚ Β` 1146/12.6.2009) απόφασης του Υπουργού Αγροτικής Ανάπτυξης και Τροφίμων «Απογραφή αγροτικών μηχανημάτων» • Υ.Α. οικ.14924/Γ3Β/3789/2010 (ΦΕΚ 2231/Β`/31.12.2010) Τροποποίηση της υπ` αριθμ. Οικ. 11337/Γ3Β/2365/27.05.09 (ΦΕΚ 1146/Β`/09) απόφασης του Υπουργού Αγροτικής Ανάπτυξης και Τροφίμων «Απογραφή αγροτικών μηχανημάτων» • Υ.Α. οικ.11337/Γ3Β/2365/2009 (ΦΕΚ 1146/Β`/12.6.2009) Απογραφή αγροτικών μηχανημάτων • Υ.Α. οικ. 15684/Γ2/2822/2006 (ΦΕΚ 1928/Β`/29.12.2006) Χορήγηση πτυχίων χειριστών και αδειών οδήγησης γεωργικών μηχανημάτων σε αλλοδαπούς • Υ.Α. οικ. 13845/Α20/2326/2006 (ΦΕΚ 1569/Β`/26.10.2006) Τροποποίηση των κοινών υπουργικών αποφάσεων 11627/4.5.2001 (ΦΕΚ 715/Β/8.6.2001) και οικ. 12521/Α20/2014/4.8.2005 (ΦΕΚ 1198/Β/30.8.2005), σε συμμόρφωση προς τις οδηγίες 2005/13/ΕΚ (L 55) του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου και 97/68/ΕΚ, Ε.Ε. Αρ. L59 (άρθρο 9 παρ. 3α, 3γ και 3δ) όπως ισχύει • Υ.Α. 13987/Γ11/2253/2005 (ΦΕΚ 1606/Β`/21.11.2005) Διατάξεις προστασίας έναντι ανατροπής για τους γεωργικούς ή δασικούς ελκυστήρες, τροποποίηση της υ.α ΔΓ/С47/23-4-98 (487/Β/98) «προϋποθέσεις και διαδικασία έγκρισης των τύπων των αυτοκινούμενων αγροτικών μηχανημάτων και τεχνικός έλεγχος των μεταχειρισμένων γεωργικών μηχανημάτων» και παύση ισχύος της υ.α 9053/24-1-00 (99/Β/00)

- Ν. 3399/2005 (ΦΕΚ 255/Α`/17.10.2005) Ρυθμίσεις θεμάτων αρμοδιότητας του Υπουργείου Αγροτικής Ανάπτυξης και Τροφίμων – Προσαρμογή στη νέα Κ.Α.Π. και άλλες διατάξεις
- Ν. 3147/2003 (ΦΕΚ 135/Α`/5.6.2003) Ρύθμιση θεμάτων αγροτικής γης, επίλυση ζητημάτων αποκατασταθέντων και αποκαθισταμένων κτηνοτρόφων και άλλες διατάξεις
- Υ.Α. 11627/2001 (ΦΕΚ 715/Β`/8.6.2001) Προϋποθέσεις έγκρισης τύπου και κυκλοφορίας διαξονικών γεωργικών και δασικών ελκυστήρων κατά Ε.Ε σε συμμόρφωση με την Οδηγία 2000/25/ΕΚ του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου
- Υ.Α. 9053/2000 (ΦΕΚ 99/Β`/3.2.2000) Τροποποίηση της ΔΓ/Σ (47/23-4-98 ΦΕΚ 487/Β/21-5-98) απόφασης του Υπουργού Γεωργίας
- Ν. 2696/1999 (ΦΕΚ 57/Α`/23.3.1999) Κύρωση του Κώδικα Οδικής Κυκλοφορίας
- Υ.Α. ΔΓ C47/1998 (ΦΕΚ 487/Β`/21.5.1998) Προϋποθέσεις και διαδικασία έγκρισης των τύπων των αυτοκινούμενων αγροτικών μηχανημάτων και τεχνικός έλεγχος των μεταχειρισμένων γεωργικών μηχανημάτων
- Υ.Α. ΔΓ/Α 10/1997 (ΦΕΚ 834/Β`/17.9.1997) Κατάργηση των 125456/14-7-94 (565/Β), ΔΓ 3F3/7-12-95 (1044/Β) και ΔΓ 65D/4-9-96 (855/Β) αποφάσεων του Υπουργού Γεωργίας
- Υ.Α. ΔΓ 800/1996 (ΦΕΚ 1191/Β`/31.12.1996) Διαδικασία εξέτασης αγράμματων υποψηφίων οδηγών χειριστών γεωργικών μηχανημάτων
- Υ.Α. ΔΓ65Δ/1996 (ΦΕΚ 855/Β`/16.9.1996) Τεχνικός έλεγχος αγροτικών μηχανημάτων
- Υ.Α. ΔΓ 3F3/1995 (ΦΕΚ 1044/Β`/20.12.1995) Έκδοση Δελτίου Ταξινόμησης Γεωργικού μηχανήματος σε μεταχειρισμένα γεωργικά μηχανήματα
- Υ.Α. 125455/1994 (ΦΕΚ 565/Β`/20.7.1994) Προϋποθέσεις και διαδικασία έγκρισης των τύπων των αυτοκινούμενων αγροτικών μηχανημάτων
- Π.Δ. 238/1994 (ΦΕΚ 135/Α`/30.8.1994) Καθορισμός των μεγίστων ορίων διαστάσεων και βαρών των αγροτικών μηχανημάτων και των υπ αυτών ρυμουλκούμενων οχημάτων
- Υ.Α. 145827/1986 (ΦΕΚ 404/Β`/11.6.1986) Μεταφορά προσώπων με αγροτικά μηχανήματα
- Υ.Α. 139850/1986 (ΦΕΚ 139/Β`/31.3.1986) Κρατικές πινακίδες αριθμού κυκλοφορίας αγροτικών μηχανημάτων
- Υ.Α. 760/1978 (ΦΕΚ 37/Α`/14.3.1978) Περί μεταφοράς πραγμάτων, ζώων και προσώπων δι αγροτικών μηχανημάτων και άλλων τινών διατάξεων
- Π.Δ. 333/1977 (ΦΕΚ 107/Β`/16.4.1977) Περί πτυχίων χειριστών και αδειών οδηγήσεως γεωργικών μηχανημάτων

Optimal agricultural practice

- Υ.Α. 2001/118518/2015 (ΦΕΚ 2359/Β`/4.11.2015) Τροποποίηση της αριθ. 1420/82031 (ΦΕΚ 1709/Β/2015) απόφασης του Αναπληρωτή Υπουργού Παραγωγικής Ανασυγκρότησης, Περιβάλλοντος και Ενέργειας «Κώδικας Ορθής Γεωργικής Πρακτικής για την Προστασία των Νερών από τη Νιτρορύπανση Γεωργικής Προέλευσης»
- Υ.Α. 1420/82031/2015 (ΦΕΚ 1709/Β`/17.8.2015) Κώδικας Ορθής Γεωργικής Πρακτικής για την Προστασία των Νερών από τη Νιτρορύπανση Γεωργικής Προέλευσης
- Υ.Α. 85167/820/2000 (ΦΕΚ 477/Β`/6.4.2000) Έγκριση κώδικα ορθής γεωργικής πρακτικής

	<ul style="list-style-type: none"> • Υ.Α. οικ.16190/1335/1997 (ΦΕΚ 519/Β`/25.6.1997) Μέτρα και όροι για την προστασία των νερών από νιτρορύπανση γεωργικής προέλευσης <p>Pesticides</p> <ul style="list-style-type: none"> • Ν. 4472/2017 (ΦΕΚ 74/Α`/19.5.2017) Συνταξιοδοτικές διατάξεις Δημοσίου και τροποποίηση διατάξεων του ν. 4387/2016, μέτρα εφαρμογής των δημοσιονομικών στόχων και μεταρρυθμίσεων, μέτρα κοινωνικής στήριξης και εργασιακές ρυθμίσεις, Μεσοπρόθεσμο Πλαίσιο Δημοσιονομικής Στρατηγικής 2018-2021 και λοιπές διατάξεις <ul style="list-style-type: none"> • Ν. 4384/2016 (ΦΕΚ 78/Α`/26.4.2016) Αγροτικοί Συνεταιρισμοί, μορφές συλλογικής οργάνωσης του αγροτικού χώρου και άλλες διατάξεις • Υ.Α. 6669/79087/2015 (ΦΕΚ 1791/Β`/20.8.2015) Τροποποίηση της αριθ. 8197/90920/22.7.2013 απόφασης των Υπουργών Υγείας, Αγροτικής Ανάπτυξης και Τροφίμων και Περιβάλλοντος, Ενέργειας και Κλιματικής Αλλαγής «Θέσπιση Εθνικού Σχεδίου Δράσης με στόχο την εφαρμογή της Οδηγίας 2009/128/ΕΚ και την προστασία του ανθρώπου και του περιβάλλοντος» (Β`1883/1.8.2013) <ul style="list-style-type: none"> • Ν. 4351/2015 (ΦΕΚ 164/Α`/4.12.2015) Βοσκήσιμες γαίες Ελλάδας και άλλες διατάξεις <ul style="list-style-type: none"> • Υ.Α. 14309/162816/2014 (ΦΕΚ 3621/Β`/31.12.2014) Αντικατάσταση των εθνικών απαιτήσεων κατά την αξιολόγηση για έγκριση φυτοπροστατευτικών προϊόντων, βάση του Κανονισμού (ΕΚ) αριθ. 1107/2009 • Υ.Α. 9519/105300/2014 (ΦΕΚ 2331/Β`/29.8.2014) Χορήγηση άδειας διάθεσης στην αγορά σε σκευάσματα φυτοπροστατευτικών προϊόντων για ερασιτεχνική χρήση <ul style="list-style-type: none"> • Εγκ. 208/2687/2014 (ΦΕΚ --/9/1.2014) Χορήγηση πιστοποιητικού γνώσεων ορθολογικής χρήσης γεωργικών φαρμάκων • Υ.Α. 8197/90920/2013 (ΦΕΚ 1883/Β`/1.8.2013) Θέσπιση Εθνικού Σχεδίου Δράσης με στόχο την εφαρμογή της Οδηγίας 2009/128/ΕΚ και την προστασία του ανθρώπου και του περιβάλλοντος • Π.Δ. 159/2013 (ΦΕΚ 251/Α`/18.11.2013) Όροι και προϋποθέσεις για την αναγγελία έναρξης άσκησης εμπορίας και τη λειτουργία καταστημάτων εμπορίας γεωργικών φαρμάκων <ul style="list-style-type: none"> • Ν. 4152/2013 (ΦΕΚ 107/Α`/9.5.2013) Επείγοντα μέτρα εφαρμογής των νόμων 4046/2012, 4093/2012 και 4127/2013 • Υ.Α. 240/2457/2013 (ΦΕΚ 88/Β`/21.1.2013) Εθνικές απαιτήσεις κατά την αξιολόγηση για έγκριση φυτοπροστατευτικών προϊόντων, βάση του Κανονισμού (ΕΚ) υπ` αριθμ. 1107/2009 • Ν. 4036/2012 (ΦΕΚ 8/Α`/27.1.2012) Διάθεση γεωργικών φαρμάκων στην αγορά, ορθολογική χρήση αυτών και συναφείς διατάξεις <ul style="list-style-type: none"> • Π.Δ. 50/2007 (ΦΕΚ 52/Α`/6.3.2007) Συμπλήρωση και τροποποίηση διατάξεων του π.δ 365/2002 (307/Α) «Μέτρα προστασίας κατά της εισαγωγής από άλλο κράτος μέλος ή τρίτη χώρα στη Χώρα ή μέσω αυτής σε άλλο κράτος μέλος της Κοινότητας οργανισμών επιβλαβών για τα φυτά ή τα φυτικά προϊόντα και κατά της εξάπλωσής τους στο εσωτερικό της, ... » όπως ισχύει, σε εκτέλεση του άρθρου 59 του Κανονισμού (ΕΚ) αριθμ. 882/2004 του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου <ul style="list-style-type: none"> • Υ.Α. 122109/2006 (ΦΕΚ 1638/Β`/8.11.2006) Καταχώρηση των δραστικών ουσιών clodinafor, pirimicarb, rimsulfuron, tolclofos methyl, triticonazole στο παράρτημα Ι του προεδρικού διατάγματος υπ αριθ. 115/97 «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2006/39/ΕΚ της Επιτροπής της 12ης Απριλίου 2006
--	---

- Υ.Α. 122110/2006 (ΦΕΚ 1638/Β`/8.11.2006) Καταχώρηση της δραστικής ουσίας oxamyl στο παράρτημα Ι του προεδρικού διατάγματος υπ αριθ. 115/97 «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2006/16/ΕΚ της Επιτροπής της 7ης Φεβρουαρίου 2006
- Υ.Α. 119427/2006 (ΦΕΚ 886/Β`/12.7.2006) Καταχώρηση της δραστικής ουσίας Warfarin στο παράρτημα Ι του προεδρικού διατάγματος 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2006/5/ΕΚ της Επιτροπής της 17ης Ιανουαρίου 2006
- Υ.Α. 117798/2006 (ΦΕΚ 602/Β`/15.5.2006) Καταχώρηση της δραστικής ουσίας Tolyfluanid στο παράρτημα Ι του προεδρικού διατάγματος 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2006/6/ΕΚ της Επιτροπής της 17ης Ιανουαρίου 2006
- Υ.Α. 117799/2006 (ΦΕΚ 602/Β`/15.5.2006) Καταχώρηση των δραστικών ουσιών Forchlorfenuron και Indoxacarb στο παράρτημα Ι του προεδρικού διατάγματος 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2006/10/ΕΚ της Επιτροπής της 27ης Ιανουαρίου 2006
- Υ.Α. 117735/2006 (ΦΕΚ 554/Β`/4.5.2006) Τροποποίηση των Παραρτημάτων Ι, έως ΙV και Χ του π.δ 365/2002 (307/Α), σε συμμόρφωση προς τις οδηγίες 2006/35/ΕΚ της Επιτροπής και 2006/36/ΕΚ της Επιτροπής
- Υ.Α. 116183/2006 (ΦΕΚ 304/Β`/14.3.2006) Τροποποίηση του παραρτήματος VI του προεδρικού διατάγματος υπ αριθ. 115/97 «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων (104/Α)», σε συμμόρφωση προς την οδηγία 2005/25/ΕΚ της Επιτροπής
- Υ.Α. 116175/2006 (ΦΕΚ 303/Β`/14.3.2006) Καταχώρηση των δραστικών ουσιών Bifenazate και Milbemectin στο παράρτημα Ι του υπ αριθ. 115/97 προεδρικού διατάγματος «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2005/85/ΕΚ της Επιτροπής της 21ης Σεπτεμβρίου 2005
- Υ.Α. 116176/2006 (ΦΕΚ 303/Β`/14.3.2006) Καταχώρηση των δραστικών ουσιών Etoxazole και Terpaloxydin στο παράρτημα Ι του υπ αριθ. 115/97 προεδρικού διατάγματος «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2005/34/ΕΚ της Επιτροπής της 17ης Μαΐου 2005
- Υ.Α. 116177/2006 (ΦΕΚ 303/Β`/14.3.2006) Καταχώρηση των δραστικών ουσιών MCPA και MCPB στο παράρτημα Ι του υπ αριθ. 115/97 προεδρικού διατάγματος «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2005/57/ΕΚ της Επιτροπής της 21ης Σεπτεμβρίου 2005
- Υ.Α. 116178/2006 (ΦΕΚ 303/Β`/14.3.2006) Καταχώρηση των δραστικών ουσιών Chlorothalonil, Chlorotoluron, Cypermethrin, Daminozide και Thiophanate –methyl στο παράρτημα Ι του υπ αριθ. 115/97 προεδρικού διατάγματος «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί»

	<p>(104/A), σε συμμόρφωση προς την οδηγία 2005/53/EK της Επιτροπής της 16ης Σεπτεμβρίου 2005</p> <ul style="list-style-type: none"> • Υ.Α. 116179/2006 (ΦΕΚ 303/Β`/14.3.2006) Καταχώρηση των δραστικών ουσιών Tribenuron στο παράρτημα Ι του υπ αριθ. 115/97 προεδρικού διατάγματος «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/A), σε συμμόρφωση προς την οδηγία 2005/54/EK της Επιτροπής της 19ης Σεπτεμβρίου 2005 • Υ.Α. 116180/2006 (ΦΕΚ 303/Β`/14.3.2006) Καταχώρηση των δραστικών ουσιών Chlorpyrifos, Chlorpyrifos-methyl, Mancozeb, Maneb και Metiram στο παράρτημα Ι του υπ αριθ. 115/97 προεδρικού διατάγματος «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/A), σε συμμόρφωση προς την οδηγία 2005/72/EK της Επιτροπής της 21ης Οκτωβρίου 2005 • Υ.Α. 115123/2006 (ΦΕΚ 118/Β`/1.2.2006) Τροποποίηση των παραρτημάτων του π.δ 365/2002 (307/A) V, σε συμμόρφωση προς την οδηγία 2005/77/EK της Επιτροπής και VII σε συμμόρφωση προς την οδηγία 2000/29/EK του Συμβουλίου παράρτημα VII και διορθωτικό • Υ.Α. 122949/2005 (ΦΕΚ 665/Β`/18.5.2005) Ανανεώσεις εγκρίσεων κυκλοφορίας φυτοπροστατευτικών προϊόντων (ζιζανιοκτόνων και φυτορρυθμιστικών ουσιών) που έληξαν στις 31-12-2004 • Υ.Α. 120979/2005 (ΦΕΚ 309/Β`/9.3.2005) Καταχώρηση των δραστικών ουσιών acetamiprid και thiacloprid στο παράρτημα Ι του προεδρικού διατάγματος υπ αριθ 115/97 «Έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/A), σε συμμόρφωση προς την οδηγία 2004/99/EK της Επιτροπής της 1ης Οκτωβρίου 2004 • Υ.Α. 120975/2005 (ΦΕΚ 275/Β`/2.3.2005) Τροποποίηση των Παραρτημάτων II, III, IV και V του π.δ 365/2002 (307/A) σε συμμόρφωση προς την οδηγία 2004/102/EK της Επιτροπής • Υ.Α. 119119/2004 (ΦΕΚ 1177/Β`/2.8.2004) Τροποποίηση και συμπλήρωση των διατάξεων του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων (104/A)», σε συμμόρφωση προς την οδηγία 2003/82/EK της Επιτροπής • Υ.Α. 106576/2004 (ΦΕΚ 967/Β`/29.6.2004) Δημοσίευση φυτοπροστατευτικών προϊόντων και βιοκτόνων σκευασμάτων, που εγκρίθηκαν κατά το έτος 2003 • Υ.Α. 106565/2004 (ΦΕΚ 967/Β`/29.6.2004) Ανάκληση της οριστικής έγκρισης κυκλοφορίας του φυτοπροστατευτικού προϊόντος (ζιζανιοκτόνου) PANTER 16/9EC • Υ.Α. 106594/2004 (ΦΕΚ 967/Β`/29.6.2004) Ανάκληση εγκρίσεων κυκλοφορίας φυτοπροστατευτικών προϊόντων (ζιζανιοκτόνα), τα οποία περιέχουν ως δραστική ουσία pendimethalin • Υ.Α. 90366/2004 (ΦΕΚ 196/Β`/4.2.2004) Διαδικασία έγκρισης μιγμάτων φυτοπροστατευτικών προϊόντων που περιέχουν μια νέα για την ΕΕ δραστική ουσία που έχει καταχωρηθεί στο Παράρτημα Ι της οδηγίας 91/414/ΕΟΚ και τουλάχιστον μια παλαιά για την οποία δεν έχει ληφθεί ακόμα απόφαση καταχώρησης ή μη στο Παρ/μα Ι της οδηγίας αυτής από την Επιτροπή της ΕΕ • Υ.Α. 111915/2003 (ΦΕΚ 1575/Β`/27.10.2003) Άδεια εγκατάστασης για τη σήμανση ξύλινων μέσων συσκευασίας σύμφωνα με το Διεθνές Πρότυπο ISPM 15 του FAO
--	---

	<ul style="list-style-type: none"> • Υ.Α. 108155/2003 (ΦΕΚ 1230/Β`/29.8.2003) Καταχώρηση των δραστικών ουσιών propineb & propryzamide στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση με την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (Α/104), σε συμμόρφωση προς την οδηγία 2003/39/ΕΚ • Υ.Α. 108153/2003 (ΦΕΚ 1230/Β`/29.8.2003) Καταχώρηση των δραστικών ουσιών oxasulfuron, imazamox, ethoxysulfuron, foramsulfuron, oxadiargyl & cyazofamid στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση με την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (Α/104), σε συμμόρφωση προς την οδηγία 2003/23/ΕΚ • Υ.Α. 108152/2003 (ΦΕΚ 1230/Β`/29.8.2003) Καταχώρηση των δραστικών ουσιών 2,4-DB, betacyfluthrin, cyfluthrin, iprodione, linuron, maleic hydrazine & pendimethalin στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση με την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2003/31/ΕΚ • Υ.Α. 108114/2003 (ΦΕΚ 1121/Β`/8.8.2003) Διαδικασία και προϋποθέσεις εφαρμογής της κ.υ.α 265/02 ταξινόμηση, συσκευασία και σήμανση σε εναρμόνιση προς την οδηγία 1999/45/ΕΚ και της οδηγίας 2001/60/ΕΚ στα φυτοπροστατευτικά προϊόντα και βιοκτόνα • Υ.Α. 250743/2003 (ΦΕΚ 870/Β`/2.7.2003) Αντικατάσταση του Παραρτήματος Χ του π.δ 365/02 (Α/307) σε συμμόρφωση προς την Οδηγία 2003/21/ΕΚ και τροποποίηση ορισμένων παραρτημάτων του π.δ 365/02 (Α/307) σε συμμόρφωση προς την Οδηγία 2003/22/ΕΚ • Υ.Α. 101381/2003 (ΦΕΚ 736/Β`/10.6.2003) Καταχώρηση της δραστικής ουσίας isoprotruron στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση με την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (Α/104), σε συμμόρφωση προς την οδηγία 2002/18/ΕΚ • Υ.Α. 101382/2003 (ΦΕΚ 736/Β`/10.6.2003) Καταχώρηση των δραστικών ουσιών cinidon ethyl, cyhalofop butyl, famoxadone florasulfam, metalaxyl-m & picolinafen στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση με την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (Α/104), σε συμμόρφωση προς την οδηγία 2002/64/ΕΚ • Υ.Α. 101383/2003 (ΦΕΚ 736/Β`/10.6.2003) Καταχώρηση της δραστικής ουσίας deltamethrin στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση με την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (Α/104), σε συμμόρφωση προς την οδηγία 2003/5/ΕΚ • Υ.Α. 101384/2003 (ΦΕΚ 736/Β`/10.6.2003) Καταχώρηση της δραστικής ουσίας ethofumesate στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση με την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (Α/104), σε συμμόρφωση προς την οδηγία 2002/37/ΕΚ • Υ.Α. 97016/2003 (ΦΕΚ 357/Β`/27.3.2003) Καταχώρηση της δραστικής ουσίας 2,4-D στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2001/103/ΕΚ
--	---

	<ul style="list-style-type: none"> • Ν. 3176/2003 (ΦΕΚ 208/Α`/29.8.2003) Κύρωση της Σύμβασης Ρόττερνταμ περί διαδικασίας συναίνεσης μετά από ενημέρωση για ορισμένα επικίνδυνα χημικά προϊόντα και προϊόντα φυτοπροστασίας στο διεθνές εμπόριο • Υ.Α. 110095/2002 (ΦΕΚ 1419/Β`/7.11.2002) Καταχώρηση των δραστικών ουσιών iprovalicarb, prosulfuron και sulfosulfuron στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2002/48/ΕΚ • Αποφ. 108244/2002 (ΦΕΚ 1345/Β`/17.10.2002) Ανανεώσεις εγκρίσεων κυκλοφορίας φυτοπροστατευτικών προϊόντων (μυκητοκτόνων) που έληξαν στις 31-12-2001 • Υ.Α. 104136/2002 (ΦΕΚ 1068/Β`/14.8.2002) Ανανέωση εγκρίσεων κυκλοφορίας φυτοπροστατευτικών προϊόντων που ανήκουν στις κατηγορίες των εντομοκτόνων, ακαρεοκτόνων, νηματωδοκτόνων, λοιπών και μεικτών γεωργικών φαρμάκων και έληξαν στις 31-12-2001 • Υ.Α. 102692/2002 (ΦΕΚ 1010/Β`/2.8.2002) Καταχώρηση των δραστικών ουσιών glyphosate και η thifensulfuron-methyl στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2001/99/ΕΚ • Υ.Α. 101371/2002 (ΦΕΚ 943/Β`/24.7.2002) Ανανεώσεις εγκρίσεων κυκλοφορίας φυτοπροστατευτικών προϊόντων (ζιζανιοκτόνων και φυτορρυθμιστικών ουσιών) που έληξαν στις 31-12-2001 • Υ.Α. 92433/2002 (ΦΕΚ 416/Β`/5.4.2002) Καταχώρηση των δραστικών ουσιών amitrole, diquat, pyridate και thiabendazole στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414/ΕΟΚ όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την Οδηγία 2001/21/ΕΚ • Π.Δ. 365/2002 (ΦΕΚ 307/Α`/10.12.2002) Μέτρα προστασίας κατά της εισαγωγής από άλλο κράτος μέλος ή τρίτη χώρα στη Χώρα ή μέσω αυτής σε άλλο κράτος μέλος της Κοινότητας οργανισμών επιβλαβών για τα φυτά ή τα φυτικά προϊόντα και κατά της εξάπλωσής τους στο εσωτερικό της, σε συμμόρφωση προς την Οδηγία 2000/29/ΕΚ του Συμβουλίου και των Οδηγιών 92/90/ΕΟΚ, 93/50/ΕΟΚ, 93/51/ΕΟΚ, 94/3/ΕΟΚ, 2001/32/ΕΚ, 2001/33/ΕΚ, 2002/28/ΕΚ και 2002/29/ΕΚ της Επιτροπής • Υ.Α. 89648/2002 (ΦΕΚ 241/Β`/28.2.2002) Τροποποίηση και συμπλήρωση των διατάξεων του προεδρικού διατάγματος αριθ. 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων (104/Α)», σε συμμόρφωση προς την Οδηγία 2001/36/ΕΚ της Επιτροπής • Υ.Α. 89619/2002 (ΦΕΚ 217/Β`/22.2.2002) Καταχώρηση των δραστικών ουσιών acibenzolar-s-methyl, cyclanilide, ferric phosphate, pymetrozine και pyrafluten-ethyl στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414/ΕΟΚ όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την Οδηγία 2001/87/ΕΚ • Υ.Α. 89603/2002 (ΦΕΚ 215/Β`/22.2.2002) Ανάκληση εγκρίσεων κυκλοφορίας φυτοπροστατευτικών προϊόντων, που περιέχουν το δρων συστατικό parathion • Υ.Α. 87348/2002 (ΦΕΚ 143/Β`/12.2.2002) Καταχώρηση της δραστικής ουσίας KBR 2738 (fenhexamid) στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την
--	---

	<p>οδηγία 91/414/ΕΟΚ όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την Οδηγία 2001/28/ΕΚ</p> <ul style="list-style-type: none"> • Υ.Α. 87350/2002 (ΦΕΚ 143/Β`/12.2.2002) Καταχώρηση της δραστικής ουσίας DPX ΚΕ 459 (flupyr-sulfuron-methyl) στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414/ΕΟΚ όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την Οδηγία 2001/49/ΕΚ • Υ.Α. 88301/2002 (ΦΕΚ 143/Β`/12.2.2002) Καταχώρηση της δραστικής ουσίας <i>Raecilomyces fumosoroseus</i> (Αποκα strain 97, PFR 97 ή CG 170, ATCC 20874) στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414/ΕΟΚ του Συμβουλίου όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την Οδηγία 2001/47/ΕΚ • Υ.Α. 103999/2001 (ΦΕΚ 1363/Β`/18.10.2001) Η απαγόρευση και μη χρησιμοποίηση πολύ επικίνδυνων φυτοπροστατευτικών προϊόντων • Υ.Α. 100831/2001 (ΦΕΚ 1169/Β`/7.9.2001) Ανάκληση εγκρίσεων κυκλοφορίας φυτοπροστατευτικών προϊόντων, που περιέχουν ως δραστική ουσία zineb • Υ.Α. 95574/2001 (ΦΕΚ 629/Β`/25.5.2001) Δημοσίευση φυτοπροστατευτικών προϊόντων και βιοκτόνων, που εγκρίθηκαν κατά το έτος 2000 • Υ.Α. 91460/2001 (ΦΕΚ 413/Β`/11.4.2001) Ανάκληση εγκρίσεων κυκλοφορίας φυτοπροστατευτικών προϊόντων, που περιέχουν ως δραστική ουσία quintozene • Υ.Α. 85533/2001 (ΦΕΚ 141/Β`/13.2.2001) Καταχώρηση μιας δραστικής ουσίας (fluroxypyr) στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2000/10/ΕΚ • Υ.Α. 85534/2001 (ΦΕΚ 141/Β`/13.2.2001) Καταχώρηση μιας δραστικής ουσίας (prohexadione calcium) στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2000/50/ΕΚ • Υ.Α. 85535/2001 (ΦΕΚ 141/Β`/13.2.2001) Καταχώρηση μιας δραστικής ουσίας (triasulfuron) στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2000/66/ΕΚ • Υ.Α. 85536/2001 (ΦΕΚ 141/Β`/13.2.2001) Καταχώρηση μιας δραστικής ουσίας (bentazone) στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2000/68/ΕΚ • Υ.Α. 85537/2001 (ΦΕΚ 141/Β`/13.2.2001) Καταχώρηση μιας δραστικής ουσίας (metsulfuron-methyl) στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/Α), σε συμμόρφωση προς την οδηγία 2000/49/ΕΚ • Υ.Α. 85538/2001 (ΦΕΚ 141/Β`/13.2.2001) Καταχώρηση μιας δραστικής ουσίας (esfenvalirate) στο παράρτημα Ι του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία
--	--

	<p>91/414/ΕΟΚ, όπως έχει συμπληρωθεί» (104/A), σε συμμόρφωση προς την οδηγία 2000/67/ΕΚ</p> <ul style="list-style-type: none"> • Υ.Α. 92261/2000 (ΦΕΚ 508/Β`/7.4.2000) Συμπλήρωση διατάξεων π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την Οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί (104/A), σε συμμόρφωση προς την οδηγία 99/73/ΕΚ • Υ.Α. 92262/2000 (ΦΕΚ 508/Β`/7.4.2000) Συμπλήρωση διατάξεων π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την Οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί (104/A), σε συμμόρφωση προς την οδηγία 99/80/ΕΚ • Υ.Α. 85219/2000 (ΦΕΚ 64/Β`/28.1.2000) Συμπλήρωση διατάξεων του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/A), σε συμμόρφωση προς την οδηγία 98/47/ΕΚ • Υ.Α. 85220/2000 (ΦΕΚ 64/Β`/28.1.2000) Συμπλήρωση διατάξεων του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/A), σε συμμόρφωση προς την οδηγία 99/1/ΕΚ • Υ.Α. 85221/2000 (ΦΕΚ 64/Β`/28.1.2000) Συμπλήρωση διατάξεων του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414 του Συμβουλίου, όπως έχει συμπληρωθεί» (104/A), σε συμμόρφωση προς την οδηγία 97/73/ΕΚ • Υ.Α. 98909/1999 (ΦΕΚ 1252/Β`/17.6.1999) Ανάκληση εγκρίσεων κυκλοφορίας σκευασμάτων γεωργικών φαρμάκων που περιέχουν ως δρών συστατικό DNOC • Υ.Α. 80126/1998 (ΦΕΚ 1253/Β`/14.12.1998) Τροποποίηση εγκρίσεων κυκλοφορίας γεωργικών φαρμάκων που περιέχουν ως δρών συστατικό chlorpyrifos ως προς τη σήμανση τοξικότητας και στους κινδύνους για τον άνθρωπο • Υ.Α. 61946/1998 (ΦΕΚ 571/Β`/5.6.1998) Ανάκληση εγκρίσεων κυκλοφορίας σκευασμάτων γεωργικών φαρμάκων που περιέχουν Fenwaterate • Υ.Α. 59897/1998 (ΦΕΚ 571/Β`/5.6.1998) Ανάκληση εγκρίσεων κυκλοφορίας σκευασμάτων γεωργικών φαρμάκων που περιέχουν Dinoterb • Π.Δ. 290/1998 (ΦΕΚ 209/Α`/9.9.1998) Τροποποίηση και συμπλήρωση διατάξεων του π.δ 115/97 «έγκριση, διάθεση στην αγορά και έλεγχος φυτοπροστατευτικών προϊόντων (104/A), σε συμμόρφωση προς τις οδηγίες 96/68/ΕΚ της Επιτροπής και 97/57/ΕΚ του Συμβουλίου • Π.Δ. 115/1997 (ΦΕΚ 104/Α`/30.5.1997) Για την έγκριση, διάθεση στην αγορά και έλεγχο φυτοπροστατευτικών προϊόντων σε συμμόρφωση προς την οδηγία 91/414/ΕΟΚ του Συμβουλίου όπως έχει συμπληρωθεί • Υ.Α. 77060/1996 (ΦΕΚ 623/Β`/25.7.1996) Ανάκληση εγκρίσεων κυκλοφορίας σκευασμάτων γεωργικών φαρμάκων που περιέχουν propham • Υ.Α. 83345/1988 (ΦΕΚ 599/Β`/24.8.1988) Ετικέτα γεωργικών φαρμάκων, καθορισμός και τυποποίηση σήμανσης προφυλάξεων και διάταξης • Υ.Α. 60902/1988 (ΦΕΚ 8/Β`/19.1.1988) Απαγόρευση της θέσεως σε κυκλοφορία και της χρησιμοποίησης των φυτοπροστατευτικών προϊόντων που περιέχουν ορισμένες δραστικές ουσίες • Υ.Α. 92477/1987 (ΦΕΚ 436/Β`/19.8.1987) Απαγόρευση της θέσεως στην κυκλοφορία και της χρησιμοποίησης των φυτοπροστατευτικών προϊόντων που περιέχουν ορισμένες δραστικές ουσίες • Υ.Α. 92870/1987 (ΦΕΚ 436/Β`/19.8.1987) Απαγόρευση του Captafol • Υ.Α. 1986 (ΦΕΚ 587/Β`/17.9.1986) Τοξικολογική κατάταξη, συσκευασία και σήμανση των γεωργικών φαρμάκων
--	---

	<ul style="list-style-type: none"> N. 721/1977 (ΦΕΚ 298/Α' /7.10.1977) Περί εγκρίσεως κυκλοφορίας και ελέγχου των γεωργικών φαρμάκων, ως και ρυθμίσεις συναφών θεμάτων
Ireland	<p>Safety, Health and Welfare at Work Act 2005</p> <p>Safety, Health and Welfare at Work (General Application) Regulations 2007</p> <p>Safety, Health and Welfare at Work (Construction) Regulations 2013</p> <p>Safety, Health and Welfare at Work (Chemical) Agent Regulations 2001</p>
Romania	<p>Law no. 319 of 14 July 2006 - Law on Safety and Health at Work</p> <p>DECISION no. 1.425 of 11 October 2006 for the approval of the Methodological Norms for the application of the provisions of the Law on Safety and Health at Work no. 319/2006</p> <p>Law no. 346 of 5 June 2002 on insurance against accidents at work and occupational diseases</p> <p>DECISION No. 493 of 12 April 2006, On the minimum safety and health requirements for the exposure of workers to noise-related risks</p> <p>DECISION No. 971 of 26 July 2006 on minimum requirements for safety and / or health signalling at work</p> <p>DECISION No. 1048 of 9 August 2006 on the minimum safety and health requirements for the use by workers of personal protective equipment at the workplace</p> <p>DECISION No. 1051 of 9 August 2006 on the minimum safety and health requirements for the manual handling of masses that pose a risk to workers, especially dorsal</p> <p>DECISION No. 1091 of 16 August 2006 on minimum safety and health requirements for the workplace</p> <p>DECISION No. 1092 of 16 August 2006 on the protection of workers from the risks related to exposure to biological agents at work</p> <p>DECISION No. 1093 of 16 August 2006 laying down minimum safety and health requirements for the protection of workers from the risks related to exposure to carcinogens or mutagens at work</p> <p>DECISION No. 1135 of 30 August 2006 on minimum safety and health requirements for work on board fishing vessels</p> <p>Decision no. 1218 of 06/09/2006 laying down minimum safety and health requirements for work to ensure the protection of workers from the risks related to the presence of chemical agents</p> <p>Decision no. 1092 of 16/08/2006 on the protection of workers from the risks related to exposure to biological agents at work</p>