

## **EU COST SACURIMA Working Group 2 Meeting Croatia 30<sup>th</sup> October, 2017.**

**Attendance:** Professor Stephan Van den Broucke (Chair) ; Professor Jose Rato Nunes; Dr Ole Carstensen; Dr Diana Lupulovic; Dr Zlatko šarić; Professor Bojan Srdjevic; Professor Rahman Nurkovic; Mr Pat Griffin; Professor Rahman Nurkovic; Dr Jarkko Leppala; Dr John McNamara.

### **WG 2 Tasks**

#### **Objectives**

Identify knowledge, attitudes, behaviours and priorities among farmers regarding safety, health and risk management.

#### **Tasks**

1) Literature review of research findings 2) Surveys of safety culture on farms 3) Reports on literature and survey findings 4) Develop recommendations.

#### **Milestones**

1) Literature review done 2) Survey completed 3) Reports submitted 4) Recommendations Prepared.

#### **Deliverables**

1) Manuscript to peer reviewed publication 2) Report to MC on knowledge, attitudes, behaviours and priorities on farms.

#### **Opening Comments**

The Chairperson explained the agreement reached by the core group at the Malmo meeting on how to work:

- Will exist for 4 years to study attitudes and behaviour in agriculture
- Do a literature review (systematic or basic)
- Survey all countries on safety culture
- Transfer into recommendations
- May need to look for further funding
- Submit proposals for further research

The chair stated that WG 2 needs to distinguish its work from WG 1, but in the later stages of the Action the group could combine with WG1 (or any WG) to make recommendations.

A working WG2 member emphasised the importance of communication and working collaboratively to achieve the WG2 objectives.

#### **Task Objectives**

The Group needs to focus on specific factors in WG2 task objectives that we can define and measure which apply to all persons. These include knowledge, attitudes and behaviours, barriers, culture etc.

We need to map out specific factors for the literature review.

We need to acknowledge the role of safety culture in OHS change as it applies to 'independent' ( i.e. self-employed) farmers and seek to understand what factors develop/enhance culture e.g. peer support; social norms; education, parents, farm structure ( e.g. company) etc.

We need to draw on existing models for both individual (knowledge, attitudes and behaviours, barriers, culture) and organisational factors relevant to the agriculture sector (legislative and economic stimuli (e.g. nudging) which could be useful to gain OHS change e.g. Health Behaviour Model.

### **Literature Review**

The WG needs to conduct the literature review as systematically as possible, as this increases chances of publication and being of influence. To that effect we will follow the steps of a Cochrane Review. Specifically:

- We will define the key words to be used as search terms (e.g., safety culture and agriculture, safety behaviour and agriculture, attitudes, norms, ...). Inclusion and exclusion criteria also need to be defined. Stephan will make a provisional list of search terms and in/exclusion criteria and disseminate to group members for feedback and amendments.
- We need to identify which specific risk behaviours we need to be looking at for improvement. Unsafe working with machinery, using pesticides, risks from falls from height, handling cattle may be areas to start.
- Publication Databases to be searched are: Web of Science; Pub Med; Scopus; Google Scholar.
- A preliminary search will be carried out with the list of search terms for refinement. Jarkko has kindly offered to do this.
- Languages: not sure if we should use just one language or several?
- Grey literature: every MC member should seek such literature in their country.
- Quality of included papers can be determined using an existing quality checklist.
- Review process: Search will first be done on titles, next on abstracts. Inclusion/exclusion of papers of potential interest at abstract stage will need to be done independently by two persons from among WG2 members to enable determining agreement. Analysis of quality followed by content analysis will be performed on withheld papers. Information to be retrieved from the papers still needs to be determined. Quality and content analysis will need to involve persons from among WG2 members to establish concordance.

The following existing resources were mentioned at WG2 meeting:

- Proposals on OHS made to Nordic Ministers
- Zoonotic disease literature
- DSc study on Risk Management
- PhD Study on OHS adoption
- Publications on determinants of farm safety behaviour.

A means of collecting European studies and national grey literature needs to be set up.

Deadlines agreed re. the literature review:

- Selection of key words – End of November
- Preliminary check of key words – Mid December (Jarkko).
- Literature review. Commence in January (focusing on predictors of risk behaviour).

**Survey related to knowledge, attitudes, and behaviours re. OHS among farmers.**

There are two relevant topics for a survey study:

- 1) A survey of the determinants of behaviours regarding safety, health and risk management among farmers in the EU countries
- 2) A survey of the legislative base for safety in agriculture across the EU.

1) A survey is to be undertaken to identify knowledge, attitudes, behaviours and priorities among farmers regarding safety, health and risk management among countries involved in this EU COST SACURIMA. Both individual and contextual factors must be looked at and possibly combined to predict change: behaviour change is influenced by knowledge, attitudes, perceived risks, social norms, habits, as well as by demographic factors (education level, age, ...) and the physical and social environment (weather conditions, age of machinery, social support, ...). Legislative and economic factors must also be looked at. We need to identify the particular means of making real sustainable change.

It would be best if the WG could be based on validated instruments where possible for the survey work. This will make the findings far more authoritative and much more likely to be published and influence EU OHS policy. There are limited number of such instruments available and WG2 should check internationally if new instruments are available (e.g., N.Z./ Australia). Instruments that are used in related sectors, such as 'safety climate surveys' used in the Industry, should also be vetted for utility. For instance, a validated safety climate instrument exist for the construction sector which could be looked at and adjusted for use in agriculture. Comparison with other similar industries/sectors needs to be considered, but it should be acknowledged that the situation is substantially different in agriculture because of unbounded control.

It was noted that Heinrick attributed  $\pm 90\%$  of injury to human behaviour and the remainder ( $\pm 10\%$ ) related to inferior working environment but this work dates from the 1920's with little research added over the years. The survey could also include national information on geo-demographic and sociological factors associated with OHS in agriculture in various countries. This would allow the different realities of participating countries to be captured. Age of farmers, education level and income are issues but importantly they work on their own and under their own supervision.

2) To determine the legislative base for safety in agriculture across the EU, use could be made of a key informant approach involving interviews with experts of the SACURIMA network using the 'delphi method'.

### **Outline plans for WG 2 communications.**

A means of working to make progress before MC Meeting in Dublin in March needs to be set up. Risto can provide email/phone for a teleconference. In order to achieve our objective we need to both communicate and work together.

The WG needs to invest in its own training. The possibility of a Training School in conjunction with an MC Meeting could be considered .