



## Unit 5 Health and Safety in Agriculture

### ✦ Glossary

**Hazard:** a danger or risk

**Impaired:** diminished

**Breakdown:** a mechanical failure

### 🚧 Agricultural machinery hazards

Agricultural machinery refers to any machine or equipment used in every stage of farming production. All agricultural machinery has motors and moving parts and consequently shares similar **hazard** characteristics with all industrial and domestic machines. Today's agricultural machinery is extremely specialized and designed to perform many different tasks.

While these mechanical systems save valuable time and are beneficial to agricultural productivity, they also present a constant danger to the people who operate them. It is therefore important for farm managers to be aware of the various factors that can cause these hazards. They are responsible for making their employees aware of the dangerous factors and hazards associated with moving machinery parts, farmstead equipment, chemicals and fertilizer application. The employees have to be aware of what needs to be done to protect themselves from injury.

The following factors are among the major causes of injury if the machinery is not used properly:

- **the operator factor:** the physical and mental condition of the operator may lead to making poor decisions, unsafe actions or having **impaired** capabilities. Age can equally affect both the physical and the mental condition of the operator. Knowledge of hazards is very important, but is not enough. A positive attitude about safety is required to make use of this knowledge;
- **the conditions of machinery:** accidents are not always the result of human error, often the condition of the machinery has not been properly monitored and maintained;
- **the machinery maintenance factor:** poorly maintained machinery has a tendency to create hazards due to frequent machinery **breakdown**.

(Adapted from: S. Bello, *Agricultural Machinery Safety Practices*, Create Space Independent Publisher, 2012)





**Understanding the text**

**1. Read the text and find expressions which mean much the same as the following.**

- 1. Caratteristiche del rischio: .....
- 2. Produttività agricola: .....
- 3. Pericolo costante: .....
- 4. Condizioni fisiche e mentali: .....
- 5. Atteggiamento positivo: .....
- 6. Manutenzione del macchinario/macchine: .....

**2. Tick the sentences that express the ideas contained in the text.**

- 1.  The very fact that agricultural machinery uses tremendous power to do work makes its operation a potential hazard for both the operator and bystanders. Even though manufacturers try to ensure that their machinery is as safe as possible, the nature of some work creates inherent hazards which cannot be avoided.
- 2.  There are many different kinds of agricultural machinery – mowers, tractors, shredders, harvesters, grinders, blowers, augers, balers, etc. – but they all have similar characteristics and can cause similar hazards.
- 3.  Some agricultural jobs are too dangerous for anyone under 16 to perform. No youth under 16 years of age may be employed at any time in any of these hazardous occupations.
- 4.  Proper maintenance of equipment according to manufacturer’s recommendations can help prevent accidents.
- 5.  People are killed or seriously injured by electricity in agriculture every year. Many of these involve contact with OHPLs (overhead power lines), poorly maintained electrical installations, cables and equipment.

**Writing**

**3. List the main causes of machinery hazards and what can be done to reduce them. One has been done as an example.**

Cause	Action to be taken
1. <b>Operator factor</b> .....	Verify that all employees wear personal protective equipment.
2. ....	.....
3. ....	.....