

**INGLESE**



# Ambiente e sicurezza *sul lavoro* *in agricoltura*

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**Work and  
environment safety  
in agriculture**

Stampato a cura di FAVLA - Fondo Assistenze Varie Lavoratori Agricoli  
e CPT - Comitato Paritetico Territoriale

## PRESENTATION

*Workers' health and safety represent an objective to which everyone commonly agrees to what they must contribute.*

*In particular, in the picture outlined by decree laws. 19 September 1994 nr.626 employers and employees find themselves involved in a mechanism and procedure in which each one has specific roles and duties. Safety at work and the prevention of accidents are not for the good of the individual but for everyone and, to which all have a direct and current interest, and to which, however, all must give a punctual and accurate contribution.*

*In particular, the employer must assess the risk factors present in a business, in a way to point out probable situations and have the priority to intervene to ensure that the working activity can be fulfilled in conditions which safeguard human life and health.*

*Workers have an important role in this, not only as receivers and beneficiaries of such norms but they become an active part being able to elect a Workers' Safety Representative who can be business (elected directly by workers of a single business) or territorial (appointed by trade-union organizations).*

*With the agreement of 30 July 2004, the employment bodies (Coldiretti, Confagricoltura and CIA) and trade-unions (FLAI-CGIL, FAI-CISL, UILA-UIL) have, in fact constituted a Joint Territorial Committee for Agricultural Safety to which farms with less than 15 employees who do not have a business Workers' Safety Representative (WSR) can adhere to make use of the supporting activity to improve safety in the workplace.*

*This manual has been established on agreement between Favla and Cpt with the aim to supply a useful support to businesses to ensure workers of training and safety information as foreseen by articles 21 and 22 of decree laws. 626/94. A website has also been established to have further information on the activities of Favla and Cpt at [www.favla.it](http://www.favla.it)*

## Roles and duties for safety at work

The 9 April 2008 nr.81 Decree Law, as modified by 3 August 2009 nr.106 Decree Law, represented an important stage in legislation regarding safety at work.

After the fortnightly good standing of the 626/94 Decree Law, that has represented a stronghold with the aim of creating a radical reformation of the social-economic culture regarding safety at work, even under the urgent drive of the community rules, the Italian legislator retains that it is important to add to the editing of a single law regarding the safety at work that on one hand represents the occasion for a significant simplification and rationalization of the referential regulatory framework (until now complex and unclear) but also to introduce a revolutionary concept.

If, in fact, the principle has by now been ascertained that a multiple amount of subjects (employer, worker, representative of the prevention and protection service, qualified doctor, etc.) cooperate with safety at work, then with a Single Law regarding safety at work, the legislator wants to extend the sphere of application of the rules to all of those who operate in the working field (article 2 Decree Laws 81/2008 states that "a worker is the person that, independently from the type of contract, carries out a working activity").

That being so, the following will synthesize the different figures in farming businesses that participate in safety at work, with duties, roles and responsibilities foreseen by the existing rules.

### The Employer (E)

The employer is the official subject in a work relationship, or however, the one who has the responsibility of the establishment (has the power regarding decisions and costs).

The employer must adopt all necessary measures in safeguarding the physical integrity and moral of the employee (article 2087 Civil Code).

In particular, the Employer:

- Assess risks present in a business and draw up a business document called "risk assessment", which lists together preventative technical measures able to reduce problems linked with work safety
- Designates the Staff of Prevention and Protection Service (emergency squad) and the Representative of the Prevention and Protection Service (RPPS) according to personal capability
- When foreseen, supplies workers with Individual Protective Devices (IPD) with the relative ways and conditions of use and maintenance, instructions linked to norms in force and business regulations as well as seriously dangerous situations
- Supplies training inherent to farm safety
- Allows access of the WSR to business documents regarding safety
- Fills in the accident register and stores the health files of each worker
- Substitutes any dangerous equipment or systems with others that are not, or however of minor risk (including equipment to lift heavy loads)
- Predisposes and uses warning and danger signs on the farm
- Supplies urgent assistance for workers (including minor wounds).

### EXCEPTIONS

The employer can directly carry out the duties of the RPPS, such as risk, first aid and fire prevention and evacuation in zoo technical places and farms with up to thirty ULA (yearly working unit) employees if, the relevant course has been attended, having contents foreseen by the Ministerial Decree 16 January 1997.

In farms or production units with up to five employees, the employer can directly carry out the duties of first aid, as well as fire prevention and evacuation, also in the case that the duties of the RPPS are entrusted to internal people or to external services, by giving advanced notice to the representative of the employees.

### The Worker

The worker is, in the logic of the safety standard system, the "figure" to be safeguarded. Article 2 of the TU Safety defines a worker "a person who, independently from the type of contract, carries out a working activity on the inside of the working sphere of the organization of a public or private employer, with or without retribution, also with the aim of learning a profession, art or job, except for domestic and family services workers".

They are equal to workers that are employed with a short term contract (c.d. "voucher") as well as apprentices.

In order to guarantee the effective collaboration of workers in assuring safety in the workplace, the law foresees several obligations:

- a) contribute, together with the employer, directors and persons in charge, to carry out obligations foreseen to safeguard safety on the workplace;
- b) observe safety standards and measures disposed by the employer, directors and persons in charge, in order for group and individual protection;
- c) correctly use work equipment, substances and dangerous preparations, means of transport and safety devices
- d) carefully use safety devices and other means of protection at their disposal;
- e) report straight away to the employer, director or person in charge any inadequacy in means of protection or devices of which letter c) and d), as well as any dangerous situations, acting directly, in the case of urgency, in the sphere of his competences and possibility and except for the obligation of which letter f) to eliminate or reduce dangerous and impending situations, notifying the workers' safety representative;
- f) do not remove or modify safety, sign or control devices without authorization;
- g) do not carry out on own initiative, manoeuvres or operations that are not to your competence and can compromise your or other persons' safety;
- h) participate in training programs organized by the employer;
- i) have health checks carried out by a qualified doctor or inspection services.

### Workers' Safety Representative

Attributions and rights are assigned to the workers' safety representative making him/her one of the main points in preventive policy, which foresees the active participation of all workers directly, and through their own representatives, towards a more efficient and conscious prevention and pro-

tection action. The designation or election of the safety representative is carried out in different ways according to the size of the firm.

The workers' safety representative can be instituted on a territorial, sector, firm or production site level.

As foreseen by article 50 TU Safety, The Workers' Safety Representative:

- a) access workplaces in which production is carried out;
- b) is pre-emptively and promptly consulted in order to evaluate risks, individuation, planning, realization and verification of prevention in the firm or production unit;
- c) is consulted about the designation of the person in charge and prevention service workers, on fire prevention activities, first aid, evacuation of the workplace and qualified doctor;
- d) is consulted about training organization pursuant to article 37;
- e) receives information and documentation of the firm about risk assessment and relative prevention measures, as well as those concerning substances and dangerous preparations, machines, systems, organization and work places, injuries and industrial disease;
- f) receives information from surveillance services;
- g) receives adequate training and, however, not less than what is stated in article 37;
- h) promotes elaboration, specification and fulfilment of prevention measures, suitable to safeguard the workers' health and physical integrity;
- i) formulates observations in the occasion of visits and verifications carried out by competent authorities which he/she normally uses;
- j) participates in periodic meeting pursuant to article 35;
- k) makes proposals regarding prevention activities;
- l) notifies the person in charge of the firm about risks specified during its activity;
- m) can make an appeal to the competent authorities that retain that the adopted prevention and protection measures from risks by the employer or by the directors and the means used to carry them out are not suitable to guarantee safety and health during work.

### Prevention and Protection Service

The employer must organise a prevention and protection service against risks.

Article 32 TU Safety has individualised professional and formative requirements, which must be in the possession of the Prevention and Protection Service Representative (RPPS).

The duties of the Service can be carried out by staff inside and outside the firm.

Together with the Employer, the RPPS collaborates with:

- Individualising risk factors, assessing risks and individualising measures for the health and safety of workers.
- Elaborating safety procedures for business activities
- Proposing training and information programmes
- Supplying all workers with information on prevention and protection

### Qualified doctor

The employer must nominate a qualified doctor, in cases in which health surveillance is foreseen.



The employer must carry out preventive and periodical health checks of the workers and express fitness judgements for specific duties.

### **Risk Assessment**

Risk assessment is defined by the legislator as “ global assessment and documentation of all risks for the health and safety of the workers present in the sphere of the organization in which it lends its activity, finalized to specify the adequate prevention and protection measures and to elaborate the program of measures to guarantee an overall improvement of health and safety levels”.

In particular, in defining intervention plans, the employer takes into account the risk level that the workers are exposed to, in relation to duties carried out by them.

The assessment must be carried out in collaboration with the RPPS and with a qualified doctor (where health surveillance is obligatory), prior to consultation of the workers’ representative.

The assessment must be updated according to specific changes of the productive processes and the organisation set-up of the firm, able to weigh on the exposition to risk of the workers.

In short, in the light of risk assessment the employer:

- monitor environment and work places, infrastructure, machines, equipment, systems and substances and verify their conformity with the rules of law and good technique.
- estimate the impact of organisational factors and those that are interactive with man;
- individualise prevention and protection measures intended to be adopted;
- elaborate a programme to improve the safety level.

### **Information and training**

#### Information

Information is “educative procedure through which knowledge and useful procedures to acquire competence to carry out each duty in safety and to identify, reduce and manage risks is transferred to the workers and other subjects of the prevention and protection system”.

The employer foresees until each employee has received the correct information about:

- Safety and health risks connected to the firm’s activity
- Risks that they he/she is exposed to in his/her activity
- Risks connected to substances and dangerous compounds
- Procedures regarding first aid, fire extinguishing and evacuating workers
- Safety figures: the Representative of the Prevention and Protection Service, the Staff of Prevention and Protection Services and a Qualified Doctor

In particular, workers must be informed about the following fundamental concepts:

- to not start any type of work if not perfectly sure of what must be done;
- when in any doubt, always follow instructions; in the case of further uncertainty do not be afraid to ask for ulterior information about the work to be done;
- to not use machines, appliances, equipment or vehicles unless otherwise authorised;

- to not joke around during work;
- to not use clothes which, in relation to the nature of work or characteristics of the plant constitute danger to staff.

Each worker must also be informed about the main public authorities and people to contact in case of emergency or concerning, more generally, work safety.

### Training

Training means “educative procedure through which knowledge and useful procedures to acquire competence to carry out each duty in safety and to identify, reduce and manage risks is transferred to the workers and other subjects of the prevention and protection system”.

Instruction means “combination of direct activities so the workers can learn to use equipment, machinery, systems, substances, devices, also protection devices and learn work procedures”.

The employer foresees until each employee has received sufficient and adequate training on his/her duties in the firm’s activity: such training should be applied in the occasion of employment, duty change or the introduction of new substances or dangerous compounds and must be periodically repeated.

Training must be periodically repeated in relation to the increase of risks or the onset of new risks.

## **Work clothing**

Adequate clothing is a useful means of defence against:

- insects and biological agents: can be cause of infection, sickness and anaphylactic shock, also deadly. The places in which animals are present (stalls, hen houses, aviaries, etc) are particularly dangerous: protect yourself always with adequate clothing
- chemical products: using chemical products, as fertilisers, insecticides and detergents, requires the use of overalls, rubber gloves, masks and closed footwear, given to high danger, not just for the skin
- sun: it is advised to not expose your skin to the sun’s rays, but to wear covered clothing, also if light, because in time skin disease and tumours could take form
- mechanical risks: do not wear clothes that flap about, are unbuttoned or wide, rings, necklaces and bracelets. They can get caught up in the machinery and provoke very serious accidents and amputation of limbs.

## **Qualified doctor and health surveillance**

A qualified doctor collaborates with the employer with risk assessment and is entrusted with the activation and management of health surveillance.

Qualified doctor:

- must visit work environments at least once a year or at different times that he establishes on the base of risk assessment; the indication of a different period to the annual one must be notified to the employer, in order to note down in the risk assessment document.

- disposes the carrying out of preventive health checks (intent on ascertaining the absence of contraindications to work which the workers are assigned, in order to assess their fitness for the specific duty) and periodical check-ups (to check health status of workers and express fitness judgement for specific duties);
- establishes and updates under his/her own responsibility, for each worker undergoing surveillance, a health and risk file, to keep with the employer in order to safeguard professional secrecy;
- supplies the workers with the significance of health checks, which they must undergo and, in the case of exposure to agents with a long term effect, on the necessity to undergo further health checks after finishing the activity which exposes them to such agents;
- supplies, on request, information analogous to the RPPS;
- informs each worker of the results of the health checks undergone and, on request of the same, issue a copy of the health document.

Health surveillance comprises:

- a) Medical examination estimate to ascertain the absence of contraindications at work which the worker is destined in order to evaluate his suitability to the specific duty;
- b) Periodical medical examination to check the state of the worker's health and express the judgement of suitability to the specific duty. The periodicity of these checks, if not foreseen by the relative rules, is established as once a year. This periodicity can have different rates, established by the qualified doctor in function of the risk assessment. The vigilance organ can dispose contents and periodicity, with motivated measures, of the different health checks to those indicated by the qualified doctor;
- c) Medical examination on request of the worker, if it is retained by the qualified doctor correlated to professional risks or to his health conditions, susceptible to worsening because of the carried out working activity, in order to express the judgement of suitability to the specific duty;
- d) Medical examination in the occasion of change of duty in order to verify the suitability to the specific duty;
- e) Medical examination at the cessation of the working relationship in the cases foreseen by laws in force;
- f) Medical examination estimate in the pre-assumed phase;
- g) Medical examination before starting work again, following absence for health reasons of a duration of more than sixty continuous days, in order to verify the suitability to the duty.

On farms, it is retained that the obligation exists in appointing a qualified doctor to turn to in the following types of risk:

- manual handling of loads
- biological risk
- chemical risk
- noise risk
- drug/alcohol addiction tests for staff that drive mechanical vehicles

In the judgement of partial, temporary or total fitness, the doctor must inform the employer or the worker it concerns in writing.

The worker can propose a recourse against the judgement of the doctor to the local health authority (ASL), which disposes, after further checks, the confirmation, modification or revocation of the judgement itself.

The recourse must be presented within thirty days from the communicative date of judgement from the part of the qualified doctor.

According to decree laws 977/67, minors must undergo a medical which must be carried out by a doctor of the Local Health Authority or, if appointed, by a qualified doctor.



## Chemical risk

Use of products such as fertilisers, pesticides and solvents, represents a range of varied dangers for farm workers, as:

- suffocating: this phenomenon can also originate from chemical products not in use, deposited in warehouses with no ventilation or if containers are left open.
- risk of explosion: the mistaken combination of chemical products and other inflammable products can provoke explosion. To avoid such a risk the mixing indications should be scrupulously followed and put away in appropriate places. These must be aerated, with easily washable floors and support surfaces, windows with narrow metal bars, must exclusively contain chemical products and the door must always be locked.
- Intoxication and occupational disease: acute intoxication shows after absorbing large doses of certain poisonous substances, provoking sickness, the chronic one is due, in time to repeated contact of little entities which can cause liver, kidney and lung disease.

Body absorption comes through:

- breathing apparatus (particles present in the air enter into the body through breathing)
- skin (which absorbs these poisons not only by direct contact but also by touching clothes or other contaminated objects)
- ingestion (particles present in the air, on the hands and clothes deposit themselves on food and cigarettes and enter the body through the mouth)

**Plant products are divided into groups, those belonging to the first and second must be used exclusively, given their high toxicity, by staff in possession of a valid permit.**

### Conservation

- Keep out of the reach of children in a place adapted for this purpose (locked) or in a locked cupboard with the sign "danger of poisoning"
- Avoid prolonged storage: establish with precision the quantity of product needed and specifically purchase that quantity
- Keep away from food and drink and always keep in their original container
- Always keep labels and health cards available (ask the seller, checking the integrity of the confection at the moment of purchase)
- Collocate a portable dust extinguisher in the storage room

### Prevention

Before starting treatment with any chemical product, it is necessary to wear Individual Protective Devices in relation to the specific risk. If you work in greenhouses or in other closed areas then further safeguarding measures and protection need to be used.

It is essential to wash thoroughly all protective clothing, both before and after treatment. Never touch the contaminated equipment with bare hands and always put it away in closed and well ventilated cupboards.

### Preparation

This is a very delicate phase and must be carried out by following instructions of product use scru-

pulously.

To work in safety:

- always mix products outside where there is no wind; use the same equipment when preparing the mixtures (scales, dippers with high handles, funnels, etc);
- Avoid smoking, eating or touching your face with your hands during all the treatment with any chemical product and especially plant protection cones;
- do not ever alter product mixtures and follow the instructions on the label scrupulously: the wrong mixture can be chemically unstable and provoke explosions or strong chemical reactions which can free gases that are also deadly;
- avoid any spreading, and if it accidentally happens, immediately absorb the product with sawdust or accurately wash the surface.

### **Distribution**

This is the phase in which the product can fly around and particular attention must be paid:

- wear the correct protective clothing appropriate for the treatment to be carried out
- never touch parts of the sprayer with your mouth (do not blow into blocked nozzles, but use the appropriate pin like tool to remove the obstruction)
- carry out the distribution if there is no wind or otherwise stay windward, dispersing the product behind your back
- accurately wash overalls and gloves also before taking them off, to be certain of not touching contaminated parts with bare hands; thoroughly wash yourself with soap and water

### **Product leakage and contact**

In the case of accidental leakage:

- move non authorised subjects away
- wear suitable protective clothes
- remove the preparation
- take care to dispose the residue
- in the case of an important leakage, warn the competent authorities
- in the case of contact (inhalation, skin contact, ingestion) follow advice given on the safety card
- in the case of a product splashing in your eyes: wash with running water for at least 15 minutes
- if the substance is swallowed, you must try to vomit and then wash out your mouth thoroughly
- Go straight to the accident and emergency unit or request immediate medical assistance with the safety card or label of the product

In the case of general sickness, trembling, excessive salivation, nausea, vomit, diarrhoea, difficulty breathing, palpitations-reddening of the skin, conjunctiva reddening, go straight away to the accident and emergency unit.

## **Physical Risk**

### **Posture**

Normal cultivation and farming activities provoke a notable strain on bone and articular system because of repeated movements and unnatural positions.

Damage is localised in tendons, joints and muscles; over a length of time it can cause serious pathologies and disabling of lower limbs and degenerative bone damage.

To limit risks:

- alternate working phases, in a way to change long working positions
- avoid staying in a still position for too long
- avoid sudden movements
- use, where possible, supports or some means which limit working in unnatural positions

### **Vibration**

Vibration is an oscillatory movement of a solid body around a reference point or position.

It is produced by agricultural machinery such as tractors or hand tools and is absorbed by the body through contact with the machine or tool

Two types of damaging vibration exist:

- medium frequency: produced by machines such as tractors; causing spinal arthritis and slipped disc, cardiopathy, hepatopathy, arterial hypertension, abdominal and chest pain, dyspnea, anxiety;
- high frequency: produced from vibrating tools such as an electric saw; causing the closure of finger arterial; alteration of bone and cartilage structure in the wrists, elbows and shoulders, tendon inflammation, headache, anxiety.

### **Exhalation**

In agriculture, it is easy to come across insidious dangers such as fumes, gases or simple air stagnation which can sometimes reach a high concentration also becoming deadly.

It is fundamental to remember that in aiding someone in danger, you must first protect yourself by using the appropriate individual protective devices, otherwise you risk suffocating and making the intervention useless and dangerous.

### **Microclimate**

"Microclimate" means climatic conditions, like temperature and humidity, present in a given moment in a circumscribed environment.

The influence of such conditions on the human body is brought about by climate variation; our body tends to always stay balanced; if we expose ourselves to temperature changes or excess humidity and lack of ventilation, our body will feel the effect.

Health damage is manifested by heat flushes, arthrosis and allergies, these last ones by working above all in hot-humid places.

Environments which are particularly risky are greenhouses or cold stores.

To prevent such damage:

- always wear clothes suitable for the climate
- place humidity and temperature level gauges in risky environments

### **Dust**

The majority of jobs in the agricultural sector cause clouds composed of fine particles in suspension which, depending on the type of job, can cause more or less serious damage to man.

The more potentially dangerous types of dust for man are:

- of vegetal origin: cereals, flour and its parasites, insects and mites;
- of animal origin: hairs, scales, scurf, feathers, excrement;
- of chemical origin: insecticides, fertilisers, pesticides.

Dust can be absorbed by the human body by:

- eye contact;
- inhalation;
- skin contact.

To work in safety:

- always wear the appropriate individual protective devices: overalls, gloves and masks
- check wind direction to avoid getting covered in dust
- always clean work environments and stalls to avoid dust accumulation

### **Steps and ladders**

Are considered to be one of the most frequent cause of injury in agriculture, in fact falls from ladders often cause serious back trauma and in particular to the spine with serious health consequences for the worker. In more dramatic cases a fall can cause death or paralysis. To be able to carry out regular duties in safety and limit the possible risk of falling, as a general rule you should always assure that ladders are kept in good condition and that the correct one should be used for each activity, being careful about the ground where the ladder is positioned.

Furthermore in high positions, wear a safety sling.

In particular, article 113 TU Safety foresees that fixed steps, destined to normal access to work places, must be constructed and kept in a manner that makes them resistant to heavy loads deriving from crowding in the case of emergency. The steps must have tread and riser dimensioned in a workmanlike fashion and adequately wide according to transit need. The steps and landings must have normal parapets or other equivalent defence on the open sides. Flights that are delimited by two walls must have at least one handrail.

Runged ladders over 5 metres in height, fixed to walls or vertical frames or with an inclination that is over 75 degrees must have a solid metallic protective cage with links or openings of such a size to impede a person accidentally falling towards the outside. The wall of the cage opposite the rung level must not be more than 60 cm far from it. The rungs must be at least 15 centimetres far from the wall to which they are applied or to which the ladder is fixed.

Portable ladders must be made of material that is suitable to the conditions of use. They must be sufficiently resistant all together and in single elements and they must have the appropriate dimensions for their use. These ladders, if wooden, must have rungs that are fixed to fitted uprights. The rungs must be without knots. Such rungs must be supported by iron guys applied under the two last rungs; there must be an intermediate one if the ladder is more than 4 metres long. It is forbidden to use ladders that have planks of wood nailed to the uprights in place of broken rungs. They must also have:

- a) non-slip devices on the lower ends of the uprights;
- b) holding hooks or non-slip supports on the upper ends, when necessary to assure the stability of the ladder.

When using the ladder involves danger for its height or other causes, it must be adequately secured or held by another person at the bottom.

The employer ensures that runged ladders are sorted in a manner to guarantee their stability during use and according to the following principles:

- a) portable runged ladders must lean on a stable, resistant, adequate dimensioned and immobile support, to guarantee the horizontal positioning of the rungs;
- b) suspended runged ladders must be hooked in a safe manner and with the exception of rope ladders, in a manner to avoid moving and any swinging motion;
- c) slipping of the foot of portable runged ladders during use must be avoided by fixing the upper or lower part of the uprights, or with any non-slip device, or by using any other efficient equivalent;
- d) runged ladders used for access must be in such a way as to protrude sufficiently over the level

- of access, unless other devices guarantee a safety hold;
- e) rung ladders composed of more inserted elements or push-up must be used in a manner to ensure a reciprocal locking of the various elements;
- f) mobile rung ladders must be stably fixed before using.

To use portable ladders composed of two or more inserted elements (Italian type or similar), besides what is written in paragraph 3, the following rules must be observed:

- a) the length of the ladder in use must not be over 15 metres, except for particular needs, in which case the upper ends of the uprights must be secured to fixed parts;
- b) ladders longer than 8 metres must have a crosspiece to reduce the angle of inflection;
- c) no worker must be on the ladder when it is moved laterally;
- d) during work, someone must always be watching the ladder from the ground.
- e) Double ladders must not be over 5 metres in height and must be supplied with an adequately resistant chain or other device to stop the ladder opening beyond the pre-established safety limit.

## **Manual Handling of Loads**

Manual Handling of Loads signifies operations of transporting or supporting a load by one or more workers, including the actions of lifting, putting down, pushing, pulling, carrying or moving a load, that, for their characteristics or in the consequence of unfavourable ergonomic conditions, provoke risks of pathologies from biomechanical overloading, particularly back-lumbar.

The employer must provide the means and measures, in particular mechanical, equipment to avoid the necessity of manual handling of loads by a worker.

In the case of the impossibility to avoid such manual handling, the employer must:

- a) organise the workplace in a way that such movement can be carried out safely and soundly



- b) evaluate, possibly in the planning phase, the safety and health conditions connected to the job in question
- c) avoid or reduce risks, particularly back-lumbar pathologies by adopting adequate measures, keeping in mind the individual risk factors, the characteristics of the workplace and the needs that such an activity involves
- d) have the workers have a health check on the base of risk assessment and individual risk factors.

Remember that it is necessary to limit risks owing to incorrect posture, if heavy loads must be moved (sacks, buckets etc.) by adopting some fundamental rules:

- avoid staying in a still position for too long
- avoid moving excessive, cumbersome or unstable weights
- avoid lifting with your back curved
- balance the weight between your hands with a straight back and outstretched arms
- keep the weight as close to your body as possible
- avoid sudden movements
- avoid ground with risks of slipping (wet floors) risk of tripping (steps or obstacles)
- alternate tiring work procedures
- lift loads by bracing legs and not the back

### **Physical risks**

The TU Safety pays particular attention to “physical risks” such as “noise, ultrasound, infrasound, mechanical vibration, electro-magnetic fields, optical radiation, of artificial origin and microclimate and the hyperbaric atmospheres that can involve health risks and the workers’ safety.

In the risk assessment sphere, the employer evaluates risks coming from exposure to physical agents so as to identify and adopt the suitable prevention and protection measures with particular reference to good technique and good practice.

Risk assessments deriving from exposure to physical agents is planned and carried out at least every four years.

As regards to noise risk, the legislator poses particular attention to the need of using individual protection devices on the following conditions:

- a) in the case in which noise exposure is equal or over the lower action values (80 decibels) the employer supplies individual protection devices for hearing;
- b) in the case in which noise exposure is equal or over the higher action values (85 decibels) workers must use the individual protection devices for hearing;
- c) he must choose individual protection devices for hearing that eliminate the risk for hearing or reduce it to a minimum, prior to consulting the workers or their representatives;
- d) verify the efficiency of the individual protection devices for hearing.

The employer makes the workers have a health check in which exposure to noise exceeds the higher action values (85 decibels). The check is carried out periodically, normally once a year or in different periods to be decided by the qualified doctor, with adequate motivation reported on the risk asses-



sment document and making it known to the workers' safety representative according to the risk assessment.

The employer guarantees that workers exposed to equal values or above the lower action values (80 decibels) are informed and trained in relation to risks deriving from noise exposure.

### **Fire Risk**

A fire is a risk that must not be undervalued in which; a small fire can become a great blaze within minutes. In fact, a fire never starts off big and only by immediate and efficient intervention can limit damages to objects or people.

The presence of wind, leaves and dry branches, above all in the summer season, must keep all workers that work on a farm alert and make them prudent during all operations.

To reduce risks:

- do not smoke, use tools with naked flames, handle incandescent material near combustible deposits, or where hay or other easily inflammable materials are stored
- be careful of the possible formation of inflammable gases in hermetically sealed cisterns or tanks
- place an adequate amount of extinguishers that are well visible and marked
- the employer must ensure that an extinguisher check up is made every six months by a specialised outside firm
- the employer must have the following systems periodically checked: electrical grounding system, anti-deflagration systems installed in silos', autoclave boilers, lifting systems (hoists, ropes, chains) sewage spreader wagons
- the employer must inform and train workers in how to use extinguishers and hydrants
- the employer adopts check up measures of risky situations in the case of emergency

### **Electrical risk**

Electricity is a particularly insidious danger, because it isn't visible and causes serious damage to the human body if it comes into contact, such as heart failure, respiratory failure or burns. The seriousness of an injury caused by electricity depends on both the intensity of the current that goes through a human body and the duration of such.

The most dangerous phenomena generated by electrical current are:

- electrocution: passage through the human body by contact with an object which is normally in tension or a metallic mass in tension caused by damage;
- electrical arc: passage through the human body from current without contact (e.g. by closing a circuit breaker or detaching an electrical cable with wet or humid hands);
- fires or explosions: they can originate from a short circuit.

To work in safety:

- pay the maximum attention to jobs carried out near to electrical lines or equipment;
- never try to connect anything by chance;
- use insulating gloves to carry out work in the presence of electricity;
- periodically check the state of electrical cables and avoid twisting or squashing them;
- do not intervene on electrical systems or boxes if not authorised;
- never use electrical appliances with wet or humid hands, with feet in water or environments which are humid.

### Biological Risk

Biological risk is represented by any micro organism, cellular cultivation or other types of parasite which could provoke allergic infection or intoxication.

The presence of animals, but also vegetal cultivation on the farm surely represents a risk factor.

Contact with human skin or through breathing can bring about both illnesses such as tetanus, leptospirosis and anthrax, and skin and respiratory infections such as pulmonary aspergillosis, alveolitis, etc.

Anaphylactic shock, even deadly, can also be verified in particularly sensitive subjects.

To protect yourself effectively you need to reduce contact from the part of these biological agents with the skin and lungs by always using the opportune overalls, masks and protective gloves and have periodic vaccinations against tetanus.

Some contact risks with biological agents are specific in relation to working context, such are the examples, in field cultivation (contact both from hay and meal from contaminated soil from organic or chemical fertiliser), in greenhouses (e.g. the strong concentration of pollen and spores in the air), in zoo technical businesses (sickness of animal origin, bovine tuberculosis, ringworm, brucellosis, brought about from the contact of man with the animal and its derivatives; in the contact with breeding animals, there is a high risk of parasites like ticks, which, attaching themselves directly to workers' skin can transmit a varied nature of infections).

To prevent biological risk:

- look after veterinary hygiene and the environment of breeding places and stalls
- look after your own personal hygiene and make available the correct hygienic means and equipment for staff (showers, wash basins, toilets, soap, clean towels, and cupboards with two sections to change clothes...)
- all the staff on the farm must be up to date with vaccinations (remember that the tetanus vaccination is obligatory)
- use the adequate IPD: gloves, masks, overalls, boots...)
- disinfect every cut and cover when soil or water is handles which could be contaminated

## Individual Protective Devices

Depending on the work to be carried out, it is necessary and often obligatory to use the appropriate Individual Protective Devices (IPD): habitual use of these prevents occupational disease or protects in the case of injury; they must be certified according to European law and be always kept in good condition.

The employer, based on the results of risk assessment:

- keep the IPD in working condition and ensure hygienic conditions, by maintenance, reparation and necessary replacements;
- provide that the IPD are only used for the foreseen usage, except for specific cases exceptional cases, in conformity with the manufacturer's information;
- supply comprehensible information for the workers;
- assign each IPD to one person only and, if circumstances require the use of the same IPD for two people, take the adequate measures so that such a use will not create any health or hygienic problem to its various users;
- inform the worker of the risks the IPD protects him/her from before use
- keep adequate information about each IPD available on the farm or productive unit;
- ensure adequate information and training, if necessary on how to use the IPD correctly and practically.

In short, the main types of IPD that can be prescribed for agricultural jobs:

### Head protection

- large brimmed hat or cap: for the sun or dust
- protective helmet: for work in holes, wells, silos, high heights or in the case of particle projection.

### Eye protection

- glasses or visors: to use during the use of chemical or plant products and in work with splinter, particle or dust production.

### Ear protection

- headphones or ear plugs: to choose in base of the work to be done, the noise level present in the environment and the time of use.

### Respiratory protection

- active filter masks: to protect from gas or exhalations
- dust masks: to use in work with chemical products or with dust production.

### Hand protection

- rubber gloves: to defend oneself from acid or chemical products, from electricity and from liquid substances
- reinforced or padded gloves: for work with mechanical tools or equipment.

### Foot protection

- rubber boots: to avoid contact with liquid substances and mud or to defend oneself from corrosive acid
- boot in non-slip material: to use in slippery places such as cellars or oil mills
- accident-prevention boots: to use for heavy work or work carried out with mechanical vehicles.

### Body protection

- Trubber overalls: to use during the use of chemical or biological products (herbicides or fertilisers)
- overalls in fabric: to use during the use of mechanical vehicles.

## WORK MACHINERY AND EQUIPMENT

Agricultural work requires ever more frequently the use of equipment and machinery.

The employer must put into act the necessary technical and organisational measures to:

- reduce the risks connected to the use of work equipment to a minimum;
- impede that said equipment can be used for work and according to conditions for which they are not adapted;
- verify that equipment is installed in conformity with the manufacturer's instructions, are object to suitable maintenance and, where necessary, supplied with appropriate instructions for use.

Workers can use equipment only if authorised by the employer.

Certain essential rules must be followed to ensure, the minimum safety level connected to the use of equipment:

- 1 - protect all elements of risky origin;
- 2 - protect, every time they can establish danger:
  - salient parts of organs in movement;
  - crank gears;
  - the final and protruding parts of shafts;
  - organs and elements to transmit motion;
  - shafts, belts and pull ropes;
  - gears, wheels and other toothed elements;
  - transmitting chains;
  - working organs and operational areas;
- 3 - protect against accidental or unintentional operations:
  - command organs (levers, buttons, etc.);
  - command pedals;
- 4 - apply emergency stop devices, where specific remaining risks of the machine request them;
- 5 - install the machine in a way to guarantee the necessary free space so that other machines can move around;
- 6 - ensure a good conservation condition and efficiency of machines and equipment, guaranteeing the maintenance in time of ordinary requirements and suitability. The booklet supplied for some equipment for the maintenance (safety reasons) must be kept updated.
- 7 - protect the operator from the risk of being crushed by the equipment tipping.

### Protection of dangerous elements

The necessity to assure machine tools the necessary operating capability may not consent, in practice, to protect or completely segregate the tool or the dangerous operational area.

This fact brings risks of damage for the contact of parts of the body of the assigned worker with work tools and parts in movement.

In practice, the solution is to keep body parts of the worker that could be damaged, away from tools or relative operational areas.

Often, however, this risky situation is aggravated if the organs in question, already partially or totally without protection, can grasp (due to salient parts or protruding rotation), squash (caused by related movement between themselves), drag (because conformed to convey towards the in-

side), or if they are equipped with notable inertia.

In these situations, the worker must be adequately informed and trained about the risky situations connected to the use of equipment and machines as well as the correct procedures to follow and those to avoid because of danger for the health and safety of the operators.

### Projection of material

A good possibility of projection of materials or particles of different nature and dimension exists for some machinery, in relation to working characteristics (work speed, nature of working material, type and nature of tools, conditions of lubrication-cooling of cutting area, etc.). To avoid the relative risk for workers, each time you must recourse to close, shields or other means of interception, fixed or adjustable.

All workplaces and adjacent passages must be protected against the same risk.

### Cleaning, regulation and maintenance

The frequency in which working organs or work areas are cleaned has an importance to the workers' safety (removal of flowing or abundant shavings, removal and loosening of chips, splinters, etc.).

The rules explicitly prohibit doing this type of operation while the machine is in movement. However they consent in doing so, where you cannot do otherwise, on then condition of using suitable tools to avoid danger (e.g. air jets, hooked equipment, etc).

Frequently tools have to be registered or substituted, to equip or re-equip the machine, to carry out surveying the worked piece, to position or fix the pieces to be used. These operations, and other types of repairing, are not consented by law when the machine is moving. If it is not possible to proceed otherwise, then it is allowed but taking into account some particulars (reduced gears or speed with command in continuous action, intermittent gears with single impulse etc.).

Specific information and appropriate warnings are placed near to the machine to inform the worker of both prohibitions.

## Sign system

The sign system is made up of signs, colours, sound signals, luminous signs, verbal messages, and gesture signs for the following purposes:

- Warning: warn of risk or danger
- Prohibition: prohibit behaviour which could cause danger
- Prescription: prescribe certain necessary behaviour in the purpose of safety
- Information: supply information relative to the emergency exits or to means of aid or rescue or supply other indications of prevention or safety









The signs must be sufficiently illuminated and well visible. They are classified according to colour and shape:

- red: stop and prohibition signs or signs of fire extinguishing equipment
- yellow: warning signs
- green: rescue signs
- light blue: prescription signs
- circle: prohibition and prescription signs
- square or rectangle: rescue or information signs
- triangle: warning signs

Following on are signs mostly used on farms, related to real risks.















### Information signs

#### Fire fighting Equipment

|   |   |   |   |
|---|---|---|---|
|   |   |   |   |
| Fire hose   | Ladder  | Fire Extinguisher   | Telephone for fire intervention   |
|  |  |  |  |
| Directions to follow<br>(signs to add to those which precede)                       |   |   |   |



















**Rescue signs**

|   |   |   |   |
|---|---|---|---|
|  |    |    |  |
| Emergency exit  | Emergency exit  | Emergency exit  | Emergency exit  |
|  |    |    |  |
| Emergency exit  | Directions to follow (information signs additional to panels that follow)           |   |   |
|  |    |    |  |
| Directions to follow  | First aid   | Security shower   | Eye washing   |
|   |  |  |   |
|   | Stretcher   | Telephone for rescue and first aid  |   |









### Prohibition signs

|   |   |   |   |
|---|---|---|---|
|  |  |  |  |
| No smoking<br>No naked flames   | No thoroughfare   | No extinguishing with water   | No entry  |
|  |  |  |  |
| Forklift trucks prohibited  | No smoking  | Not drinking water  | Do not touch  |

**Warning signs**

|   |   |   |   |
|---|---|---|---|
|    |    |    |    |
| Danger<br>overhead crane  | Danger<br>forklift trucks   | Danger  | Biological<br>hazard  |
|    |    |    |    |
| Corrosive<br>substance  | Strong<br>magnetic<br>field   | Poisonous<br>substances   | Danger<br>Highly<br>flammable   |
|    |    |    |    |
| Danger<br>explosive   | Non ionising<br>radiation   | Danger<br>live wires  | Danger<br>combustion  |
|  |  |  |  |
| Danger<br>irritant  | Low<br>temperature  | Caution trip<br>hazard  | Danger drop<br>below  |

**Prescription signs**

|  |  |  |   |
|--|--|--|---|
|   |   |   |  |
| Eye protection must be worn  | Respirators must be worn   | Face shield must be worn   | Protective gloves must be worn  |
|   |   |   |  |
| Protective headwear must be worn   | Protective footwear must be worn   | Mandatory (with eventual additional sign)  | Ear protection must be worn   |
|  |  |  |   |
| Safety harness must be worn  | Pedestrians walkway  | Protective clothing must be worn   |   |

## First aid

The employer, considering the nature of the activity and the size of the firm, having heard a qualified doctor, when appointed, adopts the necessary first aid and medical assistance required, establishing relations with external services and appoints one or more workers to first aid, if not directly provided.

Staff in charge of first aid must be trained for the minimum requirements foreseen by M.D.: 15 July 2003 nr.388.

During working activity there can be some situations in which the worker must take on the task of assuring first aid to other workers or to protect the establishment from consequential damages to accidental events.

In such cases, first of all, it is important to call emergency numbers:

- Accident and emergency unit – 118
- Fire brigade unit– 115
- Police unit– 112
- Environment emergency unit- 1515
- Antivenom centre of Turin – 011/6637637

In each firm, not to mention in each productive unit, there must be a first aid box placed in a visible position and easily accessible with the minimum medical contents prescribed by M.D. 388/2003.

Should a person be damaged in some form, then the following instructions should be applied while waiting for specialised persons:

### In the case of ACUTE INTOXICATION

#### a) A conscious, intoxicated person who collaborating

- Search for help from other people
- Identify the substance responsible and how it was absorbed
- Take off any clothing and shoes that could be contaminated
- Keep the intoxicated person resting
- Ask for information from the doctor in charge
- Transport, if necessary to accident and emergency or antivenom centre with a sample of the substance (or safety card)

#### b) An unconscious, intoxicated person

- Lie the subject on his/her back with head tilted backwards
- Take off contaminated clothing without getting contaminated yourself
- Assure that he/she is breathing (apply artificial respiration and/or cardiac massage if necessary)
- Rush urgently to hospital or antivenom centre, taking a sample of the substance (or technical card)

## In the case of a SERIOUS ACCIDENT AT WORK

- It is important to not leave the person alone while waiting for aid (do not try to move an unconscious person, nor attempt to bring him/her round by splashing cold water on their face)
- Help respiration by loosening clothing around the neck
- Cover the person to maintain body heat

## In the case of BURNS FROM HEAT OR CHEMICAL PRODUCTS

- Wash liberally with water
- Do not touch the burnt area
- Do not apply creams or ointments without medical prescription

## In the case of ELECTROCUTION

- Turn off electricity power from the mains
- Do not touch the person directly but move him/her away from the current by using material such as wood or rubber
- Assure that he/she is breathing (apply artificial respiration and/or cardiac massage if necessary)
- Cover serious burns with sterile gauze
- Take him/her to accident and emergency unit

## In the case of HEAT OR SUN STROKE

- Lie the person down in a cool place with their legs slightly raised
- Loosen clothing
- Cool down their forehead with a wet cloth

## In the case of SLIGHT CUTS

- Wash and clean the cut straight away of dirt, rust etc
- Disinfect and place sterile gauze over the cut
- Check vaccinations and consult a doctor

## In the case of DEEP CUTS

- Tampon with sterile gauze
- Go straight away to accident and emergency unit



### In the case of FRACTURES

- Do not move the injured person or limb
- Immobilise the affected part of the body
- If the fracture is an open one, then touch it only with sterile gauze to stop infection
- Take the injured person to hospital

### In the case of EYE INJURY

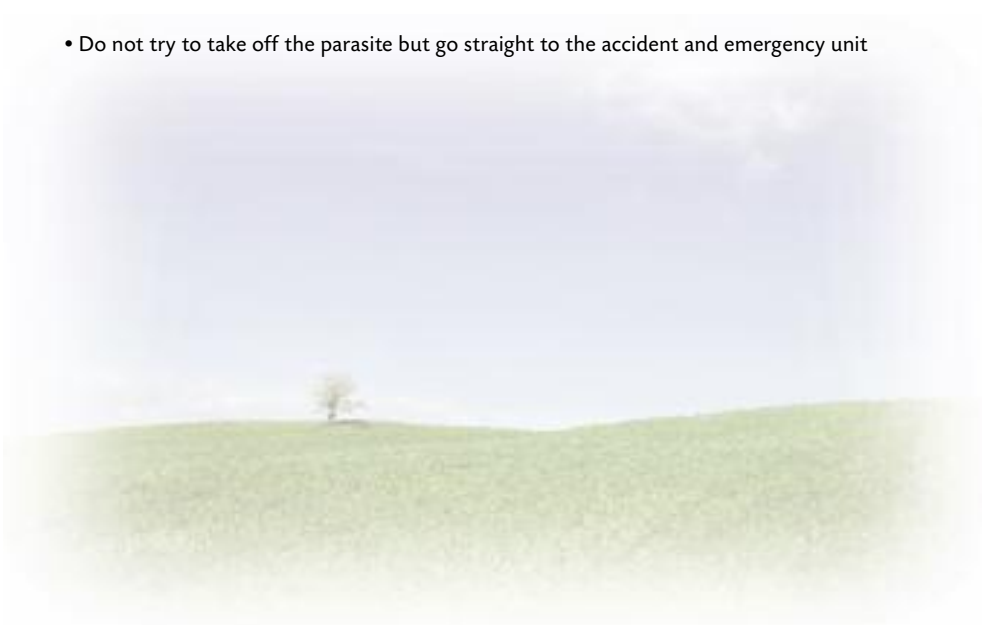
- Wash abundantly with a jet of water for at least 5 minutes holding eyelids wide open and rolling eyes from side to side
- Do not rub the affected part
- Go to accident and emergency unit

### In the case of STINGS (HORNET, WASP, BEE)

- Take the sting out with tweezers (if present)
- Disinfect
- Go to accident and emergency unit in the case of sickness or allergy

### In the case of TICK BITES

- Do not try to take off the parasite but go straight to the accident and emergency unit



## **Injury at work – WHAT TO DO**

Law has introduced a specific injury at work notion: this applies when, for violent causes during working activity the worker has an accident which causes death or suppression or permanent or temporary reduction in work capability.

The foreseen tutelage for an injured person is guaranteed by INAIL (National Institute for insurance against injury at work). Every worker must have insurance against injury. The worker must notify immediately the employer of any injury sustained at work, no matter how slight.

The employer must notify each injury to the public health and safety authority, when death is involved or when an employee is unable to work for more than 3 days. The employer must notify the local public health and safety authority and Inail within 2 days of receiving the medical certificate. In the case of death or danger of death, the report must be made within 24 hours by telegram or fax.

The employer must also note chronologically on the appropriate register, injuries which consist of work absence of at least one day.

Workers who do not fulfil such an obligation will lose the right of temporary compensation for the days prior to the one in which the employer came to know about.

With the coming into effect of decree laws 38/2000 it is foreseen that Inail must pay compensation also to injury in cases as accidental events while coming or going to or from work.

In the case of injury, Inail gives temporary compensation from the 4th day after the event to the injured party. For a party not covered by Inail, eventual integration can be paid by Favla, if the relative contribution is paid. For relative ulterior details on Favla integration, refer to internet web site [www.favla.it](http://www.favla.it)



On the date \_\_\_\_\_

the \_\_\_\_\_ undersigned

employee of farm establishment \_\_\_\_\_

**DECLARES**

to have received the manual

*“Work and environment safety in agriculture”*

which is a useful tool to process information/training provided by the employer by the rules of law.

*Yours faithfully*

\_\_\_\_\_

## **FAVLA - Fondo Assistenze Varie Lavoratori Agricoli**

*Varied Assistance Fund for Farm workers*

F.A.V.L.A. is an assistance authority for farm workers that operates not-for-profit in order to integrate the obligatory welfare treatment in the case of illness and injury and generally to integrate public assistance for all workers in the agriculture and nursery gardening sectors in the Province of Cuneo.

## **CPT - Comitato Paritetico Territoriale**

*Territorial Joint Committee*

The Territorial Joint Committee for agriculture safety (CPT) is a non-profit authority, established by the organization unions and agricultural employers of the Province of Cuneo with the function of coordinating the action of the **Workers' Safety Representative on a Territorial level (RLST)**

The RLST has the duty to establish a relationship of collaboration between the business and the workers also by inspection and becomes a reference point in terms of safety.

*For any further information contact the administrative office of Favla situated in Cuneo, Via C. Chiapello, 1 – Tel: +39 0171 692477*

## **Organizzazioni Sindacali Provinciali**

The Provincial Union Organizations that adhere to FAVLA and carry out actions of information and protection are:

|                   |   |
|-------------------|---|
| <b>FLAI CGIL</b>  | Via Bagni, 10 - 12037 Saluzzo - Tel. 0175 44546         |
| <b>FAI CISL</b>   | Corso Piemonte, 39 - 12037 Saluzzo - Tel. 0175 41292    |
| <b>UILA UIL</b>   | Corso F.lli Bandiera, 13 - 12051 Alba - Tel. 0173 33050 |
| <b>U.P.A.</b>     | Corso IV Novembre, 8 - 12100 Cuneo - Tel. 0171 692143   |
| <b>COLDIRETTI</b> | Piazza Foro Boario, 18 - 12100 Cuneo - Tel. 0171 447211 |
| <b>C.I.A.</b>     | Piazza Galimberti, 2/b - 12100 Cuneo - Tel. 0171 67978  |

