

HEALTH AND SAFETY IN AGRICOLTURE

PRACTICAL GUIDE FOR WORKERS

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INTRODUCTION TO THE MANUAL

The interministerial decree issued on the 27th March 2013 by The Ministry of Labour and Social Affairs in conjunction with the Ministry of Health and The Ministry of Agricultural, Food and Forestry Policies upon the recommendation of the most representative Trade Union confederations of workers and employers, established simplified procedures for fulfilling obligations concerning information, training and health surveillance in the agricultural sector.

Regarding training and information, the simplification is reserved to seasonal workers who work at the same company for no more than fifty days in a year, limited to simple and generic tasks that do not require any specific professional qualification.

The decree provides that the delivery of simplified training can be carried out through the supply of specific documents to the affected workers.

These documents, as stated in the decree, "must contain suitable indications to provide knowledge for the identification, reduction, and management of hazards, as well as to transfer knowledge and procedures useful for acquiring the skills needed to perform their respective tasks safely in the company, along with the identification and the elimination, **in order to** minimize and manage risks in the workplace."

The norm also specifies that the documents prepared for seasonal workers must be certified by local health authorities (ASL) or by bilateral organizations and joint bodies in the agricultural sector.

To fulfill this institutional duty and to enable the practical implementation of the project, E.B.A.A. has decided to promote and finance the creation of this manual and to certify its contents, believing that effective training must be based on immediate messages always supported by easily understandable graphic indications. According to this program directive, the manual has been drafted prioritizing the conciseness and immediacy of the messages, with rigorous normative and technical content, but easily accessible to the specific type of workers it is primarily aimed at.

CELLAR ACTIVITIES

Sulfur dioxide (SO₂), is used during winemaking and the cleaning of the cellars and equipment, releasing substances that can cause serious health damages through inhalation or contact.

The cellar worker carefully reads the safety data sheet that accompanies each chemical product.

The cellar worker acts as follows:

1. During the **filling** of the sulphitometer and the **sulfidation** of the must or wine, the cellar worker wears **anti-corrosion gloves and rubber boots**.

To protect the respiratory tract and eyes, they wear a **gas mask** with a specific filter (E2 yellow) or a self-contained breathing apparatus. Alternatively, they use goggles with a half-mask (respirator) and filter.

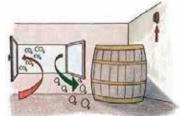
2. During the sulphitometer filling phase, they check the proper condition of the cylinder valves, the rubber hose, and the sulphitometer, replacing worn fittings if necessary.

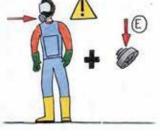
3. They perform the sulphitometer filling outside, supervised by another operator, who is also protected by a mask and gloves, to ensure rescue operations in case of emergency.

4. When using **diatomaceous earth or clays** (particles) for wine clarification, they protect the respiratory tract by using a mask with a white filter marked P3.

5. They ensure adequate ventilation of the cellar to oxygenate the air, which could become saturated with carbon dioxide (CO2 an odorless gas).







6. Before entering the tanks, the cellar worker uses **CO2 detectors** and, if necessary, employs vertical fans to expel the gas. They enter the tank equipped with a **harness and safety rope**, assisted by an operator who monitors from the outside.

The latter is equipped with **two full-face masks** with a self-contained breathing apparatus for emergency interventions.

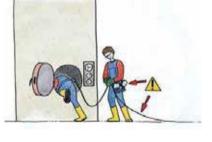
7. When working at a certain height, for example above vats for the pump-over, the cellar worker secures themselves with a **harness** and rope.

8. They use appropriate ladders, and when these exceed 5 meters, they must be fixed and equipped with protection guardrails cage protected by handrails.

9. They wear non-slip shoes or boots because the sites are often wet and very slippery.







Personal protective equipment to use:



FOOTWEAR







FACIAL MASKS



HARNESS

Risks to avoid:



CHEMICAL HAZARDS

What to do	What not to do:
Use type E filter masks when filling and using the sulfur meter.	Do not enter tanks unless harnessed and assisted by another operator.
Ventilate the cellar and check for the presence of carbon dioxide with appropriate detectors.	Do not work at dangerous heights without a harness.
Use fixed structures for working at height.	Do not perform cleaning with sanitizing products without gloves and boots.

MANUAL PRUNING

The pruner always works using **goggles**, **cut-resistant and abrasion-resistant gloves**, and **non-slip shoes**. The **handles** of cutting tools must be comfortable, light, solid, and covered with non-slip material.

There are numerous models of **pruning shears** suitable for different techniques or types of plants.

Electric or pneumatic shears are equipped with controls to prevent accidental starts.



The pruner:

- 1. Verifies that the shears, scissors, and saws are suitable for the type of plant to be pruned.
- 2. Keeps the **equipment** in order by cleaning and lubricating it daily, sharpening the blades when cutting requires more effort than usual, and adjusting the blade and counter-blade play when the cut is no longer clean.





- 3. Stores cutting tools in appropriate cases during breaks and at the end of the workday.
- 4. Protects the cuts made on the plant with suitable mastic or protective products.
- 5. Disinfects tools with an appropriate product in the presence of particular diseases.

6. Uses the **ladder** with maximum attention to its positioning. The ladder is leaned against the tree facing the main trunk and never leaned sideways because the branches could collapse and cause a fall.

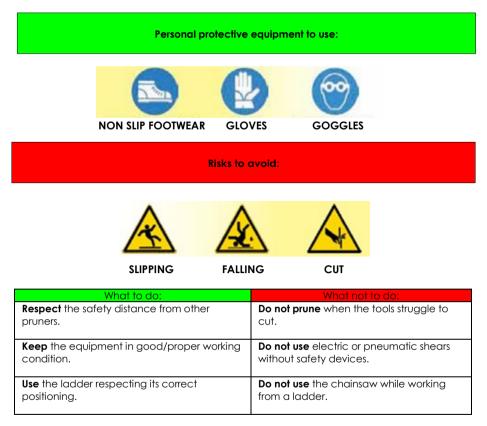


- 7. When using a cart or working platform:
- respects the instructions provided by the employer.
- follows the driver's recommendations.
- does not tamper with safety devices.
- holds onto handles during movements.
- never leans out of the vehicle.
- gets on or gets off only when the vehicle is stationary.
- maintains a safe distance from other operators.

8. Does not allow other people to enter the cutting tool's range of action.



9. Brings a **mobile phone** to the workplace to provide a precise location in case of emergency and a **first aid kit** for first aid intervention.





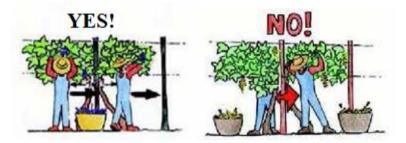
MANUAL HARVESTING AND FRUIT PICKING

Harvesting is carried out in various environmental conditions: rain, cold, wind, sun, and temperatures can change rapidly even during the same day. Dressing in layers with medium-weight clothing allows operators to easily adapt to climate changes.

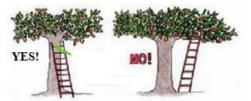


The competent operator behaves as follows:

- 1. During the grape harvest, uses cut-resistant **gloves** to protect hands from the tools used (scissors, knives, etc.); when picking fruit, uses appropriate gloves to protect against any residues of plant protection treatments present on vegetation and fruits, avoiding biological contamination.
- 2. Proceeds in the same direction as the workmate and never positions themselves in front of another operator.



3. Uses the **ladder** with maximum attention to its positioning. The ladder is leaned against the tree facing the main trunk and never leaned sideways because the branches could give way and cause a fall.



Must be fixed with upper grappling hooks and equipped with spikes at the lower extremities

4. Never climbs the last 3 steps and when using double ladders always position themselves facing the picking point.

5. If harvesting from the ground with facilitators, such as in the case of olive picking, **takes breaks** to avoid arm fatigue.

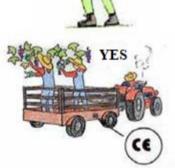
6. When using a harvesting cart:

MO

- Respects the instructions provided by the employer.
- Follows the driver's recommendations.
- Does not tamper with safety devices.
- Holds onto handles during movements.
- Never leans out of the vehicle.
- Gets on or gets off only when the vehicle is stationary.
- Maintains a safe distance from other operators.
- Lifts boxes from the ground by squatting down, keeping the back straight, the load close to the body, and never twisting the torso but moving laterally with the whole body.

ES!

- 8. Keeps the provided equipment in order.
- 9. Brings a mobile phone to the worksite to provide a location indication in case of emergency.



YES!





Personal protective equipment to use:



Risks to avoid:



What to do:	What not to do:
Follow the procedures and instructions given by the employer, refraining from taking autonomous initiatives.	Do not tamper with the safety protections of the vehicles and tools used.
Lift loads only up to the maximum allowed limit (25 kg for males and 15 kg for females).	Do not consume alcoholic substances or medications that compromise reflexes.
Maintain the appropriate safety distance from colleagues.	Do not work facing other colleagues along the vine row or on the same fruit tree.

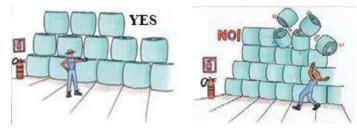
FORAGE AND FEED STORAGE

The spaces and premises dedicated to animal breeding are very **dusty**. Straw, forage, and feed create very fine fragments easily carried by the air. To avoid inhalation and eye irritation, farmers protect themselves with masks and goggles.

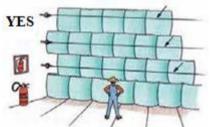
Operators who handle forage and animal feed take care of:

1. Storing hay bales and round bales in an orderly manner, considering the possibility of their **falling**.

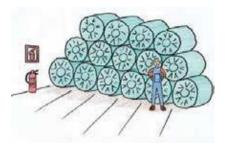




2. Stacking hay bales and round bales **"in columns"** up to a maximum of 3 tiers to prevent sudden falls that could overwhelm the operator. For stacks over 4 tiers, use separation cables.



3. Stacking hay bales and round bales **"on their side,"** i.e., resting on the ground on their curved edge, placing wedges on the outer sides to prevent rolling.



- 4. Paying particular attention during handling with vehicles (tractor with loader, telescopic handler, etc.), and move away from the machine's operating range.
- 5. **Not smoking** or lighting fires in the storage areas for straw, forage and feed, ensuring the presence of a **fire extinguisher** to prevent fire hazards.

6. In the presence of mixer-feeder wagons, adhering to safety criteria and not operating near moving parts.



Personal protective equipment to use:







PROTECTIVE SUIT



PROTECT YOUR EYES

Risks to avoid:



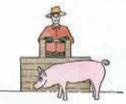
WHAT TO DO:	WHAT NOT TO DO:	
Wear a dust mask when handling and distributing forage and feed.	Do not stack hay bales and round bales in a disorderly manner.	
Stack hay bales and round no higher than three tiers, and if exceeding this, installs separation cables.	Do not smoke or light fires in the storage areas for straw, forage, and feed.	
Secure round bales resting on the ground on their curved side with wedges.	Do not forget to have a fully operational fire extinguisher nearby.	
Operate at a safe distance from machines with moving mechanical parts.	vith Do not perform interventions on the mixer-feeder wagon when its parts are in motion.	

CLEANING OF STALLS

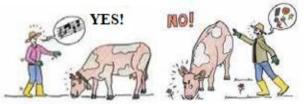
Farm animals can have sudden reactions and pose a significant danger to operators. During stall cleaning operations, the possibility of being crushed by an animal represents a risk.

The operator must work in the following ways:

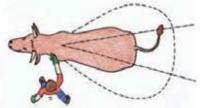
- 1. **Do not mistreat** animals with electric prods, sticks, punches, and do not use mechanical means to force their movement.
- Move animals with at least one other person assisting, using appropriate body protection equipment (e.g., wooden boards).



3. Approach patiently and position yourself frontally to the animal, calmly and quietly, alerting it with your voice to avoid scaring it and thus preventing aggressive and uncontrollable reactions.



 Contact with the animal should occur laterally at shoulder height to avoid headbutts, horn thrusts, and kicks.



In farms workplaces are often wet, as are the external paddocks; therefore, the operator wears **non-slip footwear**, also equipped with **toe caps** suitable to protect the foot from the risk of being stepped on by the animal.



The **biological risk** related to the transmission of diseases from animals to humans should be addressed with appropriate Personal Protective Equipment:

- mask
- gloves
- disposable suits
- boots.

Personal protective equipment to use:





NON-SLIP FOOTWEAR WITH ANTI-CRUSH TOE CAPS

GLOVES



MASK



Risks to avoid:





HANDS AND FEET CRUSHING



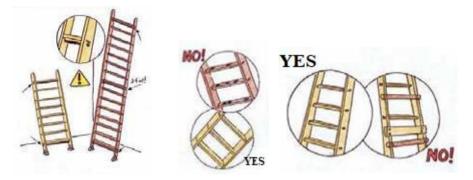
HAZARD

What to do:	What not to do:
Approach the animal laterally, calmly and quietly	Do not use electric prods or other improper tools to move animals
Use movable fences to move animals while wearing non-slip boots with anti-crush toe caps	Do not approach the animal suddenly or speak loudly
Restrain animals in appropriate racks when inspecting inside the box	Do not endanger the safety of animals by forcing them to climb steep or slippery ramps

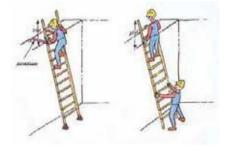
USE OF LADDERS

HAND LADDERS

Hand ladders are built with **knot-free wooden rungs**, fitted into the stiles and held with **two iron rods** placed under the two extreme rungs (first and last). If the ladder exceeds four meters in height, an additional intermediate iron rod must be applied.



During use, ladders must be positioned and secured to **prevent swaying**, **slipping**, **or toppling**. If ladders cannot be anchored, they must be **held at the base by another person**.



If the ladder is used to access another level, the stiles must extend 1 meter beyond the landing point to facilitate safe access.

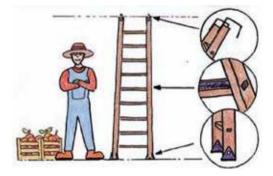
The ladder should always be positioned at a proper angle of inclination. To identify the correct angle, perform the **elbow test**: stand with your feet against the base of the ladder, parallel to the rungs, raise your elbow to shoulder height. Stand straight, and if the inclination is correct, your elbow will touch the ladder. Otherwise, move the ladder and try again.



Always climb or descend ladders using both hands.

SIMPLE PORTABLE LADDERS

They must have: 1) Retaining **hooks** 2) **Non-slip** devices on the **rungs** 3) Slip-resistant feet



DOUBLE LADDERS

Double ladders **must not exceed 5 meters in height** and must have a **device that prevents** the ladder from **opening** beyond the safety limit (e.g., chain).

For fruit picking, pruning, etc., the operator should always position the ladder frontally to the tree to avoid swaying and falls.







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FIXED LADDERS

Fixed ladders **over 5 meters high** with an inclination greater than 75° must have a sturdy **metal safety cage** starting at 2.5 meters.



Personal protective equipment to use:



Risks to avoid:



SLIPPING



FALLING

What to do:	What not to do:
Use strong and safety-compliant ladders, preferably marked "EN 131"	Do not use self-made or poorly repaired ladders (e.g., nailed rungs)
Use the simple ladder by firmly anchoring it to a support point	Do not climb the last three rungs
Wear a helmet if holding the ladder for a coworker	Do not use ladders that have suffered damage compromising their stability (e.g., deformations, dents, cracks, etc.)

MEASURES TO AVOID HEAT DAMAGE

Risky days include those with high temperature and/or humidity (attention above 30°C) and periods characterized by sudden heatwaves.

Specific Measures:

- Plan outdoor work for short periods initially, gradually increasing the duration.
- Schedule physically demanding tasks when it is cooler, preferably morning and late afternoon.
- Reduce individual physical efforts by distributing tasks among workers, including rotating staff.
- Ensure a supply of fresh drinking water and hydrosaline drinks for cooling during breaks.
 Drink water before feeling thirsty and frequently during the work shift, avoiding iced drinks and supplementing with hydrosaline drinks if sweating a lot.
- Wear clothing that protects against the harmful effects of heat and UV rays, such as:
 - Hat: It is advisable to wear a wide-brimmed hat that provides good protection to the head, ears, nose, and neck.
 - Clothing: It is advisable to wear lightweight, long-sleeved, and light-colored clothing made of breathable fabric (cotton).

- If compatible with the type of work, the use of **sunglasses** that fit properly to block UV radiation and the application of **sunscreen** on exposed areas of the body are recommended.



- Organize work to include breaks in the coolest possible places or shaded areas, with duration varying based on climatic conditions and the physical effort required by the work.
- Do not consume alcohol and drugs.
- Avoid heavy meals during lunch breaks.
- Do not work in isolated places without first informing colleagues or the employer.



- Identify, with the help of the doctor, contraindications to performing the task or identifying at-risk individuals (e.g., pre-existing medical conditions, obesity, medication intake, etc.) for whom particular measures must be adopted.

Warning Signs:

- hot and red skin
- intense thirst
- feeling of weakness
- muscle cramps
- nausea and vomiting
- dizziness, seizures
- confusion
- loss of consciousness



IMMEDIATELY REPORT THE FIRST SYMPTOMS OF MALAISE:

to colleagues or the First Aid attendant

FIRST AID MEASURES

The main First Aid measures to be taken in case of heat illness symptoms are:

- Call 118!
- Immediately call a First Aid attendant
- Place the worker in the shade and cool, lying down if dizzy, on their side if nauseous
- Loosen or remove clothing
- Sponge with cool water on the forehead, neck, and extremities
- Ventilate the worker
- Only if the person is conscious, give water, preferably a saline solution, every 15 minutes in small amounts
- Keep the person at absolute rest.

FIRE RISK

Measures to reduce fire risk in agro-livestock farms:

- Do not smoke in high-risk areas: barns, warehouses, flammable substance storage areas.
- > Do not store flammable liquids near hay, straw.
- > Keep emergency exits clear and properly marked.
- Know and be able to implement all emergency procedures in case of fire: alarm, use of extinguishers, evacuation.



VIABILITY

- Do not stand in the range of action and/or maneuver of agricultural machinery.

- Pay particular attention when transiting through accesses, paths, internal and external routes of the company.

BIOLOGICAL RISK

In agro-livestock work, a biological risk (i.e., an infectious disease) can arise from not following some simple measures:

➤ contaminated soil, hay;

> domestic and wild animals (dogs, cats, mice, pigeons, other birds);

➤ livestock;

> water, both for drinking and washing and for irrigating fields.



General Protection Measures:

- > wear appropriate protective clothing and sturdy boots (some diseases are transmitted through small cuts and abrasions during fieldwork);
- Arink only potable water (from the municipal aqueduct) as some diseases are transmitted through contaminated water (e.g., well water is often contaminated);
- > be particularly careful when working with animals;
- > do not use pointed, sharp tools that can cause cuts, abrasions, or punctures;
- in case of wounds, immediately wash the area with running potable water and disinfect with hydrogen peroxide;
- > apply a waterproof dressing before resuming work;
- > wash hands thoroughly before eating, drinking, or smoking;
- thoroughly wash clothes and protective equipment used for working with animals after use;



- always use sanitary facilities;
- > get vaccinated against tetanus every 5-10 years;
- > do not collect hay for storage when it is wet;
- store hay and grain flours properly (never in a humid environment that promotes mold formation);
- > avoid excessive dust formation when distributing hay and flours to animals (preferably work outdoors, moisten hay or use masks to protect the airways).

SOME GENERAL RULES TO AVOID BACK INJURIES (during load handling)

All the advice provided here concerns objects weighing over 3 kg: below this value, the risk to the back is generally negligible.



Avoid picking up or placing objects on the ground or above head height.

Avoid twisting the trunk and keeping the load away from the body.

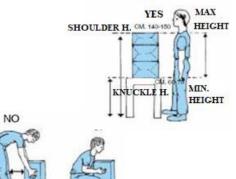


It is preferred to move objects within the range between shoulder height and knuckle height (hands clenched along the sides).

This will prevent assuming dangerous positions for the back.



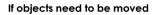




If objects need to be lifted from the ground

Do not keep your legs straight.

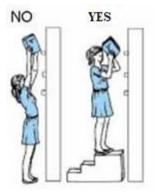
Bring the object close to the body and bend the knees: keep one foot forward for better balance.



Bring the object close to the body.

Avoid rotating just the trunk; turn the whole body using the legs.





If objects need to be placed in a high place

Avoid arching your back too much. Do not throw the load. Use a stool or a ladder.

Additionally, it is advisable to avoid:

- Moving objects that are too bulky, which may impede visibility;
- Carrying objects while walking on slippery or uneven floors;
- Handling objects in confined spaces;
- Wearing inappropriate clothing or footwear.

MANUAL TOOLS

To make the work less burdensome, it is necessary that the tools used are:

- In good condition (e.g., tips not worn, blades not bent, etc.);
- The most manageable and suitable for the job to be done (e.g., shovels and spades with aluminum alloy blades and lightweight wooden handles).

When using a shovel, it is useful to:

- Widen the base of support of the lower limbs by placing one foot forward in the direction of the movement;
- Rest the handle of the shovel on the thigh;
- Avoid using shovels with handles that are too long;
- Avoid overfilling the shovel.

SHAPE, COLOR, AND MEANING OF SIGNS

Warning signs are distinguished by color, design, shape, and size. Below there are some of the most commonly used signs in workplaces and beyond.



Prohibition signs: round shape; black pictogram on a white background; red band descending from left to right across the symbol at a 45° angle, red (red must cover at least 35% of the sign).



Mandatory signs: round shape; white pictogram on a blue background (blue must cover at least 50% of the sign's surface).



Caution signs: triangular shape; black pictogram on a yellow background, black border (yellow must cover at least 50% of the sign's surface).



Rescue signs: square or rectangular shape; white pictogram on a green background (green must cover at least 50% of the sign's surface).



Fire-fighting signs: square or rectangular shape; white pictogram on a red background (red must cover at least 50% of the sign's surface).

Prohibition signs



Mandatory signs



EVE PROTECTION

MUST BE WORN



MUST BE WORN





FOOT PROTECTION MUST BE WORN

PROTECTIVE GLOVES MUST BE WORN



PROTECTIVE CLOTHING MUST BE WORN



FACE SHIELD MUST BE WORN



PEDESTRIAN WALKAWAY

Warning signs



MATERIALS

GENERAL WARNING





×







WATCH YOUR SUDDEN DROP STEP

Rescue signs



Direction to follow - escape route - emergency exits

Fire-fighting signs





FIRE HOSE REEL

FIRE ESTINGUISHER

PERSONAL PROTECTIVE EQUIPMENT (PPE)



Personal Protective Equipment refers to any equipment intended to be worn and held by the worker to protect them against one or more risks (residual), which could threaten their safety and health at work, as well as any complement or accessory intended for this purpose.

CLEANING AND MAINTENANCE OF PPE

It is necessary to read the instruction manual to become more aware of the characteristics of the PPE and the checks/expiration dates it is subject to.

It is necessary to take care of the PPE provided to you and to immediately report any defect or issue to your supervisors.

HOW TO STORE PPE

Carefully read the information in the instruction manual. Store PPE away from sources of heat, dust, sunlight, and humidity. Glasses and masks should be wrapped in clean, soft cloths or in a protective case; footwear should be kept upright and vertical; helmets or headgear should be stored in a clean and dry place. For respiratory protection masks, consult with the safety officers.

Your personal protective equipment can save you from dangers, so give them the care and attention they deserve.

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