

## **Analysis of Accidents in Agriculture: Province of Ragusa – Year 2009**

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### **Objectives**

In the Province of Ragusa, 37% of active companies belongs to the Agriculture sector and these companies will experience an average of over 20% of the total accidents.

The objective of this analysis is to know the where, the how and the who becomes the victim of workplace accident to highlight in what process and in what equipment you can possibly focus on prevention initiatives.

Second objective, but clearly not least, is to examine the epidemiological data that points out how in the Province of Ragusa occur the 26/30% of injuries to agricultural workers in the total of those recorded in the whole Sicily.

### **Methods**

During 2009, the SPreSAL of Health Company Provincial Ragusa examined n ° 594 injuries occurred in farm workers in the Province. The record card, from which are extracted the data, are those transmitted by INAIL to our service and are a percentage of '85-90% of total number of accidents occurred in the field. To obtain this result, for each accident was investigated the type of work with their place of work, location, type and severity of injuries, the type of equipment used and the type of worker.

### **Results**

The results obtained are of course peculiar to our country where, alongside the wider cultivation in greenhouses Italy, coexist the work in open field, livestock and warehouses for processing of fruit and vegetables.

### **Investigation**

The characteristic of farming in our province is the widespread cultivation in greenhouses. The statistic of accidents confirms this vocation to greenhouse crops: in this area occurs because 49% of agricultural accidents.

Interesting data that shows that 16% of accidents occur in warehouses for the processing of agricultural products.

Only 21% of injuries occur to the use of equipment, vehicles or machinery; much as 15% of all accidents occur on board means (car) in progress (10% provincial average).

The number of accidents reported, those on foreign workers are 20% but it is estimated that the actual number is larger. There is indeed a general phenomenon of complaint under of injuries focusing on agriculture and probably involves mainly foreign workers.

Living in our territory a few large companies many employees along with a myriad of small mostly family-run businesses.

In our province working farm is a very masculine type of work; large concentration of female workers is found in stores instead of fruit and vegetable processing where the number of accidents are 40% of all cases in which women are involved.

Accidents in the greenhouse are 49% of the total; inside the greenhouse accidents caused by using vehicles or equipment constitute only 11%.

The operation responsible for the increased number of accidents caused by using vehicles or equipment is handling/performance of coils sheets greenhouses (39%), resulting from the use of stairs (29%) - often used more for hedging / unveiling of the greenhouses - and use the handles for towel wrap (18%). It is clear therefore that the hedge/unveiling of the greenhouses are, in various stages, a dangerous occupation (86% of accidents with the use of equipment or vehicles).

Be stressed that 14% of the events is caused by pump failures spraying of plant protection with potential exposure resulting in intoxication.

Injuries in the open field are 22% of the total; of these, accidents caused by using vehicles or equipment account for 28%.

The tractor has been confirmed as the most dangerous (52% of events), followed by use of chainsaws (29%) and brush cutters (16%). Fortunately limited to one event - fatal - injuries caused by round baler for haymaking.

Wanting to unify the work in the greenhouse with those in the open - remember that the large farms have mixed crops - verify how the hedge / unveiling of the greenhouses (coil + handle + scale) remains as the most dangerous phase of work (41%) followed by the use of tractors (27%) and the use of chainsaws (15%).

The storage of fruit and vegetable processing is clearly the place where the highest concentration of machinery and equipment. Indeed the use of these tools cause 34% of total accidents that occur in these workplaces. The female is involved in 20% of cases.

In order involving conveyors, handling of container boards, packaging machines and, ultimately, the movement of forklifts.

In cattle occur 12% of agricultural accidents. Are involved in these events mainly employers - 82% of the total. The female was hit in a rate of 5%. Only in 3 cases (5%) involved equipment (2 times the stairs - one time a container platform).

## **Conclusions**

Cultivation in greenhouses is the type of work that, even for its widespread use in the province, is what is responsible for the increased number of accidents - 49% of the total. Only 21% of injuries caused by use of means, machinery or equipment, while it is absolutely relevant, the percentage of commuting accidents - 15% - often fatal (10% provincial average).

20% of accidents on immigrant workers.

29% of accidents on self-employed.

The female is an overall marginal proportion - 7% - agricultural accidents.

Operations responsible for the greatest number of accidents refer to those related to covering / uncovering of the greenhouses (41%) followed by the use of tractors (27%) and chain saws (15%).

2) The epidemiological data points as in the Province of Ragusa occur on 26/30% of injuries to agricultural workers of the total of those registered throughout Sicily.

The Province of Ragusa is third in the Region as numbers of employees - 15.2% - and in first place as numbers of accidents at work - 26.6%; furthermore, in the province of Ragusa 23.4% of the working population is engaged in agriculture against 9.3% of

Catania and 7.3% of Palermo, provinces which have a greater number of employees of Ragusa.

Looking at the tables it is clear that in the provinces of Agrigento, Catania, Messina and Palermo there is a phenomenon of complaint under of accident, especially agricultural ones, and then, like the provinces of Ragusa, in which the phenomenon of complaint under be relatively limited, comprising high percentages but obviously biased.